ARVENSIS CONSULTING PRODUCT GUIDE

Arvensis Consulting Products and Solutions

to the Telecom, Datacom Industry.

Reach out to Arvensis Consulting for pricing and order quantities that you may need Arvensis cater for large volume and for niche vendors who want their own while-label product range

Large orders can be shipped by container load to the destination of your choice and we can work with you to establish phased orders, forecast and immediate requirement to ensure project objectives are on time and on budget

Note: This product guide is a generic product list. Individual pricing can be tailored to a customers as a dedicated price book with special discounts aligned with to bulk orders, general orders and forecasts.

Contents

Document Changes log: Subject to change based on customer feedback and requirements

Version	Date	Description
1.0	June 2019	Initial release for network transceiver
1.1	July 2019	Inclusion of Microwave Radio Products
1.2	July 2019	Minor fixes and updates
1.3	October 2019	Updates, Customs notices, Refurbished Equipment
1.4	April 2020	New look format, D-Link partner product list
1.5	September 2020	Added MTP/MPO cables and other fibre equipment
1.6	February 2021	Added OFDF's cabinets, enclosures, FIST's, D-Link removed
1.7	Planned Q2/3 2021	Passive Optical xWDM, xPON, PLC's Hardware
1.8	Planned Q4 2021	Aerial Fibre products, Fibre Drops and components
1.9	Planned Q2 2022	Network Cabinets, Data Centre Cabinets, Outdoor Cabinets
2.0	Planned Q3/4 2022	Optical components, MPO/MTP OFDF architecture

1. NETWORK TRANSCEIVERS

By law, vendors cannot stipulate that only branded parts may be used within the target system in order to retain warranty validity. The threat of void warranty is a commonly sold misconception designed to protect the vendor's sales channel and is almost never available in writing. In general, such mechanisms have been unsuccessful and no longer function as a barrier to entry to the market.

These types of warnings by OEM do exist. They are seldom made in writing and are widely held to be unenforceable. Our understanding is that custom and practice today is that warranty or support will not be withheld unless the compatible transceiver can be proven to have caused a defect, which is more or less unheard of. In any case, today operators routinely ask system vendors to certify the use of quality compatibles from reputable and professional suppliers.

Using MSA compliant network transceivers will not void your hardware vendor warranty. Further literature on this is available directly from the following OEM web sites: Cisco, Juniper, Brocade, Arista, Gigamon, HP

1.1. SFP		

All Arvensis Consulting SFP are compliant with MSA SFP's industry specification.

SFP transceivers typically come in 4 different versions: T, SX, LX, and ZX.

The SX version will work on Multi Mode fibre; LX and ZX only work on Single Mode fibre. The LX will cover a range of 10km and the ZX version up to 80km. The T version is the 1000Base-T RJ-45 versions.

All our transceivers come with DOM (Digital Optical Monitoring) also called DDM (Digital Diagnostic Monitoring). SFP transceivers can be supplied as commercial grade 0C~70C and industrial grade -40C~85C.

Item	Description	Price
SFP	SFP, 1Gb, 850nm, 550m, DDM, LC, MMF SFP, 2Gb, 850nm, 400m, DDM, LC, MMF SFP, 1Gb, 1310nm, 1km, DDM, LC, MMF SFP, 1Gb, 1310nm, 10km, DDM, LC SFP, 1Gb, 1310nm, 15km, DDM, LC SFP, 1Gb, 1310nm, 20km, DDM, LC SFP, 1Gb, 1310nm, 40km, DDM, LC SFP, 1Gb, 1550nm, 40km, DDM, LC SFP, 1Gb, 1550nm, 80km, DDM, LC SFP, 1Gb, 1550nm, 100km, DDM, LC SFP, 1Gb, 1550nm, 120km, DDM, LC SFP, 1Gb, 1550nm, 160km, DDM, LC	POA
BiDi SFP	SFP, BiDi, 100M-155M, 1310nmT/1490nmR, 20km, DDM, LC SFP, BiDi, 100M-155M, 1490nmT/1310nmR, 20km, DDM, LC SFP BIDI, 100Mbps-1.25Gbps, 1310nmT/1490nmR 10km LC SFP BIDI, 100Mbps-1.25Gbps, 1490nmT/1310nmR 10km, LC SFP, BIDI 1.25G 1310nmT/1550nmR 10km DDM LC SFP, BIDI 1.25G 1550nmT/1310nmR 10km DDM LC SFP, BIDI 1.25G 1310nmT/1550nmR 20km DDM LC SFP, BIDI 1.25G 1550nmT/1310nmR 20km DDM LC SFP, BIDI 1.25G 1310nmT/1490nmR 20km DDM LC SFP, BIDI 1.25G 1490nmT/1310nmR 20km DDM LC SFP, BIDI 1.25G 1310nmT/1490nmR 40km DDM LC SFP, BIDI 1.25G 1490nmT/1310nmR 40km DDM LC SFP, BIDI 1.25G 1310nmT/1490nmR 60km DDM LC SFP, BIDI 1.25G 1490nmT/1310nmR 60km DDM LC	POA
CWDM SFP	SFP, CWDM 1.25G 1270nm-1610nm 19dB DDM SFP, CWDM 1.25G 1270nm-1610nm 24dB DDM SFP, CWDM 1.25G 1270nm-1610nm 28dB DDM SFP, CWDM 1.25G 1270nm-1610nm 34dB DDM SFP, CWDM 1.25G 1470nm-1610nm 41dB DDM	POA
DWDM SFP	DWDM SFP's are available for 50GHz and 100GHz ITU wavelengths and with data rates of 100MB – 4.25Gb. Optical power budgets range from 13dBm to 45dBm.	POA
Copper SFP	SFP, Cu 1000Base-T, Auto-neg, RJ45, host side	POA

1.2. SFP+

The SFP+ or SFPPlus is the Enhanced Small Form-factor Pluggable and has the same shape as a 1G SFP but will support data rates up to 16 Gbps. SFP+ 10GB Optics have a smaller footprint and lower power consumption than XFP transceivers. The SFP+ will support 8Gb on Fibre Channel and 10 Gbit/s on Gigabit Ethernet and Optical Transport Network standard OTU2. The SFP 10GB comes in 5 different versions: T, SX, LX, EX and ZX. The SX version will work on Multi Mode fibre and the LX, EX and ZX will work only on Single Mode fibre. The LX will cover a maximum range of 10km, the EX of 40km, with the ZX reaching up to 80km. The T version is the 10000Base-T RJ-45 versions.

In 2010, the ZR (80km) CWDM and DWDM SFP 10GB optics became available.

The SFP+ 10G are available in: CWDM SFP+ 10Gb, DWDM SFP+ 10Gb, DAC (Twinax), AOC and BiDi. Arvensis Consulting offer's the whole CWDM and DWDM spectrum for SFP 10GB.

Item	Description	Price
SFP+	SFP+, 10Gb, 850nm, MMF, 300/OM3, 400m/OM4, Cisco OEM SFP+, 10Gb, 850nm, MMF, <300m, LC SFP+, 10Gb, 1310nm, MMF, <220m, LC SFP+, 10Gb, 1310nm,10km, LC SFP+, 10Gb, 1310nm 20km, LC SFP+, 10Gb, 1310nm 40km, LC SFP+, 10Gb, 1310nm 70km, LC SFP+, 10Gb, 1550nm 40km, LC SFP+, 10Gb, 1550nm 40km, LC, Industrial Temp -40C to 85C SFP+, 10Gb, 1550nm 80km, LC SFP+, 10Gb, 1550nm 80km, LC, Allied Telesis OEM SFP+, 10Gb, 1550nm 100km, LC with CDR	POA
BiDi SFP+	SFP+, 10Gb, BIDI 1270nmT/1330nmR 10km 9dB, LC SFP+, 10Gb, BIDI 1330nmT/1270nmR 10km 9dB, LC SFP+, 10Gb, BIDI 1270nmT/1330nmR 20km 12dB, LC SFP+, 10Gb, BIDI 1330nmT/1270nmR 20km 12dB, LC SFP+, 10Gb, BIDI 1270nmT/1330nmR 40km 16dB, LC SFP+, 10Gb, BIDI 1330nmT/1270nmR 40km 16dB, LC SFP+, 10Gb, BIDI 1270nmT/1330nmR 60km 21dB, LC SFP+, 10Gb, BIDI 1330nmT/1270nmR 60km 21dB, LC SFP+, 10Gb, BIDI 1490nmT/1550nmR 80km 22dB, LC, CDR SFP+, 10Gb, BIDI 1550nmT/1490nmR 80km 22dB, LC, CDR	POA
CWDM SFP+	SFP+, 10Gb CWDM 10dB 1470nm-1610nm DFB, LC SFP+, 10Gb CWDM 14dB 1470nm-1610nm MSA Case SFP+, 10Gb CWDM 14dB 1470nm-1610nm MSA Case, CDR SFP+, 10Gb CWDM 23dB 1470nm-1610nm MSA Case SFP+, 10Gb CWDM 23dB 1470nm-1610nm MSA Case, CDR	POA
DWDM SFP+	SFP+, 10Gb DWDM 100Ghz 14dB, LC SFP+, 10Gb DWDM 50Ghz 14dB, LC SFP+, 10Gb DWDM 100Ghz 23dB, LC SFP+, 10Gb DWDM 50Ghz 23dB, LC SFP+, Tuneable, 10G DWDM 14dB 50GHz SFP+, Tuneable, 10G DWDM 23dB 50GHz	POA
Direct Attach Copper (DAC)	SFP+ cable, up to 10.5G, 1m, 30AWG, PASSIVE SFP+ cable, up to 10.5G, 2m, 30AWG, PASSIVE SFP+ cable, up to 10.5G, 5m, 24AWG, PASSIVE SFP+ cable, up to 10.5G, 5m, 30AWG, ACTIVE SFP+ cable, up to 10.5G, 10m, 24AWG, ACTIVE	POA
Copper SFP+	SFP+ 10GBase-T. Auto-Neg for lower data rates. 10Gb–30m, 100M at 100m,	POA

1.3. QSFP

QSFP/QSFP+ QSFP is short for Quad (4-channel) Small Form-factor Pluggable. It is a compact, hot-pluggable transceiver.

100G QSFP modules are available in a range of data rates, from 40Gbps, 53Gbps, 103Gbps, 112Gbps, 200Gbps and 400Gbps.

Digital diagnostics functions are available via the I2C interface, as specified by the QSFP28 MSA.

QSFP28 100G QSFP28 SR4, LR4 and ER4 Lite 100G QSFP28 CWDM4, 4WDM4-10, 4WDM-20 and 4WDM-40 and more options are available.

Single Wavelength 100G QSFP28, Optical Transceiver for FR, DR and LR options are available.

QSFP28-DD electrical interfaces employ eight lanes that operate up to 25 Gbps NRZ modulation, providing connectivity of up to 200 Gbps aggregate.

QSFP56-DD electrical interfaces will employ eight /four lanes that operate up 50/100 Gbps PAM4 modulation, providing connectivity up 400 Gbps aggregate.

Contact Arvensis Consulting with your requirements and we will help you with a solution fit for your needs.

Item	Description	Price
QSFP+	QSFP+, 40GBASE SR4, MMF, 850nm, 150m, MPO QSFP+, 40GBASE IR4, SMF, 2KM, 1270~1330, MPO QSFP+, 40GBASE-SR4 MPO, Cisco OEM QSFP+, 40GBASE PSM4, SMF, 10KM, MPO QSFP+, 40GBASE IR4, SMF, 2KM, 1270~1330, LC QSFP+, 40GBASE LR4, SMF, 10KM, 1270~1330, LC	POA
QSFP28	QSFP28, 40G SR4, 100m/OM3, 150m/OM4, MMF MPO QSFP28, 40G SR4, 300m/OM3, 400m/OM4, MMF MPO QSFP28, 103Gb SR4, 70m/OM3, 100m/OM4 MMF MPO QSFP28, 103.1/112.2Gb SR4, 70m/OM3, 100M/OM4 MMF MPO QSFP28, CWDM4, 103Gbps, SMF, 2km, LC, DDM QSFP28, 100GBASE CWDM4, LC, 2km, SMF, Cisco OEM QSFP28, CWDM4, 103Gbps, SMF, 10km, LC, DDM QSFP28, ER4, 103Gbps, SMF, 40km, LC, DDM QSFP28, LR4 EML, 103/112Gb, SMF, 10km, LC, DDM QSFP28, LR4 DML, 103/112Gb, SMF, 10km, LC, DDM QSFP28, 100GBASE LR4, LC, 10km, SMF, Cisco OEM QSFP28, LR4 EML, 103/112Gb, SMF, 20km, LC, DDM QSFP28, ER4, 103/112Gb, SMF, 40km, LC, DDM QSFP28, CLR4, 100Gb, SMF, 2km, LC, DDM QSFP28, LR4 DML, 103G, SMF, 10km, LC, DDM QSFP28, LR4 DML, 103G, SMF, 20km, LC, DDM	POA
QSFP56 or QSFP-DD	QSFP-DD, 2×100G CWDM4, 8×25G, 200GbE, 2km, SMF QSFP-DD, 2×100G 4WDM-10, 8×25G, 200GbE, 10km, SMF QSFP-DD, 2×100G LR4, 8×25G, 200GbE, 10Km SMF QSFP-DD, 4×100G DR4, 4×100G 400GbE, 1310nm, SMF, 500m QSFP-DD, 4×100G FR4, 4×100G 400GbE, SMF, 2km QSFP-DD, 4×100G LR4, 4×100G 400GbE, SMF, 10km	POA
Direct Attach Copper (DAC)	QSFP+ 40Gb cable, up to 0.5m, 30AWG QSFP+ 40Gb cable, up to 1m, 30AWG QSFP+ 40Gb cable, up to 2m, 30AWG QSFP+ 40Gb cable, up to 3m, 30AWG QSFP+ 40Gb cable, up to 5m, 26AWG QSFP+ 40Gb cable, up to 7m, 26AWG QSFP+ to 4x 10Gb SFP+, 1m, 30AWG QSFP+ to 4x 10Gb SFP+, 3m, 30AWG QSFP+ to 4x 10Gb SFP+, 5m, 28AWG	POA
QSFP Adaptor	CFP to QSFP28 Adapter, 100G, supports FEC CFP2 to QSFP28 Adapter, 100G, without FEC, supports 100G QSFP28 LR4/ER4. Supports 100G QSFP28 SR4/PSM4/CWDM4/CLR4 when the 100GE network equipment's CFP2 port has FEC function	POA

1.4. XFP

XFP's operate at nominal wavelength of 850/1310/1550nm. XFP versions are SR (<300m), LR(<10km), ER(<40km) and ZR(<80km).

Used for 10G-BASE ETH, 8G Fibre Channel and SDH/SONET

XFP modules are hot-swappable and protocol-independent.

Principal applications include 10 Gigabit Ethernet, 10 Gbps Fibre Channel, synchronous optical networking (SONET) at OC-192 rates, synchronous optical networking STM-64, 10 Gbps Optical Transport Network (OTN) OTU-2, and parallel optics links.

XFP's can operate over a single wavelength or use dense wavelength-division multiplexing techniques.

All Arvensis Consulting XFP transceivers include digital diagnostics (DDM) that provide management that were added to the SFF-8472 standard.

XFP modules use an LC fibre connector type to achieve high density.

The XFP specification was developed by the XFP Multi Source Agreement Group in 2002 and adopted on 2003

Item	Description	Price
XFP	XFP, 10Gb, 850nm, <300m, OM3 MMF, LC XFP, 10Gb, 1310nm, <220m, MMF, LC XFP, 9.95Gb-11.3Gb, 1310nm FP, <2km, LC, DDM, SMF XFP, 10Gb, 1310nm, 10km, DDM, LC XFP, 10Gb, 1310nm, 20km, DDM, LC XFP, 10Gb, 1310nm, 40km, DDM, LC XFP, 10Gb, 1310nm, 70km, DDM, LC XFP, 10Gb, 1550nm, 40km, DDM, LC XFP, 10Gb, 1550nm, 80km, DDM, LC XFP, 10Gb, 1550nm, 100km, DDM, LC XFP, 10Gb, 1550nm, 120km, DDM, LC	POA
BiDi XFP	XFP, 10Gb, BIDI 1270nmT/1330nmR 10km 9dB LC XFP, 10Gb, BIDI 1330nmT/1270nmR 10km 9dB LC XFP, 10Gb, BIDI 1270nmT/1330nmR 20km 12dB LC XFP, 10Gb, BIDI 1330nmT/1270nmR 20km 12dB LC XFP, 10Gb, BIDI 1270nmT/1330nmR 40km 16dB LC XFP, 10Gb, BIDI 1330nmT/1270nmR 40km 16dB LC XFP, 10Gb, BIDI 1270nmT/1330nmR 60km 21dB LC XFP, 10Gb, BIDI 1330nmT/1270nmR 60km 21dB LC XFP, 10Gb, BIDI 1490nmT/1550nmR 80km, LC XFP, 10Gb, BIDI 1550nmT/1490nmR 80km, LC	POA
CWDM XFP	XFP, CWDM 10Gb, 1470nm-1610nm, 10dB, DFB, LC XFP, CWDM 10Gb, 1470nm-1610nm, 14dB, EML, LC XFP, CWDM 10Gb, 1470nm-1610nm, 23dB, EML, LC	POA
DWDM XFP	XFP, DWDM, 10Gb, 14dB, 100Ghz XFP, DWDM, 10Gb, 23dB, 100Ghz XFP, DWDM, 10Gb, 14dB, 50Ghz XFP, DWDM, 10Gb, 23dB, 50Ghz XFP, 10Gb, DWDM, Tuneable Full C band ITU with FEC XFP, 10Gb, DWDM, Tuneable Full C band ITU without FEC	POA
Direct Attach Copper (DAC)	XFP, cable, up to 10.7G, 1m, 30AWG, PASSIVE XFP, cable, up to 10.7G, 3m, 30AWG, PASSIVE XFP, cable, up to 10.7G, 5m, 30AWG, PASSIVE XFP, cable, up to 10.7G, 7m, 30AWG, PASSIVE XFP, cable, up to 10.7G, 10m, 24AWG, ACTIVE XFP, cable, up to 10G to SFP+, 1m, 30AWG, PASSIVE XFP, cable, up to 10G to SFP+, 3m, 30AWG, PASSIVE XFP, cable, up to 10G to SFP+, 1m, 24AWG, PASSIVE	POA

1.5. CFP

CFP modules offer 100 Gigabit connectivity options for data centre networking, enterprise core aggregation. Link distances of 500m, 10km, 20km and 40km are supported.

Arvensis Consulting offers SR10, LR4, ER4 CFP modules and converter adapters from CFP to QSFP28.

Digital Coherent Optics or DCO CFP's offer longer distances with high-gain soft-decision FEC enables signals to traverse longer distances while requiring fewer regenerator points.

This provides more margin, allowing higher bit-rate signals to traverse farther distances.

Spectral shaping provides greater capacity across cascaded ROADM, resulting in increased spectral efficiency for super channels. Spectral shaping is critical in flexible grid systems because it allows carriers to be squeezed closer together to maximize capacity.

100G CFP-DCO digital coherent optical transceiver is a hot-pluggable CFP form-factor optical module designed for high-speed optical networking applications including 100-Gigabit Ethernet and OTU4. The CAUI and OTL4.10 electrical interface and MDIO management interface are built in the module.

Item	Description	Price
CFP	CFP, 100GBASE-SR10, 100m/OM3 MMF, Cisco OEM CFP, 100G SR10, MMF, 300m/OM3, 400m/OM4, (w/o ref clock) CFP, 100G SR10, MMF, 300m/OM3, 400m/OM4, (with ref clock) CFP, LR4, 103/112Gbps, SMF, 10km, LC, DDM, angled port CFP, ER4, 103/112Gbps, SMF, 40km, LC, DDM, direct port	POA
Coherent CFP	CFP, 100G, Coherent, ZR with EDFA CFP, 100G, Coherent, ZR w/o EDFA CFP, Metro DWDM, Coherent with EDFA CFP, Metro DWDM, Coherent w/o EDFA CFP, Long-Haul DWDM, Coherent with EDFA CFP, Long-Haul DWDM, Coherent w/o EDFA	POA
CFP Adaptor	CFP to QSFP28 Adapter, 100G, supports FEC	POA

Product Name	CFP DCO ZR	CFP DCO MR	CFP DCO LH
Data Rate	100GE/OTU4	100GE/OTU4	100GE/OTU4
Application	120km DWDM/P2P	600km DWDM	2000km DWDM
CAUI-4 for 100GBE host interface	√	√	√
OTL4.4 for OTU4 host interface	√	√	√
Built-in OTN Processing	√	√	√
Interoperability with G.709 FEC	√	√	√
PRBS generation & detection for line/host interfaces	√	√	√
CFP MSA compliant	√	√	√

Note: Technical Specification and Data Sheets for DCO products are only provided under NDA.

1.6. CFP2		

CFP2 was specified by CFP MSA in a form factor of 1/2 in size of the CFP module. The module electrical interface has been generically specified to allow for supplier-specific customization around various 4 x 25Gbit/s interfaces, but it can also support 10x10Gbit/s, 4x25Gbit/s, 8x25Gbit/s, or 8x50Gbit/s lanes.

Arvensis Consulting, CFP2 100Gbps LR4 and ER4 modules supports a link length of 10, 20, 25 and 40km on standard single-mode fibre (G.652) for 100G ETH and OTU4 112G applications. The 100Gb Ethernet signal is carried over four wavelengths with multiplexing and de-multiplexing of the four wavelengths managed within the device.

Arvensis Consulting also offers adapters for CFP2 to QSFP28.

| Item	Description	Price
CFP2	CFP2, 100GBASE SR10, 300m/OM3, 400m/OM4 MMF CFP2, LR4, 103/112Gbps, SMF, 20km, LC, DDM, direct port CFP2, ER4 Lite, 103/112Gbps, SMF, 25km, LC, DDM, direct port CFP2, ER4, 103/112Gbps, SMF, 40km, LC, DDM, direct port CFP2 PAM4, 212.5Gbps, SMF, 10km, LC, DDM, direct port CFP2 PAM4, 212.5Gbps, SMF, 40km, LC, DDM, direct port CFP2, 100GBASE-LR4 ,Receiver only (w/o TOSA), 100GE/OTU4, 10km, CFP2, 100GBASE LR4, DFB-based LAN-WDM Cooling transmitter, 100GE/OTU4, 10km, <-8.6dBm CFP2, LAN-WDM EML transmitter, PIN-base Integrated ROSA with SOA, 100GE/OTU4, 40km	POA
CFP2 Adaptor	CFP2 to QSFP28 Adapter, 100G, without FEC, supports 100G QSFP28 LR4/ER4. Supports 100G QSFP28 SR4/PSM4/CWDM4/CLR4 when the 100GE network equipment's CFP2 port has FEC function	POA

1.7.	CFP4

CFP4 form factor is the half size of CFP2 module, which is designed to support Singlemode (SMF) and Multimode(MMF) optic fibre.

CFP4 has 4x25G TX and RX I/O electrical pairs, so its nominal signalling lane rate is 25Gbit/s. The CFP4 electrical interface is specified to support both 4 x 25Gbit/s and 4 x 10Gbit/s interfaces. CFP MSA defines the CFP4 to apply for 40G/100G Ethernet, telecommunication and other applications

Arvensis Consulting's CFP4 100Gbps LR4 and ER4 modules supports a link length of 10km, 20km, 25km and 40km on standard single-mode fibre (G.652) for 100G ETH and OTU4 112G applications.

Item	Description	Price
CFP4	CFP4, SR4 100m, DDM, pull tab	$760.60
	CFP4, LR4, 103/112Gbps, SMF, 10km, LC, DDM, direct port	Email ACL
	CFP4, LR4, 103/112Gbps, SMF, 20km, LC, DDM, direct port	Email ACL
	CFP4, ER4 Lite, 103/112Gbps, SMF, 25km, LC, DDM, direct port	Email ACL
	CFP4, ER4, 103/112Gbps, SMF, 40km, LC, DDM, direct port	Email ACL
CFP4 Adaptor	CFP4 to QSFP, DAC, 0.5-3m, 4x 25G or 4x 28G, 30 AWG	Email ACL
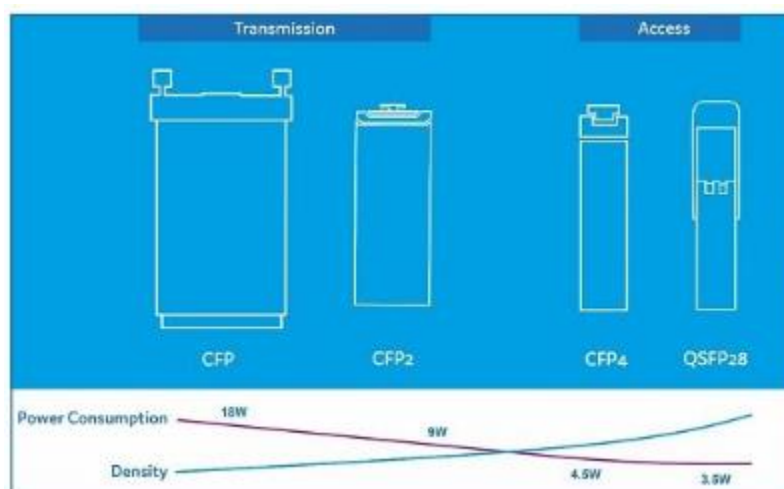
100GbE Form-Factor Evolution(2)

	CFP	CFP2		CFP4	QSFP28
Width	82mm	41.5mm		21.7mm	18.35mm
Power	<24W	<12W		9W	3.5W
Electrical	10 x10Gb/s CAUI 10	10 x 10Gb/s CAUI 10	4 x 25Gb/s CAUI 4	4 x 25Gb/s CAUI 4	4 x 25Gb/s CAUI 4
Variants	SR10, LR4, ER4	SR10, LR4, ER4		SR4, LR4, (CWDM4)	SR4, LR4, (PSM4,CWDM4)
Medium	MMF, SMF	MMF, SMF		MMF, SMF	MMF, SMF

1.8. OSFP

Our partners are currently developing industry leading transceivers with OSFP MSA (Octal Small Form Factor Pluggable), a new pluggable form factor with eight high speed electrical lanes that will initially support 425 Gbps (4*100G and/or 8x50G)

Since the OSFP is slightly wider and deeper than the QSFP, it is possible to build an adaptor that supports existing 100G QSFP optics modules in a OSFP cage. OSFP to QSFP adapter for backward compatibility

The future, 10km, 40km and 80km ranges with the OSFP able to meet the projected thermal requirements for 800 Gbps optics when those systems and optics become available in the future

Contact Arvensis Consulting if you are interested to know more about OSFP's

Item	Description	Price
OAFP	OSFP, 4×100G DR4, 4×100G 400GbE, 1310nm, SMF, 500m OSFP, 2x 200G FR4, 8*50G PAM4, SMF, 2km OSFP, 4×100G FR4, 4×100G 400GbE, SMF, 2km	Email ACL

Note: Technical Specification and Data Sheets for OSFP products are only provided under NDA.
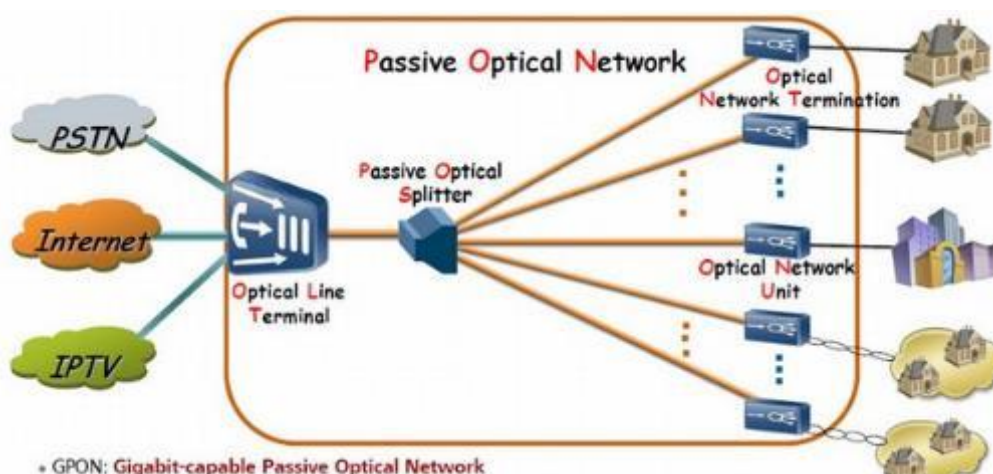
1.9. PON, GPON, EPON, GEPON

A Passive Optical Network (PON) is a point-to-multipoint fibre to the premises network architecture in which unpowered or passive optical splitters are used to enable a single fibre solution to serve to premises, typically 16-128.

GPON, GEPON, XGSPON, EPON and others provide varying upstream and downstream bandwidth sector, GPON standard, SFP type OLT transceiver module.

Arvensis Consulting offer 50+ PON transceiver range and have only listed some of the basic products below. For more options of a specific enquiry please contact us: PON Enquiry.

| Item	Description	Price
GPON	SFP GPON OLT B+, 20km, 1490nmT 2.488Gbps, 1310nmR 1.244Gbps SFP GPON OLT B+, 20km, 1490nmT 2.488Gbps, 1310nmR 1.244Gbps SFP GPON OLT C+, 20km, 1490nmT 2.488Gbps, 1310nmR 1.244Gbps SFP GPON ONU, B+, 1.25G, 1310nmT/1490nmR, TX Burst signal low active SFP GPON ONU, B+, 1.25G, 1310nmT/1490nmT, TX Burst signal low active XFP GPON, OLT N1, 1577nmT 9.953Gbps, 1270nmR 2.488Gbps XFP GPON, OLT N2, 1270nmT 2.488Gbps, 1577nmR 9.953Gbps,	Email ACL

* GPON: Gigabit-capable Passive Optical Network

1.10.	Other Transceivers	
Item	**Description**	**Price**
CPRI SFP and SFP+	CPRI OBSAI LTE SFP: Common Public Radio Interface (CPRI) standard defines the interface of base stations between the Radio Equipment Controllers (REC) standard, to local or remote radio units, known as Radio Equipment (RE). Wide range of options available.	Email ACL
SMPTE SPF	Fibre Optic Transport of HD/SD-SDI It is becoming increasingly necessary and economically feasible to transport HD/SD-SDI signals over fibre instead of coaxial cable. Arvensis Consulting can supply a wide range of transceivers. **SMPTE 297-2006**: This standard defines the fibre optic interface for the transmission and reception of SDI signals at various data rates: 3G ~ 12G **SMPTE 259M**: 143 through 360 Mbps **SMPTE 344M**: 540 Mbps **SMPTE 292**: 1.485 and 1.485/1.001 Gbps **SMPTE 424M**: 2.97 and 2.97/1.001 Gbps	Email ACL
	Loopback and Test Boards for QSFP. QSFP+, SFP+, CSFP, XFP, CFP. Tuneable Board for DWDM tuneable XFP and SFP+ transceivers. Wide range of options. QSFP28, 100G Loopback Module	Email ACL POA

1.11.	Shipping and Freight	
	Shipping and Freight: Typically orders of <50 or less are as indicated. For large orders please contact Arvensis Consulting for a quote. Typical lead time is 7-10 days. If you have forecasted your order in advance or requested that we hold local stock of specific models then the shipping cost is only a domestic courier fee to dispatch your order.	POA

Orders can be consolidated and if you don't see what you need please let us know as we have over 3000 products accessible.
Bulk orders for Data Centres and inventory stock holding are available and discounts scaling with volume.

Full 200G QSFP56 Portfolio for Next-GEN Data Center

ARVENSIS
Consulting
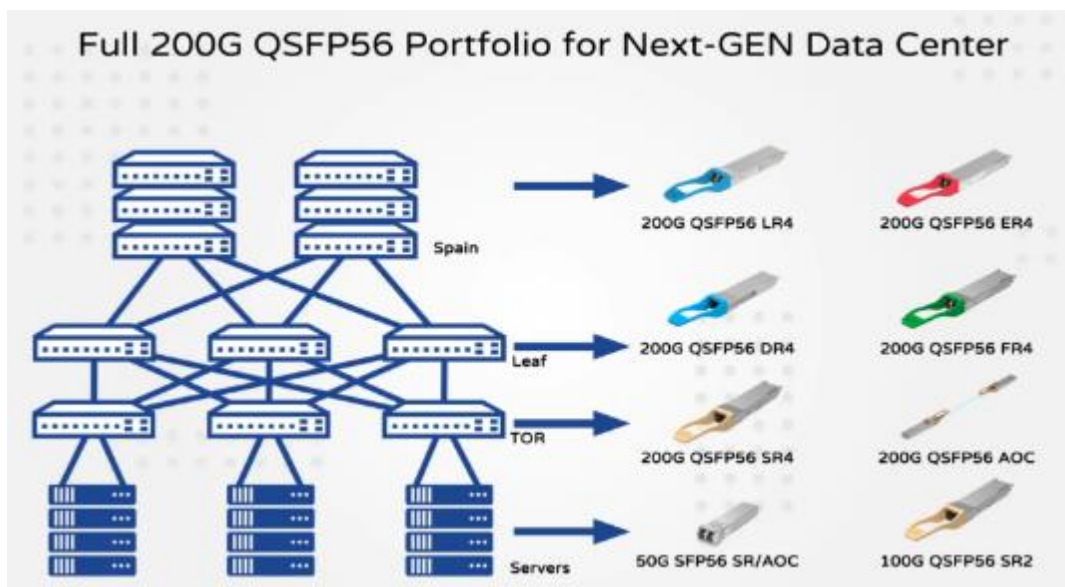
1.12.   Our Transceiver Partners

Arvensis Consulting partner directly with 2 global manufacturers who have a combined sale of 9m transceivers and a failure rate of <0.07%. Dealing directly with our partners has enabled Arvensis Consulting to keep pricing to the lowest possible point while also bypassing the wholesaler and distributors

Arvensis Consulting have a healthy relationship with both our manufactures, going back to early 2011 and as such are highly trusted suppliers.

All transceivers are supplied with a standard 12-month warranty. Extended warranties of 24 and 36 months available on request (longer is possible if needed).

The product guide is based on current demands with new items being added regularly. If you don't see what you are looking for, please contact Arvensis Consulting with your requirements at sales@arvensis-consulting.com as we don't list every variant or option.

About our Partners.

- **Manufacturer A**: Founded in 2008 as a specialist transceiver manufacturer and Public Listed company on the Shenzhen Stock Exchange. Manufacturer of the world's first sub-10W 400G QSFP-DD and OSFP DR4 and FR4 optical transceiver products.

  Current Market value of $5.24B. Sales figures for 2018 - shipped 5m transceivers globally to 300+ customers in over 60 countries.

  With 3000+ product specifications, manufactured in their 35000m² factory and employs ~1100+ staff.

  Manufactures to specification and supplier of major OEM brands.

  Advanced R&D departments and has stringent quality management systems in place with the following quality assurance standards in place: ISO9001, ISO14001, TUV, CE, UL, FCC, FDA, RoHS, REACH and EMC certified

- **Manufacturer B:** Founded in 2006 as a specialist transceiver and middleware manufacturer of passive optical products.
  Sales figures for 2018 – shipped 4m transceivers globally to 400+ customers in over 60 countries. 600k of annual sales where for 100GB+ CFP modules

  With 5000+ product specifications, manufactured in a 20000m² factory and employs 600 staff and offices in the USA, Asia, Russia and most recently India.

  21 Software copy right patents and an optical engine with advanced optical monitoring capability.

  Advanced R&D departments and has stringent quality management systems in place with the following quality assurance standards in place: GR-468, TUV, ISO14001, SR4CL, ISO9001, RoHS, EMC certified, UL.
  OEM manufacturer for the following major brands:

2. OPTICAL ATTENUATORS AND ADAPTERS

2.1. LC APC Plastic Body

Arvensis Consulting sources their optic fibre attenuators direct from the factory. Our LC/APC attenuators have a ≥60dB Return Loss (RL) with the following attenuation accuracy
1-9dB – ≤0.5dB
10-30dB – ≤10% of the attenuators value
Single Mode: 1310nm/1550nm
Input Power (Max): 200mW
Durability: <0.20dB typical, 1000 mating's
Operating temp: -20~+75°C

Item	Description	Price (ea)
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 1-10)	POA
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 11-20)	POA
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 21-30)	POA
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 31-40)	POA
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 41-50)	POA
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 51-100)	POA
LC/APC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 101+)	POA

2.2. LC APC Plastic Body

Arvensis Consulting sources their optic fibre attenuators direct from the factory.
Our LC/UPC attenuators have a ≥50dB Return Loss (RL) with the following attenuation accuracy
1-9dB – ≤0.5dB
10-30dB – ≤10% of the attenuators value
Single Mode: 1310nm/1550nm
Input Power (Max): 200mW
Durability: <0.20dB typical, 1000 mating's
Operating temp: -20~+75°C

Item	Description	Price
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 1-10)	POA
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 11-20)	POA
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 21-30)	POA
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 31-40)	POA
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 41-50)	POA
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 51-100)	POA
LC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 25, 30 dB (Qty 101+)	POA

2.3.	SC APC Metal Body	

Arvensis Consulting sources their optic fibre attenuators direct from the factory. Our SC/APC attenuators have a ≥60dB Return Loss (RL) with the following attenuation accuracy
1-9dB – ≤0.5dB
10-30dB – ≤10% of the attenuators value
Single Mode: 1310nm/1550nm
Input Power (Max): 200mW
Durability: <0.20dB typical, 1000 mating's
Operating temp: -20~+75°C

Item	Description	Price
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 1-10)	POA
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 11-20)	POA
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 21-30)	POA
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 31-40)	POA
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 41-50)	POA
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 51-100)	POA
SC/APC F-M	Att, 1, 2 ,3 ,5 ,8,10, 15, 20, 30 dB (Qty 101+)	POA

2.4.	SC UPC Metal Body	

Arvensis Consulting sources their optic fibre attenuators direct from the factory. Our SC/UPC attenuators have a ≥50dB Return Loss (RL) with the following attenuation accuracy
1-9dB – ≤0.5dB
10-30dB – ≤10% of the attenuators value
Single Mode: 1310nm/1550nm
Input Power (Max): 200mW
Durability: <0.20dB typical, 1000 mating's
Operating temp: -20~+75°C
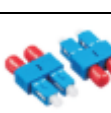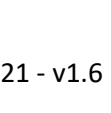
Item	Description	Price
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 1-10)	POA
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 11-20)	POA
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 21-30)	POA
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 31-40)	POA
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 41-50)	POA
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 51-100)	POA
SC/UPC F-M	Att, 1, 2 ,3 ,5 ,8, 10, 15, 20, 30 dB (Qty 101+)	POA

If you don't see what you need please contact Arvensis Consulting a as we don't list every item due to the sheer volume of products.

2.5. Hybrid Adapters (F-F)					
Photo	Description	Price	Photo	Description	Price
	SC-LC Adapter	POA		FC-LC Adapter	POA
	ST-LC Adapter	POA		SC-FC Adapter	POA
	SC-ST Adapter	POA		FC-ST Adapter	POA
	SC-LC Duplex Adapter	POA		SC-FC Duplex Adapter	POA
	SC-ST Duplex Adapter	POA		FC-ST Duplex Adapter	POA

2.6. Hybrid Adapter (M-F)					
Photo	Description	Price	Photo	Description	Price
	LC (Female) - SC (Male) Adapter	POA		LC (Female) - SC (Male) Adapter MM	POA
	LC (Female) - SC/APC (Male) Adapter	POA		LC (Female) - SC/APC (Male) Adapter MM	POA
	LC (Female) - SC/APC (Male) Adapter MM OM3	POA		LC (Female) - SC (Male) Adapter SM Duplex	POA
	LC (Female) - FC (Male) Adapter	POA		LC (Female) - ST (Male) Adapter	POA
	SC (Female) - LC (Male) Adapter	POA		SC (Female) - FC (Male) Adapter	POA
	SC/APC (Female) - FC/APC (Male) Adapter	POA		SC (Female) - ST (Male) Adapter	POA
	FC (Female) - SC (Male) Adapter	POA		FC/APC (Female) - SC/APC (Male) Adapter	POA
	FC (Female) - ST (Male) Adapter	POA		FC (Female) - LC (Male) Adapter	POA
	ST (Female) -SC (Male) Male Adapter	POA		ST (Female) -SC (Male) Male Adapter Duplex	APOA
	ST (Female) -SC (Male) Male Adapter MM	POA		ST (Female) -LC (Male) Male Adapter	POA

	ST (Female) -FC (Male) Male Adapter	POA		SC -E2000/UPC Adapter	POA
	SC/APC -E2000/APC Adapter	POA		SC/UPC -E2000/APC Adapter	POA

2.7.	Bulkhead Adapter (F-F)				
Photo	**Description**	**Price**	**Photo**	**Description**	**Price**
	SC: Simplex adapter with Flange. Colours: Blue, Green, Beige, Aqua and Violet	POA		SC: Simplex adapter without Flange. Colours: Blue, Green, Beige, Aqua and Violet	POA
	SC: Duplex adapter with Flange. Colours: Blue, Green, Beige, Aqua and Violet	POA		SC: Duplex adapter without Flange. Colours: Blue, Green, Beige, Aqua and Violet	POA
	SC/UPC: Simplex metal adapter with Flange. Colour: Blue	POA		SC/APC: Simplex metal adapter with Flange. Colour: Blue	POA
	SC/UPC: Duplex metal adapter with Flange. Colour: Blue	POA		SC/UPC: Simplex adapter with Flange and shutter. Colour: Blue	POA
	SC/APC: Simplex adapter with flange and shutter. Colour: Green	POA		SC/UPC: Simplex adapter without flange and shutter. Colour: Blue	POA
	SC/APC: Simplex adapter without Flange and shutter. Colour: Blue	POA		SC/UPC SM SX metal avoid laser adaptor with flange Colour: Blue	POA
	SC/APC SM SX metal Avoid Laser Adaptor With Flange Colour: Green	POA		SC/UPC SM SX metal avoid laser adaptor with flange Colour: Blue	POA
	SC/PC SM SX metal avoid laser adaptor with flange Colour: Beige	POA		LC/UPC SM simplex adaptor, without flange Colour: Blue	POA
	LC/APC SM simplex adaptor, without flange Colour: Green	POA		LC Duplex adaptor, with flange Colours: Blue, Green, Beige, Aqua, Violet	POA
	LC Quad adapter, with flange, Colours: Blue, Green, Beige, Aqua, Violet	POA		LC/UPC, Duplex adapter, with flange, Metal	POA
	LC/UPC, Quad adapter, with flange, Metal	POA		FC/UPC (square) SM, simplex adapter (zinc alloy)	POA
	FC/UPC (rectangle) SM, simplex adapter (zinc alloy)	POA		FC/UPC (small D) SM, simplex adapter (zinc alloy) Dust cover either red or white	POA
	FC/UPC (big D) SM, simplex adapter (zinc alloy) Dust cover either red or white	POA		FC/APC (square) SM, simplex Adapter (zinc alloy)	POA

	FC/UPC (rectangle) SM, duplex adapter (zinc alloy)	POA		ST/UPC SM, simplex adapter (zinc alloy)	POA
	ST/UPC MM, simplex adapter, (zinc alloy)	POA		ST/UPC SM, duplex adapter, (zinc alloy)	POA
	ST/UPC MM, duplex adapter, (zinc alloy)	POA	For any other connecters not listed, please contact Arvensis Consulting directly for special requirements.		

For bulk pricing please contact Arvensis Consulting directly: sales@arvensis-consulting.com

3. FIBRE PATCH CABLES

3.1. Simplex Single Mode LC/APC–LC/APC

Arvensis Consulting sources their optic fibre attenuators direct from 2 manufacturers. Our LC/APC patch cables have a ≥60dB Return Loss (RL) with the following specification:

Ø2.0mm. G657A2/LSZH 1-piece connector
Grade C Insertion Loss (IL): ≤0.3dB
Grade A Insertion Loss (IL): ≤0.15dB
Single Mode: 1310nm/1550nm
Durability: <0.20dB typical, 1000 mating's
Operating temp: -40~+85°C

Item	Description	Price
1m	Simplex SM LC/LC APC, Grade-C Simplex SM LC/LC APC, Grade-A	POA
2m	Simplex SM LC/LC APC, Grade-C Simplex SM LC/LC APC, Grade-A	POA
3m	Simplex SM LC/LC APC, Grade-C Simplex SM LC/LC APC, Grade-A	POA
5m	Simplex SM LC/LC APC, Grade-C Simplex SM LC/LC APC, Grade-A	POA
10m	Simplex SM LC/LC APC, Grade-C Simplex SM LC/LC APC, Grade-A	POA

3.2. Duplex Single Mode LC/APC–LC/APC

Arvensis Consulting sources their optic fibre attenuators direct from 2 manufacturers. Our LC/APC patch cables have a ≥60dB Return Loss (RL) with the following specification:

Ø2.0mm. G657A2/LSZH 1-piece connector
Grade C Insertion Loss (IL): ≤0.3dB
Grade A Insertion Loss (IL): ≤0.15dB
Single Mode: 1310nm/1550nm
Durability: <0.20dB typical, 1000 mating's
Operating temp: -40~+85°C

Item	Description	Price
1m	Duplex SM LC/LC APC, Grade-C Duplex SM LC/LC APC, Grade-A	POA
2m	Duplex SM LC/LC APC, Grade-C Duplex SM LC/LC APC, Grade-A	POA
3m	Duplex SM LC/LC APC, Grade-C Duplex SM LC/LC APC, Grade-A	POA
5m	Duplex SM LC/LC APC, Grade-C Duplex SM LC/LC APC, Grade-A	POA
10m	Duplex SM LC/LC APC, Grade-C Duplex SM LC/LC APC, Grade-A	POA

3.3 Single Mode LC/APC–LC/UPC

Arvensis Consulting sources their optic fibre attenuators direct from 2 manufacturers. Our LC/APC –LC/UPC patch cables have a ≥60dB/≥50dB Return Loss (RL) with the following specification:
Ø2.0mm. G657A2/LSZH 1-piece connector
Grade A Insertion Loss (IL): ≤0.15dB
Single Mode: 1310nm/1550nm
Durability: <0.20dB typical, 1000 mating's
Operating temp: -40~+85°C

Item	Description	Price
1m	Simplex SM LCA/LCU, Grade-A	POA
2m	Simplex SM LCA/LCU, Grade-A	POA
3m	Simplex SM LCA/LCU, Grade-A	POA
5m	Simplex SM LCA/LCU, Grade-A	POA
10m	Simplex SM LCA/LCU, Grade-A	POA

3.4 Duplex Single Mode LC/APC–LC/UPC

Arvensis Consulting sources their optic fibre attenuators direct from 2 manufacturers. Our LC/APC –LC/UPC patch cables have a ≥60dB/≥50dB Return Loss (RL) with the following specification:
Ø2.0mm. G657A2/LSZH 1-piece connector
Grade A Insertion Loss (IL): ≤0.15dB
Single Mode: 1310nm/1550nm
Durability: <0.20dB typical, 1000 mating's
Operating temp: -40~+85°C

Item	Description	Price
1m	Duplex SM LCA/LCU, Grade-A	POA
2m	Duplex SM LCA/LCU, Grade-A	POA
3m	Duplex SM LCA/LCU, Grade-A	POA
5m	Duplex SM LCA/LCU, Grade-A	POA
10m	Duplex SM LCA/LCU, Grade-A	POA

3.5 Duplex Armoured Patch Cable

Our Armoured patch cable is available in any configuration LC, SC, ST, FC, MU and UPC or APC polish, 1 or 2 tube constructions.
Cable Weight: ~10.5kg/km
Ø3.0mm. G6552D; G657A/LSZH or G657B3 (bend insensitive)
Insertion Loss (IL): ≤0.3dB
Return Loss (RL): ≥60dB/≥50dB
Single Mode: 1310nm/1550nm
Durability: <0.20dB typical, 1000 mating's
Operating temp: -20~+80°C
Tensile Strength: 400N (short duration)
Tensile Strength: 200N (long duration)
Lateral Compressive Strength: ≥3000N/100mm
Bend Radius: ≥30D (SM and MM)

Item	Description	Price
1m	Duplex SM LCU/LCU G657B3 single tube patch cable	POA
2m	Duplex SM LCU/LCU G657B3 single tube patch cable	POA
3m	Duplex SM LCU/LCU G657B3 single tube patch cable	POA
5m	Duplex SM LCU/LCU G657B3 single tube patch cable	POA
10m	Duplex SM LCU/LCU G657B3 single tube patch cable	POA

3.6 Simplex Armoured Patch Cable

Our Armoured patch cable is available in any configuration LC, SC, ST, FC, MU and UPC or APC polish.
Cable Weight: ~10.5kg/km
Ø3.0mm. G6552D; G657A/LSZH or G657B3 (bend insensitive)
Insertion Loss (IL): ≤0.3dB
Return Loss (RL): ≥60dB/≥50dB
Single Mode: 1310nm/1550nm
Durability: <0.20dB typical, 1000 mating's
Operating temp: -20~+80°C
Tensile Strength: 400N (short duration)
Tensile Strength: 200N (long duration)
Lateral Compressive Strength: ≥3000N/100mm
Bend Radius: ≥30D (SM and MM)

Item	Description	Price
1m	Simplex SM LCU/LCU G657B3 single tube patch cable	POA
2m	Simplex SM LCU/LCU G657B3 single tube patch cable	POA
3m	Simplex SM LCU/LCU G657B3 single tube patch cable	POA
5m	Simplex SM LCU/LCU G657B3 single tube patch cable	POA
10m	Simplex SM LCU/LCU G657B3 single tube patch cable	POA

Armoured patch cables are also available for Multi-Mode Fibre OM3, OM4 and OM5
Customer orders can be made for any type of connector: SC, MU, FC and ST connectors
Discounts scale with order volume and for large production runs, please ensure you forecast.
Enquire with Arvensis Consulting for further details.
To ensure no delays to your time critical project, please forecast at the earliest opportunity.
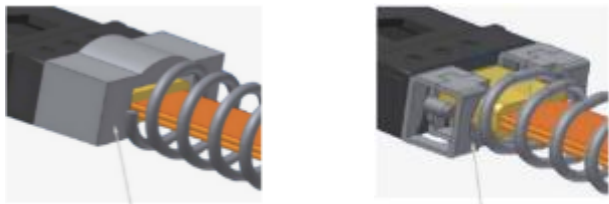
3.7 MPO vs. MTP Differences	
MPO	**MTP**
MPO or Multi-fibre Push On cables are capped with MPO connectors at either end. MPO connector is a connector for ribbon cables with at least 8 fibres, which is designed to provide multi-fibre connectivity in one connector to support high bandwidth and high-density cabling system applications. It is compliant with the IEC 61754-7 standard. At present, the most common fibre counts are 8, 12, 16, and 24. 32, 48, and 72 fibre counts are also possible in limited applications.	**MTP® or Multi-fibre Pull Off** cables are equipped with MTP® connectors at either end. MTP® connector is a trademark by US Conec for a version of the MPO connector with improved specifications. So MTP® connectors are fully compliant with all generic MPO connectors and can interconnect directly with other MPO based infrastructures. However, the MTP® connector is a multiple engineered product enhancement to improve mechanical and optical performance when compared to generic MPO connectors.
MPO connector is usually equipped with inferior plastic pin clamps, which may lead to effortless breaking of pins with constant cable mating	The MTP® connector has a metal pin clamp to ensure a strong clasp on the pins and minimize any inadvertent breaking when mating connectors.
 MPO Plastic Pin Clamp MTP Mental Pin Clamp	In the MTP® **connector**, the oval spring is used to maximize the gap between fibre ribbon and spring, which can protect the fibre ribbon from damages during inserting. The MTP® design includes a recessed pin clamp and oval spring will ensure a secure spring seat, and greater clearance between the spring and the ribbon cable in order to reduce the risk of damage to the cable.
The MPO connector is not manufactured with the **floating ferrule**.	A **floating ferrule** is adopted in an MTP® cable design for improving mechanical performance. In other words, the floating ferrule of the MTP® connector can float inside to keep physical contact over a mated pair under an applied load. The floating ferrule feature was particularly important for applications in which the cable plugs directly into an active Tx/Rx device, and was one of the primary reasons that the MTP® became the connector of choice for emerging parallel optics Tx/Rx applications.
Guide Pins: the chamfered shaped guide pins adopted by MPO connectors will produce more debris when used. Typically guide hole damage may be evident after only 50 mating's	**Guide Pins:** The MTP® connector uses tightly held tolerance stainless steel elliptical guide pin tips to reduce the amount of debris that may fall into the guide pin holes or on the ferrule end face. Rated for 500 mating's before any damage may become evident
The MPO connector has been recognized as an international standard in network architecture for many years.	MTP® connectors are the **advanced version** of MPO with improvements to minimize issues like optical loss, dropped packets, and so on. MTP® connectors in MTP® cables are designed to ensure precision alignment of the male and female sides, which will help to reduce the insert loss and return loss when transmitting the data in high-density cabling systems. Furthermore, MTP® insertion loss rates have continued to improve, now rivalling loss rates that single-fibre connectors saw just a few years ago.

3.8 MTP and MPO Cable Polarity

TYPE A - KEY UP / KEY DOWN (STANDARD CONFIG)

Utilize pinout method (A) for standard MT/MT applications. A (-A) extension is not required for standard Type A cables. However, you must use a (-A) extension when using a custom code.
This configuration is the default standard unless otherwise stated with a pinout extension (-B, -C, -D).

TYPE B - KEY UP/UP or KEY DOWN/DOWN

Type (B) pinout places the connector key on both ends in either an up or down position. Key Up/ Key Up and Key Down / Key Down are the same cable. This pinout places Left fiber 1 —> Right Fiber 12, etc.

TYPE C - KEY UP / KEY DOWN (PAIR WISE FLIP)

Type (C) pinout utilizes the same key configuration as Type (A), but incorporates a duplex pair-wise flip with the fiber location from the left to the right connector.

TYPE D - (UNIVERSAL CONFIG)

Type (D) pinout utilizes the same key configuration as Type (A), but incorporates a even/odd flip with the fiber location from the left to right connector.

Note: The Type-B cable is illustrated with a twist. This is to correctly align the trunk cable entering the B adaptors. Additionally, for ease of illustration, the lower transceiver connection is shown inverted; the transceiver would be mounted key up as normal.

Connectivity Method B for duplex signals

Specify the required polarity at the time of placing your order. The B-Polarity method is the most commonly used and is also the default for any order unless specified otherwise.

3.9 MPO-MPO MMF OM3 12 Core Trunk Cable

MPO(F) - MPO(F) 12 core Patch or Trunk cable
Multi-Mode 50/125, OM3, LSZH, 3.0mm diameter with Standard MPO connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.5dB
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 12 core Trunk Patch Cable OM3	POA
2m	MPO-MPO 12 core Trunk Patch Cable OM3	POA
3m	MPO-MPO 12 core Trunk Patch Cable OM3	POA
5m	MPO-MPO 12 core Trunk Patch Cable OM3	POA
10m	MPO-MPO 12 core Trunk Patch Cable OM3	POA
15m	MPO-MPO 12 core Trunk Patch Cable OM3	POA
20m	MPO-MPO 12 core Trunk Patch Cable OM3	POA

3.10 MPO-MPO MMF OM4 12 Core Trunk Cable

MPO(F) - MPO(F) 12 core Patch or Trunk cable
Multi-Mode 50/125, OM4, LSZH, 3.0mm diameter, Standard MPO connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.5dB
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 12 core Trunk Patch Cable OM4	POA
2m	MPO-MPO 12 core Trunk Patch Cable OM4	POA
3m	MPO-MPO 12 core Trunk Patch Cable OM4	POA
5m	MPO-MPO 12 core Trunk Patch Cable OM4	POA
10m	MPO-MPO 12 core Trunk Patch Cable OM4	POA
15m	MPO-MPO 12 core Trunk Patch Cable OM4	POA
20m	MPO-MPO 12 core Trunk Patch Cable OM4	POA

3.11 MPO-MPO SMF 12 Core Trunk Cable

MPO(F) - MPO(F) 12 core Patch or Trunk cable
Single-Mode 9/125, G625D, LSZH, 3.0mm diameter, Standard MPO connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Elite ≤ 0.35dB, typical ≤ 0.15dB)
RL ≥ 60dB (Elite ≥ 65dB)
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 12 core Trunk Patch Cable SMF	POA
2m	MPO-MPO 12 core Trunk Patch Cable SMF	POA
3m	MPO-MPO 12 core Trunk Patch Cable SMF	POA
5m	MPO-MPO 12 core Trunk Patch Cable SMF	POA
10m	MPO-MPO 12 core Trunk Patch Cable SMF	POA
15m	MPO-MPO 12 core Trunk Patch Cable SMF	POA
20m	MPO-MPO 12 core Trunk Patch Cable SMF	POA

3.12 MTP-MTP MMF OM3 12 Core Trunk Cable

MTP(F) - MTP(F) 12 core Patch or Trunk cable
Multi-Mode 50/125, OM3, LSZH, 3.0mm diameter, Standard MTP connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.5dB
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
2m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
3m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
5m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
10m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
15m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
20m	MTP-MTP 12 core Trunk Patch Cable OM3	POA

3.13 MTP-MTP MMF OM4 12 Core Trunk Cable

MPO(F) - MPO(F) 12 core Patch or Trunk cable
Multi-Mode 50/125, LSZH, 3.0mm diameter, Standard MTP connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.5dB
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 12 core Trunk Patch Cable OM4	POA
2m	MTP-MTP 12 core Trunk Patch Cable OM4	POA
3m	MTP-MTP 12 core Trunk Patch Cable OM4	POA
5m	MTP-MTP 12 core Trunk Patch Cable OM4	POA
10m	MTP-MTP 12 core Trunk Patch Cable OM4	POA
15m	MTP-MTP 12 core Trunk Patch Cable OM4	POA
20m	MTP-MTP 12 core Trunk Patch Cable OM4	POA

3.14 MTP-MTP SMF 12 Core Trunk Cable

MPO(F) - MPO(F) 12 core Patch or Trunk cable
Single-Mode 9/125, G625D, LSZH, 3.0mm diameter, Standard MTP connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Elite ≤ 0.35dB, typical ≤ 0.15dB)
RL ≥ 60dB (Elite ≥ 65dB)
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 12 core Trunk Patch Cable SMF	POA
2m	MTP-MTP 12 core Trunk Patch Cable SMF	POA
3m	MTP-MTP 12 core Trunk Patch Cable SMF	POA
5m	MTP-MTP 12 core Trunk Patch Cable SMF	POA
10m	MTP-MTP 12 core Trunk Patch Cable SMF	POA
15m	MTP-MTP 12 core Trunk Patch Cable SMF	POA
20m	MTP-MTP 12 core Trunk Patch Cable SMF	POA

3.15 MPO-MPO MMF OM3 24 Core Trunk Cable

MPO(F) - MPO(F) 24 core Patch or Trunk cable
Multi-Mode 50/125, OM3, LSZH, 3.0mm diameter, Standard MPO connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB)
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 24 core Trunk Patch Cable OM3	POA
2m	MPO-MPO 24 core Trunk Patch Cable OM3	POA
3m	MPO-MPO 24 core Trunk Patch Cable OM3	POA
5m	MPO-MPO 24 core Trunk Patch Cable OM3	POA
10m	MPO-MPO 24 core Trunk Patch Cable OM3	POA
15m	MPO-MPO 24 core Trunk Patch Cable OM3	POA
20m	MPO-MPO 24 core Trunk Patch Cable OM3	POA

3.16 MPO-MPO MMF OM4 24 Core Trunk Cable

MTP(F) - MTP(F) 24 core Patch or Trunk cable
Multi-Mode 50/125, OM4, LSZH, 3.0mm diameter, Standard MPO connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB)
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 24 core Trunk Patch Cable OM4	POA
2m	MPO-MPO 24 core Trunk Patch Cable OM4	POA
3m	MPO-MPO 24 core Trunk Patch Cable OM4	POA
5m	MPO-MPO 24 core Trunk Patch Cable OM4	POA
10m	MPO-MPO 24 core Trunk Patch Cable OM4	POA
15m	MPO-MPO 24 core Trunk Patch Cable OM4	POA
20m	MPO-MPO 24 core Trunk Patch Cable OM4	POA

3.17 MPO-MPO SMF 24 Core Trunk Cable

MPO(F) - MPO(F) 24 core Patch or Trunk cable
Single-Mode 9/125, G625D, LSZH, 3.0mm diameter, Standard MPO connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Elite ≤ 0.35dB, typical ≤ 0.15dB)
RL ≥ 60dB (Elite ≥ 65dB)
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 24 core Trunk Patch Cable SMF	POA
2m	MPO-MPO 24 core Trunk Patch Cable SMF	POA
3m	MPO-MPO 24 core Trunk Patch Cable SMF	POA
5m	MPO-MPO 24 core Trunk Patch Cable SMF	POA
10m	MPO-MPO 24 core Trunk Patch Cable SMF	POA
15m	MPO-MPO 24 core Trunk Patch Cable SMF	POA
20m	MPO-MPO 24 core Trunk Patch Cable SMF	POA

3.18 MTP-MTP MMF OM3 24 Core Trunk Cable

MTP(F) - MTP(F) 24 core Patch or Trunk cable
Multi-Mode 50/125, OM3, LSZH, 3.0mm diameter, Standard MTP connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB)
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
2m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
3m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
5m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
10m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
15m	MTP-MTP 12 core Trunk Patch Cable OM3	POA
20m	MTP-MTP 12 core Trunk Patch Cable OM3	POA

3.19 MTP-MTP MMF OM4 24 Core Trunk Cable

MTP(F) - MTP(F) 24 core Patch or Trunk cable
Multi-Mode 50/125, OM4, LSZH, 3.0mm diameter, Standard MTP connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB)
RL ≥ 20dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 24 core Trunk Patch Cable OM4	POA
2m	MTP-MTP 24 core Trunk Patch Cable OM4	POA
3m	MTP-MTP 24 core Trunk Patch Cable OM4	POA
5m	MTP-MTP 24 core Trunk Patch Cable OM4	POA
10m	MTP-MTP 24 core Trunk Patch Cable OM4	POA
15m	MTP-MTP 24 core Trunk Patch Cable OM4	POA
20m	MTP-MTP 24 core Trunk Patch Cable OM4	POA

3.20 MTP-MTP SMF 24 Core Trunk Cable

MTP(F) - MTP(F) 24 core Patch or Trunk cable
Single-Mode 9/125, G625D, LSZH, 3.0mm diameter, Standard MTP connector with standard routing and B-Polarity
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Elite ≤ 0.35dB, typical ≤ 0.15dB)
RL ≥ 60dB (Elite ≥ 65dB)
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 24 core Trunk Patch Cable SMF	POA
2m	MTP-MTP 24 core Trunk Patch Cable SMF	POA
3m	MTP-MTP 24 core Trunk Patch Cable SMF	POA
5m	MTP-MTP 24 core Trunk Patch Cable SMF	POA
10m	MTP-MTP 24 core Trunk Patch Cable SMF	POA
15m	MTP-MTP 24 core Trunk Patch Cable SMF	POA
20m	MTP-MTP 24 core Trunk Patch Cable SMF	POA

3.21 MPO-LC MMF OM3 12 Core Breakout Cable

MPO (F) – LC/UPC Fan-out cable. MPO 12 core standard connector with 6x LC Duplex connectors. Multi-Mode 50/125, OM3, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA
2m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA
3m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA
5m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA
10m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA
15m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA
20m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM3	POA

3.22 MPO-LC MMF OM4 12 Core Breakout Cable

MPO (F) – LC/UPC Fan-out cable. MPO 12 core standard connector with 6x LC Duplex connectors. Multi-Mode 50/125, OM4, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA
2m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA
3m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA
5m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA
10m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA
15m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA
20m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC OM4	POA

3.23 MPO-LC SM 12 Core Breakout Cable

MPO (F) – LC/UPC Fan-out cable. MPO 12 core standard connector with 6x LC Duplex connectors. Single-Mode 9/125, G652D, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Typical ≤ 0.15dB) LC IL ≤ 0.2dB
RL (dB) ≥ 60dB (Elite ≥ 65dB) LC/U RL ≥ 50dB LC/A RL ≥ 65dB
Available with the Elite and LC/A connectors for improved performance

Item	Description	Price
1m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA
2m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA
3m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA
5m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA
10m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA
15m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA
20m	MPO-MPO 12 Core Fan-out Cable MMF LC/UPC SM	POA

3.24 MTP-LC MMF OM3 12 Core Breakout Patch Cable

MTP (F) – LC/UPC Breakout cable. MTP 12 core standard connector with 6x LC Duplex connectors. Multi-Mode 50/125, OM3, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA
2m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA
3m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA
5m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA
10m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA
15m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA
20m	MTP-LC 12 Breakout Cable MMF LC/UPC OM3	POA

3.25 MTP-LC MMF OM4 12 Core Breakout Cable

MTP (F) – LC/UPC Breakout cable. MTP 12 core Standard connector with 6x LC Duplex connectors. Multi-Mode 50/125, OM4, LSZH, 3.0mm cable with each Breakout 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA
2m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA
3m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA
5m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA
10m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA
15m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA
20m	MTP-LC 12 Breakout Cable MMF LC/UPC OM4	POA

3.26 MTP-LC SM 12 Core Breakout Cable

MTP (F) – LC/UPC Breakout cable. MTP 12 standard connector with 6x LC Duplex connectors. Single-Mode 9/125, G652D, LSZH, 3.0mm cable with each Breakout 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Typical ≤ 0.15dB) LC IL ≤ 0.2dB
RL (dB) ≥ 60dB (Elite ≥ 65dB) LC/U RL ≥ 50dB LC/A RL ≥ 65dB
Available with the Elite and LC/A connectors for improved performance

Item	Description	Price
1m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA
2m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA
3m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA
5m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA
10m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA
15m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA
20m	MTP-LC 12 Breakout Cable MMF LC/UPC SM	POA

3.27 MPO-LC MMF OM3 24 Core Breakout Cable

MPO (F) – LC/UPC Fan-out cable. MPO 24 standard connector with 12x LC Duplex connectors. Multi-Mode 50/125, OM3, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA
2m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA
3m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA
5m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA
10m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA
15m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA
20m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM3	POA

3.28 MPO-LC MMF OM4 24 Core Breakout Cable

MPO (F) – LC/UPC Fan-out cable. MPO 24 standard connector with 12x LC Duplex connectors. Multi-Mode 50/125, OM4, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA
2m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA
3m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA
5m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA
10m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA
15m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA
20m	MTP-MTP 24 Fan-out Cable MMF LC/UPC OM4	POA

3.29 MPO-LC SM 24 Core Breakout Cable

MPO (F) – LC/UPC Fan-out cable. MPO 24 standard connector with 12x LC Duplex connectors. Single-Mode 9/125, G652D, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Typical ≤ 0.15dB) LC IL ≤ 0.2dB
RL (dB) ≥ 60dB (Elite ≥ 65dB) LC/U RL ≥ 50dB LC/A RL ≥ 65dB
Available with the Elite and LC/A connectors for improved performance

Item	Description	Price
1m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA
2m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA
3m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA
5m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA
10m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA
15m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA
20m	MTP-MTP 24 Fan-out Cable MMF LC/UPC SM	POA

3.30 MTP-LC MMF OM3 24 Core Breakout Cable

MTP (F) – LC/UPC Breakout cable. MTP 24 core standard connector with 6x LC Duplex connectors. Multi-Mode 50/245, OM3, LSZH, 3.0mm cable with each fan-out 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA
2m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA
3m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA
5m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA
10m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA
15m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA
20m	MTP-LC 24 Breakout Cable MMF LC/UPC OM3	POA

3.31 MTP-LC MMF OM4 24 Core Breakout Cable

MTP (F) – LC/UPC Breakout cable. MTP 24 core Standard connector with 6x LC Duplex connectors. Multi-Mode 50/245, OM4, LSZH, 3.0mm cable with each Breakout 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.35dB (Typical 0.15dB). LC IL ≤0.2dB
RL ≥ 20dB. LC≥ 30dB
Also available to order with the Elite connector for improved performance

Item	Description	Price
1m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA
2m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA
3m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA
5m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA
10m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA
15m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA
20m	MTP-LC 24 Breakout Cable MMF LC/UPC OM4	POA

3.32 MTP-LC MMF SM 24 Core Breakout Cable

MTP (F) – LC/UPC Breakout cable. MTP 24 core standard connector with 6x LC Duplex connectors. Single-Mode 9/245, G652D, LSZH, 3.0mm cable with each Breakout 2.0mm diameter, with 0.5m length. Standard MTP connector
For other lengths not listed please contact Arvensis Consulting
IL ≤ 0.7dB (Typical ≤ 0.15dB) LC IL ≤ 0.2dB
RL (dB) ≥ 60dB (Elite ≥ 65dB) LC/U RL ≥ 50dB LC/A RL ≥ 65dB
Available with the Elite and LC/A connectors for improved performance

Item	Description	Price
1m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA
2m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA
3m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA
5m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA
10m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA
15m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA
20m	MTP-LC 24 Breakout Cable MMF LC/UPC SM	POA

4   OPTIC FIBRE EQUIPMENT

4.1   Visual Fault Locator

Handheld adjustable visual light source for fault locating, new service installations, and tracing of connectivity in dense cable installations.

The VLF is the tool for locating broken fibres, micro-bends, cracked fibre and patch cable continuity verification within the dead zone of OTDR's

Standard fitting for 2.5mm universal connections and a 1.25mm (F) to 2.5mm (M) SM 9/125 hybrid adaptor included with a snug carry case.

A 1.25mm connector adaptor for FC(M)-LC(F) adaptor supplied separately.

Centre Wavelength: 650nm ± 10nm. (635nm can be supplied on order)

Emitter Type: FP-LD (10mw, 1mw optional)

Operating Mode: CE and Pulsed (2-3Hz)

Operating Distance: 5/8/10/20/30km

Output Power: 30mw Standard (Optional 1,3,5,10mw)

Item	Description	Price
VLS-080502	Order quantity of 1-5 in standard configuration, excl shipping and GST	POA
VLS-080502	Order quantity of 6-10 in standard configuration, excl shipping and GST, 5% Off	POA
VLS-080502	Order quantity of 11-20 in standard configuration, excl shipping and GST, 7.5% Off	POA
VLS-080502	Order quantity of 21-50 in standard configuration, excl shipping and GST, 10% Off	POA
VLS-080502	Order quantity of 51-100 in standard configuration, excl shipping and GST, 15% Off	POA
VLS-080502	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.2   Handheld Adjustable Light Source

Handheld adjustable light source for new infrastructure installations, fibre loss testing, acceptance testing, and maintenance work. When combined with our handheld optical power meter, it offers a quick and accurate testing solution for both Single-Mode and Multi-Mode fibres. The O-080202 unit offers 1 to 4 wavelengths and an adjustable output power (Customer order specific).

Combined with our Optical Power Meter (O-080104A) for wavelength ID information.

Standard fitting: FC(F) with SC (F) Adaptor and optional LC and ST adapters available for order separately.

Tone Generation:270Hz, 330Hz, 1KHz, 2KHz

Wavelengths: 1310/1550, (1310/1490, 1550/1625nm (supplied on order)

Emitter Type: FP-LD

Operating Mode: CE and Pulsed (2-3Hz)

Operating Distance: 5/8/10/20/30km

Output Power: Adjustable from -5dBm to ~-12dBm in <0.5dBm steps

Item	Description	Price
O-080202	Order quantity of 1-5 in standard configuration, excl shipping and GST	POA
O-080202	Order quantity of 6-10 in standard configuration, excl shipping and GST, 5% Off	POA
O-080202	Order quantity of 11-20 in standard configuration, excl shipping and GST, 7.5% Off	POA
O-080202	Order quantity of 21-50 in standard configuration, excl shipping and GST, 10% Off	POA
O-080202	Order quantity of 51-100 in standard configuration, excl shipping and GST, 15% Off	POA
O-080202	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.3   Handheld Optical Power Meter

Handheld adjustable optical power meter for new infrastructure installations, fibre loss testing, acceptance testing, and maintenance work. When combined with our handheld light source unit, it offers a quick and accurate testing solution for both Single-Mode and Multi-Mode fibres. The O-080104A unit offers 6 wavelengths for optical reading and wavelength ID when used together with the light source unit.

Data Storage for 1000 records. Reference power levels can be setup and stored for recall.

Standard fitting: FC(F), with adaptors for SC (F), ST(F) and LC (F) included

Calibrated λ: 850nm, 1300nm, 1310nm, 1490nm, 1550nm and 1625nm.

Tone ID:270Hz, 330Hz, 1KHz, 2KHz

Wavelengths: 1310/1550, (1310/1490, 1550/1625nm default on order)

Detector Type: InGaAs

Measurement Range: -70 to ~+6dBm

Uncertainty: ±0.15dB

Intelligent backlight control, auto-off power options and more…

Item	Description	Price
O-080104A	Order quantity of 1-5 in standard configuration, excl shipping and GST	POA
O-080104A	Order quantity of 6-10 in standard configuration, excl shipping and GST, 5% Off	POA
O-080104A	Order quantity of 11-20 in standard configuration, excl shipping and GST, 7.5% Off	POA
O-080104A	Order quantity of 21-50 in standard configuration, excl shipping and GST, 10% Off	POA
O-080104A	Order quantity of 51-100 in standard configuration, excl shipping and GST, 15% Off	POA
O-080104A	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.4   Optic Fibre Identifier

A vitally important tool to identify is a fibre is live or carrying traffic or not without disrupting services. The Fibre identifier also includes a Visual Fault Locator module. Measure signal direction and optical power with macro bent technology.

Insertion Loss: 1.0dB

Fibre Type: <3mm Fibre

Identify Signal Type: 270Hz/1KHz/2KHz

Minimal Power Detection (1310nm): -30dBm

Minimal Power Detection (1550nm): -35dBm

Centre Wavelength: 650nm

Output Power: 10mW

Detector Type: 1mm InGaAs

Battery: 2x AA

Battery Life: >60 Hours

Display: LED

Item	Description	Price
O-080702	Order quantity of 1-5 in standard configuration, excl shipping and GST	POA
O-080702	Order quantity of 6-10 in standard configuration, excl shipping and GST, 5% Off	POA
O-080702	Order quantity of 11-20 in standard configuration, excl shipping and GST, 7.5% Off	POA
O-080702	Order quantity of 21-50 in standard configuration, excl shipping and GST, 10% Off	POA
O-080702	Order quantity of 51-100 in standard configuration, excl shipping and GST, 15% Off	POA
O-080702	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.5   Connector Insertion/Extraction Tool

Insertion Extraction Tool:
• Easily inserts and extracts fibre optic connectors in high density patch panels.
• Works with LC and SC simplex and duplex connectors as well as MU, MT-RJ and other similar types.
• Tool tip design insures positive grip without slipping, avoid network faults and bumps.
• Spring loaded tool action and ergonomic grips allow easy, comfortable and precise left or right hand operation.
• Dimensions: 222.86 mm x 70 mm x 19.1 mm.
• Weight: 99g.

Item	Description	Price
Mil-80860	Order quantity of 1-5 excl shipping and GST	POA
Mil-80860	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
Mil-80860	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
Mil-80860	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
Mil-80860	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
Mil-80860	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.6   One-Click Cleaner Cle-Pen End-face Cleaner

One-Click Cleaner Cle-Pen available for:
- 1.25mm to suit LC & MU with PC/APC/UPC finish and
- 2.5mm SC/ST/FC PC/APC/UPC finish.

The dust caps acts as an adapter for cleaning unmated connectors or patch cables. Extendable tip to access recessed connectors.
Compliant with EU/95/2002/EC Directive(RoHS)
Number of Cleans: ~800 clicks
Cleaning Method: Dry
Specify type when placing order as there are 2 different models
PN: **O-220805a** – 1.25mm LC/MU
PN: **O-220805b** – 2.5mm SC/ST/FC

Item	Description	Price
O-220805(x)	Order quantity of 1-5 excl shipping and GST	POA
O-220805(x)	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-220805(x)	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-220805(x)	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-220805(x)	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
O-220805(x)	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.7   Fibre Connector Cleaner

Efficient and Easy to use and delivers consistently high quality cleaning performance where you need it most.
Lightweight and safe to use.
Anti-static resin is used in the construction of the casing
Replacement tape so you can reuse the cleaner and reduce costs
Number of Cleans: ~400 wipes
Cleaning Method: Dry

Item	Description	Price
O-220705	Order quantity of 1-5 excl shipping and GST	POA
O-220705	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-220705	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-220705	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-220705	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
O-220705	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.8   MPO/MTP One-Click Cleaner

The NeoClean employs microfibers designed specifically for high density optical connectors to remove even the smallest contamination not visible to the naked eye.

MPO/MTP connectors of 1 row/12 s or 2 rows/24 s are common as well as the uncommon 16/32 connector.

Anti-static resin is used in the construction of the casing

Replacement tape so you can reuse the cleaner and reduce costs

Number of Cleans: ~600 clicks

Cleaning Method: Dry

PN: **O-220803-M** – 1 Row 12 / 2 Row 24

PN: **O-220803-M2** – 1 Row 16 / 2 Row 32

Item	Description	Price
O-220803-(x)	Order quantity of 1-5 excl shipping and GST	POA
O-220803-(x)	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-220803-(x)	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-220803-(x)	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-220803-(x)	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
O-220803-(x)	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.9   Buffer Tube Stripper

The Buffer Tube Stripper with adjustable blades can be set for any depth to help assure nick-free jacket entry. Used on Simplex fibre and a variety of fibre optic cables up to 1/8th inch diameter (3.17mm)

Loose tube fibre demands a precision tool capable of cutting different buffer tube diameters without nicking the enclosed fibre

Adjustable Stripping Range: 2-3mm

Item	Description	Price
O-221029	Order quantity of 1-5 excl shipping and GST	POA
O-221029	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-221029	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-221029	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-221029	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
O-221029	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

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4.10 Fibre Cleaver - O-220112

A multifunction cleaver, the blade can rotate automatically 26 times full-circle, without needing any blade adjustment offering less user action to fine tune the cleaver. Average cutting angle performance of 0.5
Fibre Type: Single silica fibre
Adapt to Bare Fibre Diameter: Ø125um
Coating Diameter: Ø0.25mm, Ø0.9mm, Ø2.0mm, Ø3.0mm, Ø3mmx2
Length: 10~16mm (Ø0.25mm and Ø 0.9mm),
Cutting Angle: ≤0.7°
Cutting Edge Lifespan: ~60,000 cleaves

Item	Description	Price
O-220112	Order quantity of 1-5 excl shipping and GST	POA
O-220112	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-220112	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-220112	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-220112	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
O-220112	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.11 Fibre Cleaver - O-220113

A multifunction cleaver, the blade can rotate automatically 26 times full-circle, without needing any blade adjustment offering less user action to fine tune the cleaver. Average cutting angle performance of 0.5. Automatic offcut collection bin
Fibre Type: Single silica fibre
Adapt to Bare Fibre Diameter: Ø125um
Coating Diameter: Ø0.25mm and Ø0.9mm
Length: 10~16mm (Ø0.25mm and Ø 0.9mm),
Cutting Angle: ≤0.7°
Cutting Edge Lifespan: ~60,000 cleaves

Item	Description	Price
O-220113	Order quantity of 1-5 excl shipping and GST	POA
O-220113	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-220113	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-220113	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-220113	Order quantity of 51-100 excl shipping and GST, 15% Off	POA
O-220113	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.12 Fibre Cleaver - O-220114

A great entry level fibre cleaver and manufactured from high-grade U.S. super hard aluminium alloy (HV450 hardness).
Fibre Type: Single silica fibre
Adapt to Bare Fibre Diameter: Ø125um
Coating Diameter: Ø0.25mm, Ø0.9mm, Ø2.0mm, Ø3.0mm, Ø3mmx2
Length: 10~16mm (Ø0.25mm and Ø 0.9mm),
Cutting Angle: ≤0.7°
Cutting Edge Lifespan: ~60,000 cleaves

Item	Description	Price
O-220114	Order quantity of 1-5 excl shipping and GST	POA
O-220114	Order quantity of 6-10 excl shipping and GST, 5% Off	POA
O-220114	Order quantity of 11-20 excl shipping and GST, 7.5% Off	POA
O-220114	Order quantity of 21-50 excl shipping and GST, 10% Off	POA
O-220114	Order quantity of 51-100 excl shipping and GST, 15% Off	APOA
O-220114	For order quantities over 100 units please contact sales@arvensis-consulting.com	POA

4.13 Fusion Splicers		
Image	**Description**	**Base Price**
	PN: O-ACL-S80M The ultimate start kit, small, light with long battery life. 4 motors for accurate alignment. 250 x magnifications of fibre s. 7 second fast splicing and 26 second intelligent heating. Electrodes rated for ~4000 splices. 4400mAh Li-Battery. Inductive auto heater and 3-in-1 multifunction clamps with waterproof design. **Kit includes:** Fibre Cleaver, Miller Fibre Strippers, Spare pair of electrodes, AC Power Cord, AC Adapter, Brace, Drop-cable Strippers, Carry Bag and user manual.	POA
	PN: O-ACL-S60C ARC calibration by temperature and air pressure done automatically. PAS digital image processing and 250 x magnifications of fibre s. 6 second fast splicing and 26 second intelligent heating. Electrodes rated for ~4000 splices. 5800mAh Li-Battery. Inductive auto heater and 3-in-1 multifunction clamps with 360° rubber and amour protection against impacts water and dust. **Kit includes:** Miller Fibre Strippers, Spare pair of electrodes, AC Power Cord, AC Adapter, Brace, Drop-cable Strippers, Carry Bag and user manual.	POA
	PN: O-ACL-S60F Fast boot up time of 1 second with upgraded Quad CPU and 6 seconds per splice and 18 seconds heating. 4 Motors for accurate alignment. 250 x magnifications of fibre s. Electrodes rated for ~4000 splices. 5200mAh Li-Battery. Inductive auto heater, rubber and amour protection against impacts (IP5X) water and dust (IPX2). **Kit includes:** Miller Fibre Strippers, Spare pair of electrodes, AC Power Cord, AC Adapter, Brace, Drop-cable Strippers, Carry Bag and user manual.	POA
	PN: O-ACL-S80C Small, lightweight and high reliability entry unit with 4 motors for alignment. 7 seconds per splice and 18 seconds heating. 320 x magnifications of fibre s. Electrodes rated for ~4000 splices. 6800mAh Li-Battery. Inductive auto heater, rubber and amour protection against impacts (IP5X) water and dust (IPX2). **Kit includes:** Miller Fibre Strippers, Spare pair of electrodes, AC Power Cord, AC Adapter, Brace, Drop-cable Strippers, Carry Bag and user manual.	POA

	PN: O-ACL-S80D Rich with functions and 6 alignment motors for precision dual direction splicing. Small, lightweight and high reliability. 7 seconds per splice and 18 seconds heating. 320 x Magnifications of fibres. Electrodes rated for ~4000 splices. Fitted with large 6800mAh Li-Battery. Inductive auto heater, rubber and amour protection against impacts (IP5X) water and dust (IPX2) and automatic environmental compensation to ensure optimal splice performance. **Kit includes:** Miller Fibre Strippers, Spare pair of electrodes, AC Power Cord, AC Adapter, Brace, Drop-cable Strippers, Carry Bag and user manual.	POA
	PN: O-ACL-S60G (Ribbon Splicer) Ribbon splicing for 1-12 cores. Precision alignment with a 26 second splicing time for 1-2 cores and 4-12 cores 40 seconds. 25x Magnifications of fibre s. Electrodes rated for ~3000 splices. Fitted with 5200mAh Li-Battery. Inductive auto heater, rubber and amour protection against impacts (IP5X) water and dust (IPX2) and automatic environmental compensation to ensure optimal splice performance. **Kit includes:** Miller Fibre Strippers, Spare pair of electrodes, AC Power Cord, AC Adapter, Brace, Drop-cable Strippers, Carry Bag and user manual.	POA
	PN: O-ACL-S60S An entry level fusion splicer with a user friendly interface and great features. 8 seconds per splice and 28 seconds heating. 300 x Magnifications of fibre s. Electrodes rated for ~4000 splices. Fitted with large 8800mAh Li-Battery. Inductive auto heater, rubber and amour protection against impacts (IP5X) water and dust (IPX2) and automatic environmental compensation to ensure optimal splice performance. **Kit includes:** Fibre Cleaver, Spare pair of electrodes, AC Power Cord, AC Adapter, Fibre Stripper, Skin Line Stripper, Carry Bag and user manual.	POA

	4.14 Fibre Optic Kits	
Image	**Description**	**Base Price**
	PN: O-ACL-KIT503 – FAST Connector Termination Kit The connector kit contains all the tooling you need prepare fibre optic cables (breakout, stripping and cleaving) for termination with the range of FAST connectors. The kit allows for termination of 250um and 900um coated connectors using the PC range of FAST connectors **Kit includes:** Tri-hole stripper (TFS-392), Kevlar scissors (KC-1), 6" Side Cut Pliers 130mm, FTTH Flat drop Optical Cable, Precision Fibre Cleaver FC-6S with bin attachment, Optic Fibre Power Meter FMP-380, Visual Fault Locator VLF-10S, Fibre Optic Cleaning Cube with 120 wipes, 250ml Twist-Lock Auto Dispensing Alcohol Bottle, Fibre Optic Disposal Unit, Black Marker, Carry Bag (230x160x150mm)	POA
	PN: O-ACL-KIT111M – Fibre Cleaning Kit A basic cleaning kit contains all the typical cleaning devices for today's field tech and data centre engineer. **Kit includes:** NTT-AT Fibre Optic Cassette Cleaner (OPTIPOP-R), Box of KIMWIPES 280 pcs/box, Cle-Pen One Click Cleaner (SC/ST/FC) Cle-Pen One Click Cleaner (LC/MU), Dry Wipes 100 pcs, 250ml Twist-Lock Auto Dispensing Alcohol Bottle, MTP/MPO Cleaner NEOCLEAN-M, Carry Bag (230x160x150mm)	POA
	PN: O-ACL-KIT404 – Test Equipment Toolkit A compact and economical solution for all applications in fibre optic network verification, installation, maintenance and surveillance. This kit also has everything you need to properly clean optical fibre end faces, bulkhead connections and fibres in preparation for splicing applications. Whether you are using single-mode or multimode fibre, this kit is designed for you, **Kit includes:** Tri-hole stripper (TFS-392), Kevlar scissors (KC-1), Grey Buffer Tube Stripper(45-162), Fibre Cassette Cleaner (KC-105), Cle-Pen One Click Cleaner (SC/ST/FC) Cle-Pen One Click Cleaner (LC/MU), Utility Knife, Black Marker, Optical Power Meter (HW-3211), Visual Fault Locator (VLF-10S), Seikoh-Giken Standard FC and SC Adaptor, Fibre Optic Inspection Microscope 400x (TFS-392), Optic Fibre Light Source (HW-3111), Black Tool Case (370x265x138mm)	POA
Do you need to setup a new employee or a new department? **Arvensis Consulting can work with you to put together a kit that meets your exact requirement.** **We can also restock your kits as consumables are used up.** **Contact Arvensis to discuss your requirements today**		

	4.15 Shipping and Freight	
	Pricing is dependent on volume and weight and will be advised at the time of quoting. Consolidate orders to reduce shipping costs or request sea-freight to save on costs if your order is not urgent.	POA

5   OFDF's Cabinets and Racks

	5.1. Rack Mount OFDF's	
Item	**Description**	**Price**
	PN: ATL-OTB-M01 **Dimension:** 300X180X25mm **Material:** ABS **Capacity:** 12 Fibres **Architecture:** Modular Cassette	POA
	PN: ATL-OTB-M02 **Dimension:** 300X200X23mm **Material:** ABS **Capacity:** 24 Ports LC Duplex **Architecture:** Modular Cassette	POA
	PN: ATL-OTB-M03 **Dimension:** 300x180x25mm **Material:** ABS **Capacity:** 12 Fibres **Architecture:** Modular Cassette	POA
	PN: ATL-OTB-M04 **Dimension:** 255×180×25mm **Material:** ABS **Capacity:** 12 Fibres **Architecture:** Modular Cassette	POA
	PN: ATL-OTB-M05 **Dimension:** 300X200X23mm **Material:** ABS **Capacity:** 24 Ports LC Duplex **Architecture:** Modular Cassette	POA
	PN: ATL-OTB-M10 **Capacity:** 12/24 Cores SC/FC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X1UX311mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M11 **Capacity:** 12/24 Cores SC/FC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X1UX300mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M12A **Capacity:** 12/24 Cores SC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X1UX250mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA

	PN: ATL-OTB-M12B **Capacity:** 12/24 Cores LC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X1UX250mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M18 **Capacity:** 48 Cores LC/APC LC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X2UX250mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M19 **Capacity:** 48 Port SC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X2UX250mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M16 **Capacity:** 72 Cores LC/APC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX300mm Adapter: FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M17 **Capacity:** 72 Cores SC/APC SC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX300mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M13 **Capacity:** 96 Cores LC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX300mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M14 **Capacity:** 96 Cores LC/APC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX300mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA

	PN: ATL-OTB-M15 **Capacity:** 96 Cores SC/APC SC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX300mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M20 **Capacity:** 144 Cores LC/APC LC/UPC Simplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX400mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M21 **Capacity:** 144 Cores SC/APC SC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X3UX400mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M22 **Capacity:** 288 Cores LC/APC LC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X5UX400mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-OTB-M23 **Capacity:** 288 Cores SC/APC SC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X5UX400mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black, White and Grey, or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-ODF-M144A **Capacity:** 144 Cores SC/APC SC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X4UX480x400x178mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-ODF-M144B **Capacity:** 144 Cores SC/APC SC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X4UX480x400x178mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black or Customized **Material:** Cold-rolled Steel	POA

	PN: ATL-ODF-M144C **Capacity:** 144 Cores SC/APC SC/UPC Duplex **Splice Tray Capacity:** 12 Fibres/Tray; 24 Fibres/Tray **Dimension:** 19"X4UX480x340x178mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Drawer Type Rack-mount **Colour:** Black or Customized **Material:** Cold-rolled Steel	POA
	PN: ATL-ODF-M144C-Module12 **Capacity:** 12 Cores SC/APC SC/UPC Duplex **Splice Tray Capacity:** 12 Fibres **Adapter:** SC Adaptors **Installation:** Modular fit with ATL-ODF-M144C Includes 12 pigtails of relevant fibre mode as specified by customer and fibre adaptor to suit, fitted at factory. Optional for customer to supply pigtails	POA
	PN: ATL-ODF-M144C-Module24 **Capacity:** 24 Cores LC/APC LC/UPC Duplex **Splice Tray Capacity:** 24 Fibres **Adapter:** LC Adaptors **Installation:** Modular fit with ATL-ODF-M144C Includes 24 pigtails of relevant fibre mode as specified by customer and fibre adaptor to suit, fitted at factory. Optional for customer to supply pigtails	POA
	PN: ATL-ODF-M96 **Capacity:** 96 Cores **Splice Tray Capacity:** 8 Cassette Modules **Dimension:** 19"5UX225x485x345mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Outdoor Cabinet **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF	POA
	PN: ATL-ODF-M72 **Capacity:** 72 Cores **Splice Tray Capacity:** 6 Cassette Modules **Dimension:** 19"X4UX180x485x345mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Outdoor Cabinet **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF	POA
	PN: ATL-ODF-M48A **Capacity:** 48 Cores **Splice Tray Capacity:** 4 Cassette Modules **Dimension:** 19"X3UX132x485x345mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Outdoor Cabinet **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF	POA
	PN: ATL-ODF-M48B **Capacity:** 48 Cores **Splice Tray Capacity:** 4 Cassette Modules **Dimension:** 19"X3UX132x485x345mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Outdoor Cabinet **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF	POA

	PN: ATL-ODF-M24 **Capacity:** 24 Cores **Splice Tray Capacity:** 2 Cassette Modules **Dimension:** 19"X2UX90x485x345mm **Adapter:** FC, SC, ST, LC Adaptors **Installation:** Outdoor Cabinet **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF	POA
	PN: ATL-ODF-M12 **Dimension:** 44.5X485X285mm **Capacity:** 12 Fibres **Material:** Cold-rolled Steel **Architecture:** Modular	POA

5.2. OFDF Frames		
Item	**Description**	**Price**
	PN: ATL-ODF-01 **Capacity:** 720 Cores **Dimension:** 19" 2200x840x300mm **Installation:** Floor Standing OFDF Frame **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF Frame Suitable for ribbon and non-ribbon fibre optic cable types. Standard 19" rack dimensions. Modular unit with internal trays for fibre distribution	POA
	PN: ATL-ODF-02 **Capacity:** 648 Cores **Dimension:** 19" 2200x800x400mm **Installation:** Floor Standing OFDF Frame **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF Frame Suitable for ribbon and non-ribbon fibre optic cable types. Standard 19" rack dimensions. Modular unit with internal trays for fibre distribution	POA
	PN: ATL-ODF-03 **Capacity:** 576 Cores **Dimension:** 19" 2000x800x400mm **Installation:** Floor Standing OFDF Frame **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF Frame Suitable for ribbon and non-ribbon fibre optic cable types. Standard 19" rack dimensions. Modular unit with internal trays for fibre distribution	POA
	PN: ATL-ODF-04 **Capacity:** 576 Cores **Dimension:** 19" 2000x800x400mm **Installation:** Floor Standing OFDF Frame **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF Frame Suitable for ribbon and non-ribbon fibre optic cable types. Standard 19" rack dimensions. Modular unit with internal trays for fibre distribution	POA

Item	Description	Price
	PN: ATL-ODF-05 **Capacity:** 1440 Cores **Dimension:** 19" 2200x1440x300mm **Installation:** Floor Standing OFDF Frame **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Architecture:** Modular OFDF Frame Suitable for ribbon and non-ribbon fibre optic cable types. Standard 19" rack dimensions. Modular unit with internal trays for fibre distribution	POA

5.3. Outdoor Cabinets and Enclosures		
Item	**Description**	**Price**
	PN: ATL-WME-1 **Dimension:** 400x200x500mm **Installation:** Wall mounted or Pole mounted **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Rating:** IP66 Fan cooling with DIN rail mounts inside and a single shelf, electrostatic powder coating finish over zinc-coated plate 1.5mm – 2.0mm steel **Optional:** Perforated mounting strip, mounting plate, wall fixing brackets, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-WME-1A **Dimension:** 400x200x600mm **Installation:** Wall mounted or Pole mounted **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Rating:** IP66 Fan cooling with DIN rail mounts inside and 3 shelves, electrostatic powder coating finish over zinc-coated plate 1.5mm – 2.0mm steel **Optional:** Perforated mounting strip, mounting plate, wall fixing brackets, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-WME-2 **Dimension:** 700x600x300mm **Installation:** Wall mounted **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Rating:** IP66 Electrostatic powder coating finish over zinc-coated plate 1.5mm – 2.0mm steel **Optional:** Perforated mounting strip, mounting plate, wall fixing brackets, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-OFOC-01 **Dimension:** 1200x600x600mm **Installation:** Ground or Floor Mounted **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Rating:** IP66 Fan cooling, electrostatic powder coating finish over zinc-coated plate 1.5mm – 2.0mm steel **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA

	PN: ATL-OFOC-02 **Dimension:** 965x620x300mm **Installation:** Wall Mounted **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Rating:** IP66 Fan cooling, electrostatic powder coating finish over zinc-coated plate 1.5mm – 2.0mm steel **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-OFOC-03 **Dimension:** 1100x640x420mm **Installation:** Ground or Floor Mounted **Colour:** Beige/Light Grey or Customized **Material:** Cold-rolled Steel **Rating:** IP66 Fan cooling with 19" rails fitted inside, electrostatic powder coating finish over zinc-coated plate 1.5mm – 2.0mm steel **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-OFOC-04 **Dimension:** 860x640x335mm **Installation:** Ground or Floor Mounted **Colour:** Powder coating option for customer requirements **Material:** Stainless Steel 201/304 **Rating:** IP66 **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-OFOC-05 **Dimension:** 1000x650x450mm **Installation:** Ground or Floor Mounted **Colour:** Powder coating option for customer requirements **Material:** Stainless Steel 201/304 **Rating:** IP66 Fan cooling with rails fitted inside for shelf mounts **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-OFOC-06 **Dimension:** 620x580x295mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 Modular OFDF fitment patch cable management fitted inside **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA
	PN: ATL-OFOC-FTTB-01 **Dimension:** 800x600x155mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 OFDF Splice tray fitment and LC/SC connector mount with copper termination points **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip.	POA

Image	Description	Price
	PN: ATL-OFOC-ONU-01 **Dimension:** 580x500x200mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 OFDF Splice tray fitment with copper termination points **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-ONU-02 **Dimension:** 670x670x260mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 OFDF Splice tray fitment with LC/SC connector mounts and 4 small equipment shelves **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-ONU-02 **Dimension:** 950x600x550mm **Installation:** Ground of Floor Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 19" 12RU side rails fitted for equipment front mounting with bottom cable locker management space **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-PON-01 **Dimension:** 750x650x200mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 19" 2RU rails fitted for rear mounting equipment in a vertical position **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-QQY **Dimension:** 700x455x185mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 Suitable for harsh or industrial environment with a splice tray fitment and basic mounting option **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-SSW **Dimension:** 1200x700x425mm **Installation:** Ground or Floor Mounted **Colour:** Powder coating option for customer requirements **Material:** Stainless Steel **Rating:** IP66 19" 5RU rack rails, Suitable for harsh or industrial environment with a bottom cable locker management space for cables. **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA

	PN: ATL-OFOC-SXG-01 **Dimension:** 600x800x150mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel or Stainless Steel **Rating:** IP66 Perforated back panel, double door, offers the user a multitude of mounting options for equipment layout. **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-SXG-02 **Dimension:** 800x600x150mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel or Stainless Steel **Rating:** IP66 Perforated back panel, double door, offers the user a multitude of mounting options for equipment layout. **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-SXG-03 **Dimension:** 600x400x150mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel or Stainless Steel **Rating:** IP66 Perforated back panel, single door, offers the user a multitude of mounting options for equipment layout. **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-WLG **Dimension:** 850x700x400mm **Installation:** Ground or Floor Mounted or Pole Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel or Stainless Steel **Rating:** IP66 19" side rails fitted panel, integrated cable bottom cable locker for slack storage, **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA
	PN: ATL-OFOC-WZ **Dimension:** 500x400x200mm **Installation:** Wall Mounted **Colour:** Powder coating option for customer requirements **Material:** Cold-rolled Steel **Rating:** IP66 Fan cooled with fibre splice trays mounts with a backing panel for mounting small equipment. **Optional:** Perforated mounting strip, mounting plate, lock (customer specification), gland plate, rain canopy, and support rails mounting clip	POA

	5.4. Fibre Distribution: Metal Box Types	
Item	**Description**	**Price**
	PN: ATL-ODB-M01 **Dimension:** 360x360x85mm **Capacity:** 24f SC or 48f LC **Installation:** Wall mount indoor or semi-outdoor within a sheltered area **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M02 **Dimension:** 450x450x140mm **Capacity:** 24f SC or 48f LC **Installation:** Wall mount indoor or semi-outdoor within a sheltered area **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M03 **Dimension:** 550x450x140mm **Capacity:** 72f SC or 144f LC **Installation:** Wall mount indoor or semi-outdoor within a sheltered area **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M11 **Dimension:** 470x370x130mm **Capacity:** 1- 32f SC PLC splitter Distribution cabinet **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M12 **Dimension:** 550x500x180mm **Capacity:** 1- 32f SC PLC splitter Distribution cabinet or 48 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M14 **Dimension:** 450x450x140mm **Capacity:** 1- 32f SC PLC splitter, 48 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP68 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M15 **Dimension:** 650x450x200mm **Capacity:** 1- 32f PLC splitter, 48 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA

Image	Details	Price
	PN: ATL-ODB-M16 **Dimension:** 650x450x200mm **Capacity:** 1- 32f SC PLC splitter, 48 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M17 **Dimension:** 415x400x150mm **Capacity:** 6x 1x8 PLC Splitter, 48 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M18 **Dimension:** 455x405x150mm **Capacity:** SC 72 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M18-A **Dimension:** 455x405x160mm **Capacity:** SC 96 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M18-B **Dimension:** 650x500x160mm **Capacity:** SC 144 fibres **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M19-16 **Dimension:** 370x330x110mm **Capacity:** 1x16 Splitter **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA
	PN: ATL-ODB-M19-32 **Dimension:** 450x350x120mm **Capacity:** 2x16 Splitter **Installation:** Wall mount or pole mount **Colour:** Black or White **Material:** Cold rolled steel or stainless steel **Rating:** IP65 **Optional:** Colour finish or customer logo can be added as required	POA

5.5. Fibre Distribution: Plastic Terminal Boxes		
Item	**Description**	**Price**
	PN: ATL-OTB-SY-01 **Dimension:** 198x112x45mm **Capacity:** 12 fibre core **Installation:** Indoor wall mount **Colour:** White **Material:** Polycarbonate plastic (PC) + ABS **Rating:** IP54 Indoor **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-02 **Dimension:** 265x155x55mm **Capacity:** 24 fibre core **Installation:** Indoor wall mount **Colour:** White **Material:** Polycarbonate plastic (PC) + ABS **Rating:** IP54 Indoor **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-03 **Dimension:** 235x126x52mm **Capacity:** 1x 8 PLC Splitter, 8 fibre cores **Installation:** Indoor wall mount **Colour:** White **Material:** Polycarbonate plastic (PC) + ABS **Rating:** IP54 Indoor **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-04 **Dimension:** 235x126x52mm **Capacity:** Mini-Splitter: 1x2, 1x4, 1x8 **Installation:** Indoor wall mount **Colour:** White **Material:** Polycarbonate plastic (PC) + ABS **Rating:** IP54 Indoor **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-04-A **Dimension:** 235x126x52mm **Capacity:** 1x8 Splitter **Installation:** Indoor wall mount **Colour:** White **Material:** Polycarbonate plastic (PC) + ABS **Rating:** IP54 Indoor **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-05 **Dimension:** 323x150x72mm **Capacity:** 4 Pcs of 1x8 Splitter for 32fibre SC capacity **Installation:** Indoor wall mount **Colour:** White **Material:** LSZH ABS Plastic **Rating:** Indoor **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-06 **Dimension:** 450x180x150mm **Capacity:** Max 3 Pcs of 1x16 Splitter, 48 fibre SC or 96 fibre LC **Installation:** Indoor wall mount **Colour:** White **Material:** **Rating:** IP30 Indoor **Optional:** Customer logo can be added as required	POA

	PN: ATL-OTB-SY-08 **Dimension:** 345x275x85mm **Capacity:** Max 2x 1:8 Splitter or 1:16 Splitter, 16 fibre LC **Installation:** Wall and Pole mount **Colour:** White **Material:** PC + ABS Plastic **Rating:** IP65 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-10 **Dimension:** 210x241x120mm **Capacity:** 1x 16 PLC Splitter SC , 16 fibre SC with 16 drop cable ports **Installation:** Wall and Pole mount **Colour:** White **Material:** PC + ABS Plastic **Rating:** IP68 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-10-A **Dimension:** 320x200x95mm **Capacity:** 1x8 PLC Splitter, 8 fibre SC with 8 drop cable ports , 36 Splices **Installation:** Wall and Pole mount **Colour:** White **Material:** PC + ABS Plastic **Rating:** IP68 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-10-B **Dimension:** 320x215x133mm **Capacity:** 1x16 PLC Splitter SC/LC, 16 drop cable ports, 48 Splices **Installation:** Wall mount, Pole mount or Aerial installation **Colour:** Black **Material:** LSZH ABS Plastic **Rating:** IP68 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-11-A **Dimension:** 278x175x70mm **Capacity:** 1x8 Splitter, 8x SC/LC with 3 in port and 8 out, 24 Splices **Installation:** Wall mount **Colour:** Black **Material:** Strengthened Polymer Plastic **Rating:** IP68 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-11-B **Dimension:** 278x190x95mm **Capacity:** 1x16 Splitter, 16x SC/LC with 3 in port and 8 out, 36 Splices **Installation:** Wall mount **Colour:** Black **Material:** Strengthened Polymer Plastic **Rating:** IP68 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-13-A **Dimension:** 303x216x104mm **Capacity:** 1x 16 PLC Splitter, 16 Cable Ports (8-12mm x 3 ports and 2-3mm x 16 ports) **Installation:** Wall mount, Pole mount or Aerial Mount **Colour:** Black external finish **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required	POA

	PN: ATL-OTB-SY-13-B **Dimension:** 303x230x104mm **Capacity:** 1x 16 PLC Splitter, 16 Cable Ports (8-12mm x 3 ports and 2-3mm x 16 ports) **Installation:** Wall mount, Pole mount **Colour:** Black external finish **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required	POA
	PN: ATL-OTB-SY-13-C **Dimension:** 303x230x104mm **Capacity:** 1x 16 LGX Splitter, 16 Cable Ports (8-12mm x 3 ports and 2-3mm x 16 ports) **Installation:** Wall mount, Pole mount **Colour:** Black external finish **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required	POA
	PN: ATL-ODB-SK-01-2 **Dimension:** 185x135x41mm **Capacity:** 1x 1:2 PLC Splitter (variants for 4 and 6 splitter) **Installation:** Wall mount **Colour:** White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-ODB-SK-02 **Dimension:** 200x160x45mm **Capacity:** 1x 1:8 PLC Splitter , 8 fibres **Installation:** Indoor wall mount **Colour:** White **Material:** PC + ABS **Optional:** Customer logo can be added as required	POA
	PN: ATL-ODB-SK-03 **Dimension:** 210x215x50mm **Capacity:** 1x 1:8 PLC Splitter , 8 fibres **Installation:** Wall mount **Colour:** White **Material:** PC + ABS **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-ODB-SK-04 **Dimension:** 225x215x55mm **Capacity:** 1x 1:8 PLC Splitter , 8 fibres **Installation:** Wall mount , Pole mount **Colour:** White **Material:** ABS **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-ODB-SK-05 **Dimension:** 225x215x65mm **Capacity:** 1x 1:8 PLC Splitter , 12 fibres **Installation:** Wall mount , Pole mount **Colour:** White **Material:** ABS **Optional:** Customer logo can be added as required	POA
	PN: ATL-ODB-SK-06-A **Dimension:** 320x240x100mm **Capacity:** 1x 1:16 PLC Splitter , 24 fibres **Installation:** Wall mount , Pole mount **Colour:** White **Material:** ABS	

	Optional: Customer logo can be added as required, variants available	
	PN: ATL-ODB-SK-07-A **Dimension:** 310x235x100mm **Capacity:** 1x 1:16 PLC Splitter , 16 fibres **Installation:** Wall mount , Pole mount **Colour:** White or Black **Material:** PC + ABS **Optional:** Customer logo can be added as required, variants available	
	PN: ATL-ODB-SK-09 **Dimension:** 325x275x95mm **Capacity:** 1x 1:16 PLC Splitter , 16 fibres **Installation:** Wall mount , Pole mount **Colour:** White **Material:** ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	
	PN: ATL-ODB-SK-10 **Dimension:** 340x260x110mm **Capacity:** 1x 1:16 PLC Splitter , 24 fibres **Installation:** Wall mount , Pole mount **Colour:** White **Material:** ABS + PC **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	
	PN: ATL-FTTH-SK-18 **Dimension:** 340x210x95mm **Capacity:** 3x 1:8 PLC Splitters, 96 Splices, 24 adaptors ports **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-FTTH-SK-18-A **Dimension:** 275x175x82mm **Capacity:** 16 Core in-line drop cable ports **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-FTTH-SK-18-B **Dimension:** 340x210x95mm **Capacity:** 96f Splice, 24 SC Adaptors, 3x 1:8 PLC Splitters, 24 Cable Ports **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-FTTH-SK-18-C **Dimension:** 320x210x87mm **Capacity:** 1x 1:16 PLC Splitter, 16 Cable Ports **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, ,variants available	POA

Item	Description	Price
	PN: ATL-FTTH-SK-18-D **Dimension:** 320x210x87mm **Capacity:** 1x 1:8 PLC Splitter, 9 Cable Ports, 4 Splice trays **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	POA
	PN: ATL-FTTH-SK-18-E **Dimension:** 270x175x80mm **Capacity:** 1x 1:8 PLC Splitter, 9 Cable Ports, 2 Splice trays **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required	POA
	PN: ATL-FTTH-SK-18-F **Dimension:** 330x210x120mm **Capacity:** 1x 1:16 Mini PLC Splitter, 16 Cable Ports, 6 trays (48 Splices) **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required	POA
	PN: ATL-FTTH-SK-19 **Dimension:** 390x270x115mm **Capacity:** 3x 1:8 PLC Splitter, 2 trays (48 Splices), 24 connector adaptors **Installation:** Wall mount, Pole mount **Colour:** Black or White **Material:** PC + ABS **Rating:** IP65 **Optional:** Customer logo can be added as required, variants available	POA

5.6. Fibre Distribution: Dome Splice Enclosures		
Item	**Description**	**Price**
	PN: ATL-DSJ-D2 **Dimension:** 288x178x80mm **Capacity:** 48 fibres – 4x 12F Trays **Cable Ports:** 1 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 16mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DSJ-D3 **Dimension:** 300x178mm **Capacity:** 48 fibres – 4x 12F Trays **Cable Ports:** 1 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DSJ-D4 **Dimension:** 288x178mm **Capacity:** 48 fibres – 4x 12F Trays **Cable Ports:** 1 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA

	PN: ATL-DGJS25-5 **Dimension:** 510x220mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 1 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 31mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DGJS25-6 **Dimension:** 510x220mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 3 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 31mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DGJS25-7 **Dimension:** 550x250mm **Capacity:** 288 fibres – 6x 48F Trays **Cable Ports:** 1 In and 6 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 45mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DGJS25-7A **Dimension:** 550x250mm **Capacity:** 288 fibres – 6x 48F Trays **Cable Ports:** 1 In and 6 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 45mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DFOSC-B1 **Dimension:** 450x230mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 2 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 18mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DFOSC-B1-PLC **Dimension:** 450x230mm **Capacity:** 24-96 fibres – 4x 24F Trays, 18-24x SC/LC adaptors, 1x1:8, 1x 1:16 mini PLC Splitter **Cable Ports:** 2 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 18mm **Material:** Strengthened Polymer Plastic **Rating:** IP67	POA
	PN: ATL-DFOSC-B2 **Dimension:** 380x255x200mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 2 In and 8 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 18mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA

	PN: ATL-DFOSC-B3 **Dimension:** 400x140mm **Capacity:** 72 fibres – 6x 12F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP65	POA
	PN: ATL-DFOSC-B4 **Dimension:** 400x140mm **Capacity:** 96 fibres – 4x 24F Trays **Cable Ports:** 1 In and 4 Out **Installation:** Aerial, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP65	POA
	PN: ATL-DFOSC-B4-SC **Dimension:** 400x140mm **Capacity:** 96 fibres – 4x 24F Trays, 36x SC adaptors **Cable Ports:** 1 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP67	POA
	PN: ATL-DFOSC-B5-1 **Dimension:** 550x155mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 1 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DFOSC-B5-2 **Dimension:** 550x155mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 1 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DFOSC-B6-1 **Dimension:** 550x155mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 2 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-DFOSC-B6-2 **Dimension:** 550x155mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 1 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 22mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA

Item	Description	Price
	PN: ATL-DFOSC-B7 **Dimension:** 510x230mm **Capacity:** 288fibres – 12x 24F Trays **Cable Ports:** 1 In and 6 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 8 – 44mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA

5.7. Fibre Distribution: In-Line or Horizontal Splice Enclosures		
Item	**Description**	**Price**
	PN: ATL-HABS-01 **Dimension:** 465x188x120mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 15mm **Material:** ABS Polycarbonate Plastic **Rating:** IP67	POA
	PN: ATL-HABS-02 **Dimension:** 465x188x120mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 3 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 15mm **Material:** ABS Polycarbonate Plastic **Rating:** IP67	POA
	PN: ATL-HABS-03 **Dimension:** 465x188x120mm **Capacity:** 144 fibres – 6x 24F Trays **Cable Ports:** 4 In and 4 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 15mm **Material:** ABS Polycarbonate Plastic **Rating:** IP67	POA
	PN: ATL-HSJ-Small-1 **Dimension:** 230x185x85mm **Capacity:** 48 fibres – 4x 12F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury Duct **Cable Diameter Φ:** 2 – 9mm **Material:** ABS Polycarbonate Plastic **Rating:** IP65	POA
	PN: ATL-HSJ-Small-4 **Dimension:** 280x200x90mm **Capacity:** 48 fibres – 4x 12F Trays **Cable Ports:** 2 Port **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 14mm **Material:** ABS Polycarbonate Plastic **Rating:** IP65	POA
	PN: ATL-HSJ-Small-5 **Dimension:** 230x200x50mm **Capacity:** 12 fibres **Cable Ports:** 4 Ports **Installation:** Aerial **Cable Diameter Φ:** 8 – 16mm **Material:** ABS Polycarbonate Plastic **Rating:** IP65	POA

	PN: ATL-HSJ-Small-6 **Dimension:** 375x146x43mm **Capacity:** 48 fibres – 4x 12F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 2 – 8mm **Material:** Strengthened Polymer Plastic **Rating:** IP68	POA
	PN: ATL-HSJ-Small-7 **Dimension:** 248x150x30mm **Capacity:** 12 fibres – 1x 12F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Pipeline laying way **Cable Diameter Φ:** 2 – 10mm **Material:** ABS Plastic **Rating:** IP65	POA
	PN: ATL-HSJ-New (PN pending) **Dimension:** 530x190x150mm **Capacity:** 144 fibres or 288 ribbon fibre **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 25mm **Material:** Polymer Plastic **Rating:** IP68	POA
	PN: ATL-HGJS-ZM-24 **Dimension:** 485x200x105mm **Capacity:** 96 fibres 4x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 18.5mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HGJS-24 **Dimension:** 580x190x140mm **Capacity:** 144 fibres 6x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 30mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HGJS-24-D(PLC) **Dimension:** 580x255x140mm **Capacity:** 4-32 SC adaptors **Cable Ports:** 3 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 30mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HGJS-24-D **Dimension:** 580x255x140mm **Capacity:** 288 fibres 576 Ribbon Fibre **Cable Ports:** 3 In and 3 Out **Installation:** Aerial, Direct Bury, Wall mount, Pipeline laying way **Cable Diameter Φ:** 7 – 30mm **Material:** ABS Polycarbonate Plastic **Rating:** IP67	POA

	PN: ATL-HGJS-ST24 **Dimension:** 440x220x110mm **Capacity:** 96 fibres 4x 24F Trays **Cable Ports:** 3 In and 3 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 30mm **Material:** ABS Polymer Plastic **Rating:** IP68	POA
	PN: ATL-HFOSC-A1 **Dimension:** 490x230x130mm **Capacity:** 144 fibres 6x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 25mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A2 **Dimension:** 555x290x106mm **Capacity:** 256 fibres 8x 32F Trays **Cable Ports:** 4 Ports **Installation:** Aerial, Direct Bury, Duct, wall mount **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic **Rating:** IP68	POA
	PN: ATL-HFOSC-A3 **Dimension:** 410x180x80mm **Capacity:** 96 fibres 4x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 16mm **Material:** Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A4 **Dimension:** 390x185x90mm **Capacity:** 96 fibres 4x 24F Trays **Cable Ports:** 3 In and 3 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic **Rating:** IP65	POA
	PN: ATL-HFOSC-A5 **Dimension:** 480x155x110mm **Capacity:** 96 fibres 4x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A6 **Dimension:** 430x200x120mm **Capacity:** 96 fibres 4x 24F Trays **Cable Ports:** 6 In and 8 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA

	PN: ATL-HFOSC-A7 **Dimension:** 670x240x200mm **Capacity:** 144 fibres 6x 24F Trays **Cable Ports:** 2 In and 2 Out **Installation:** Aerial, Direct Bury, Duct **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic **Rating:** IP68	POA
	PN: ATL-HFOSC-A8 **Dimension:** 605x190x80mm **Capacity:** 24 fibres, 2x 1:8 or 1x 1:16 PLC Splitter with 18x SC adaptors **Cable Ports:** 4 In and 16 Drops Out **Installation:** Aerial **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic (flame retardant polycarbonate) **Rating:** IP67	POA
	PN: ATL-HFOSC-A9 **Dimension:** 305x200x75mm **Capacity:** 12 fibres, 1x 1:8 PLC Splitter **Cable Ports:** 4 Ports **Installation:** Aerial, Wall Mount **Cable Diameter Φ:** 7 – 22mm **Material:** ABS Polymer Plastic (flame retardant polycarbonate) **Rating:** IP65	POA
	PN: ATL-HFOSC-A10 **Dimension:** 300x200x80mm **Capacity:** 48 fibres, 4x 12F Trays, 8x SC adaptors **Cable Ports:** 6 Ports **Installation:** Aerial, Wall Mount **Cable Diameter Φ:** 7 – 22mm **Material:** Polymer Plastic **Rating:** IP65	POA
	PN: ATL-HFOSC-A11 **Dimension:** 315x200x120mm **Capacity:** 24 fibres, 4x 12F Trays, 1x 1:8 PLC Splitter **Cable Ports:** 4 In and 8 Out **Installation:** Aerial, Duct, Direct Buried **Cable Diameter Φ:** 7 – 16mm **Material:** Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A12 **Dimension:** 315x200x120mm **Capacity:** 64 fibres, 2x 1:8 PLC Splitter, 18x SC Adaptors **Cable Ports:** 2x In and 4 Out, 2x 16x 2.3mm Drops **Installation:** Aerial, Duct, Direct Buried **Cable Diameter Φ:** 7 – 18mm **Material:** Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A13 **Dimension:** 315x200x98mm **Capacity:** 96 fibres, **Cable Ports:** 8 Ports **Installation:** Aerial, Duct, Direct Buried **Cable Diameter Φ:** 7 – 18mm **Material:** ABS Polymer Plastic **Rating:** IP67	POA

	PN: ATL-HFOSC-A14 **Dimension:** 380x200x120mm **Capacity:** 8 Fibres, 2x 1:8 PLC Splitter, SC pre-connector **Cable Ports:** 4 In and 8 Out **Installation:** Wall Mount, Pole Mount, Aerial **Cable Diameter Φ:** 10 – 16mm **Material:** Strengthened Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A15 **Dimension:** 480x200x120mm **Capacity:** 144 Fibres, **Cable Ports:** 2 In and 2 Out **Installation:** Wall Mount, Aerial, Direct bury, Pipeline Laying way **Cable Diameter Φ:** 7 – 20mm **Material:** Polymer Plastic **Rating:** IP67	POA
	PN: ATL-HFOSC-A16 **Dimension:** 540x260x140mm **Capacity:** 288 Fibres, **Cable Ports:** 2 In and 2 Out **Installation:** Wall Mount, Aerial, Direct bury, Pipeline Laying way **Cable Diameter Φ:** 7 – 26mm **Material:** Polymer Plastic **Rating:** IP67	POA

All Cabinets and racks can be tailored and manufactured to a customer's specification or requirements, a minimum order quantity may apply for customized production runs.

The factory can add your company logo, specific contact details or any specific colour or signage that you require onto the cabinet at the time of manufacture.

Additional OCC or Outdoor Cross Connect fibre cabinets from 144 fibre to 1728 fibre outdoor cabinets are also available on request

Please contact Arvensis Technology with your requirements, sales@arvensis-consulting.com

6 IoT Tracking Devices

6.3 CAT-M1/NB-IoT 3G/4G/LTE Devices

Item	Image	Description	Price (ea)
4.1.1.		Bolt OBDII GPS Tracker. Caters for entry-level tracking and fleet management applications.	POA
4.1.2.		Dart 2 GPS Tracker, incl 12-wire harness for inputs and outputs with driver-ID capabilities.	POA
4.1.3.		G62 compact GPS tracking device with a variety of inputs and outputs to cater for the most demanding applications.	POA
4.1.4.		G100 compact GPS tracking device with a variety of inputs and outputs to cater for the most demanding applications. Power additional peripheral devices with output power options.	POA
4.1.5.		G100 compact GPS tracking device with a variety of inputs and outputs to cater for the most demanding applications with Iridium Flexicard and Antenna for Satellite tracking.	POA
4.1.6.		Oyster2 is a rugged, waterproof, cellular GPS tracking device for tracking non-powered, exposed assets with super-long battery life.	POA
4.1.7.		Oyster2 rugged nylon-glass IP67 housing (black)	POA
4.1.8.		Remora2 is an IP67 rated, rugged device designed for tracking non-powered assets where super-long battery life is required without sacrificing the frequency of updates and accuracy performance.	POA
4.1.9.		Yabby GPS provides all of the features of the popular Oyster and Remora in a tiny form factor. The small size is perfect for mounting to small assets or in concealed location.	POA
4.1.10		Yabby GPS with WiFi location provides all of the features of the popular Oyster and Remora in a tiny form factor. The small size is perfect for mounting to small assets or in concealed locations. Available in 2G or 4G Cat-M1/Nb-IoT.	POA
4.1.11		Falcon Cellular is a super-smart, battery-powered tracking device in a rugged IP67 housing. Designed for asset location with temp monitoring. I2C interface supports a range of sensors for multiple input and digital output.	POA
4.1.12		**HOT:** AC main power (10A) monitoring for outage. Sends you a SMS when power fails or restores or send an SMS to switch on or off. Remote reboot equipment or delay passing AC to avoid power flapping events. Remote power on, plug-in for temp sensor or temperature activated switching, scheduler for automated switching. Plug-in and go, no wire-in electrician costs to install.	POA

		6.4 Sigfox Devices	
4.2.1.		Oyster2 is a rugged, waterproof, cellular GPS tracking device for tracking non-powered, exposed assets with super-long battery life	POA
4.2.2.		Oyster2 rugged nylon-glass IP67 housing (black)	POA
4.2.3.		SensorData is a battery-powered data communicator that interfaces to a range of sensors, GPS, inputs and outputs, and uploads data via the Sigfox network. I2C interface for a wide range of sensors	POA
		6.5 LoRaWAN Devices	
4.3.1.		Guppy is a compact, rugged "tag" device that is designed for locating containers, trailers, skip bins, and other assets using the LoRaWAN geo-location services. Can also alert on movement and after-hours activity The IP-67	POA
4.3.2.		G62 compact GPS tracking device with a variety of inputs and outputs to cater for the most demanding applications.	POA
4.3.3.		Oyster2 is a rugged, waterproof, cellular GPS tracking device for tracking non-powered, exposed assets with super-long battery life	POA
4.3.4.		Oyster2 rugged nylon-glass IP67 housing (black)	POA
4.3.5.		Yabby GPS provides all of the features of the popular Oyster and Remora in a tiny form factor. The small size is perfect for mounting to small assets or in concealed location.	POA
4.3.6.		SensorData is a battery-powered data communicator that interfaces to a range of sensors, GPS, inputs and outputs, and uploads data via the LoRaWAN network. I2C and SDI-12 interface for a wide range of sensors	POA
4.3.7.		SensorNode is a battery-powered data communicator that interfaces to a range of sensors, GPS, inputs and outputs, and uploads data via the LoRaWAN network. I2C interface for a wide range of sensors	POA
		6.6 Peripherals and Sensors	
4.4.1.		Bolt OBDII Y-Cable or splitter cable. Advise vehicle make and model when ordering OBDII splitter cables	POA
4.4.2.		Compact 125kHZ RFID Reader (DMCAN) reads cards and keyfobs. Works for the G62. Driver lists can be downloaded to the device, to enable uninterrupted operation when out of coverage.	POA
4.4.3.		Compact 125kHZ RFID Reader reads cards and keyfobs. Works for the Dart. Driver lists can be downloaded to the device, to enable uninterrupted operation when out of coverage.	POA

4.4.4.		A simple and relatively low cost solution for clients that do not already have access/ID cards or keyfobs. If you need a specific type of card read then please discuss with Arvensis Consulting	POA
4.4.5.		The iButton Reader is a computer chip enclosed in a 16 mm stainless steel casing. The unique and durable stainless steel can mean up-to-date information can safely travel with a person or object anywhere they go.	POA
4.4.6.		The iButton is a computer chip enclosed in a 16 mm stainless steel casing. Works with the iButton Reader	POA
4.4.7.		Temperature and Humidity combination sensor, supplied with a standard 2m cable length 0 – 100% RH operating range ± 3% RH (max) -40 to +125 °C operating range ± 0.4°C (max)	POA
4.4.8.		Temperature Probe supplied with a standard 2m cable length. 55 to +125 °C operating range	POA
4.4.9.		Dart 12v Adaptor for standard cigarette lighter fitment that connects directly into the Dart device.	POA
4.4.10.		Dart OBDII Adaptor for standard OBDII port that connects directly into the Dart device	POA
4.4.11.		Dart 12 wire harness. The harness is supplied with the Dart2 device as standard. Replacement if originally supplied cable becomes damaged	POA
4.4.12.		12V Relay Kit for Immobilisation for use with the Dart, G62 and G100 products. Immobiliser functions should only be used with the vehicle starter motor for safety reasons and should only be installed by certified Auto Electricians	POA
4.4.13.		24V Relay Kit for Immobilisation for use with the Dart, G62 and G100 products. Immobiliser functions should only be used with the vehicle starter motor for safety reasons and should only be installed by certified Auto Electricians	POA
4.4.14.		Adapter board for LoRaWAN Yabby including Tag-Connect. The device is configured with a USB cable and a special Tag-Connect adapter. The USB part of the cable is the same as the config cable for the Guppy and Oyster LoRaWAN.	POA
4.4.15.		USB Config Cable for Sigfox and LoRaWAN Devices. The USB part of the cable is the same as the config cable for the Guppy and Oyster LoRaWAN. Sigfox and LoRaWAN devices require a config cable in order to program parameters, set LoRaWAN regions, and read device information (AppKey, DevEUI, PAC etc)	POA
4.4.16.		C-cell Lithium Thionyl Chloride (LTC) batteries for extreme long life and harsh temperature conditions. (International shipping may be problematic)	POA

|			
4.4.17.		AA-cell Lithium Thionyl Chloride (LTC) batteries for extreme long life and harsh temperature conditions. (International shipping may be problematic)	POA
4.4.18.		Yabby small black clip-together housing.	POA
4.4.19.		Yabby housing for collars for animals and livestock	POA
		6.7 Shipping and Freight	
4.5.1.		Typical lead time is 1-2 days for in-stock items otherwise 5-8 days for orders from the factory	POA

Arvensis Consulting source their IoT products direct from the manufacturer. This enables us to cut out the middle man for improved savings. All devices are supplied with a standard 12-month warranty with additional warranties available for a small fee.

Contact Arvensis Consulting for SIM card and Data connection services as well as for our back-end portal and analytics.
All tracking portal access includes a mobile app for iPhone and/or Android App.
Group data plans are available for improved consolidation of data usage across multiple devices and sensors

7. Digital Microwave Radio Systems

7.1.	Indicative Pricing and System Capacity
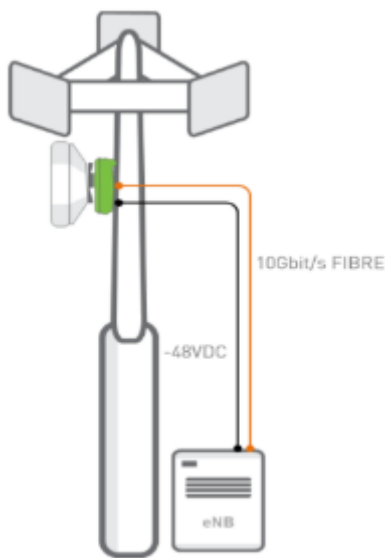
With Arvensis Consulting Digital Microwave Radio (DMR) solutions and our world leading-technology partner company, we can provide a wide range of transmission solutions for Disaster recovery, Backup, Redundancy and Media-Diversity for bandwidths of up to 20Gbps and ultra-low latency connectivity.

Arvensis Consulting can also provide turnkey solutions for installation, colocation, project management, design and frequency licensing of your DMR solution.

Arvensis Consulting have partnered with New Zealand's foremost technical field services company for installation and maintenance solutions with a national presence in all major NZ cities and towns.

Indicative pricing for the microwave radio equipment for 200Mbit – 2Gbps is provided below, please contact us for other solutions or for a quote.

We also provide turnkey solutions for your network that include frequency licensing, installation, colocation solutions and commissioning.

Capacity	Mod/Chan Size	Product	Ant Size(m)	Price
1+0, 200Mbit/s	512QAM/28MHz	WTM4200 inbuilt OMT	0.6	POA
1+0, 200Mbit/s	512QAM/28MHz	WTM4200 inbuilt OMT	0.9	POA
1+0, 200Mbit/s	512QAM/28MHz	WTM4200 inbuilt OMT	1.2	POA
2+0, 400Mbit/s	512QAM/28MHz	WTM4200 inbuilt OMT	0.6	POA
2+0, 400Mbit/s	512QAM/28MHz	WTM4200 inbuilt OMT	0.9	POA
2+0, 400Mbit/s	512QAM/28MHz	WTM4200 inbuilt OMT	1.2	POA
2+0, 600Mbit/s	128QAM/56MHz	WTM4200 inbuilt OMT	0.6	POA
2+0, 600Mbit/s	128QAM/56MHz	WTM4200 inbuilt OMT	0.9	POA
2+0, 600Mbit/s	128QAM/56MHz	WTM4200 inbuilt OMT	1.2	POA
4+0, 800Mbit/s	512QAM/28MHz	2 x WTM4200 inbuilt eq coupler on external OMT	0.6	POA
4+0, 800Mbit/s	512QAM/28MHz	2 x WTM4200 inbuilt eq coupler on external OMT	0.9	POA
4+0, 800Mbit/s	512QAM/28MHz	2 x WTM4200 inbuilt eq coupler on external OMT	1.2	POA
4+0, 1000Mbit/s	2048QAM/28MHz	2 x WTM4200 inbuilt eq coupler on external OMT	1.2	POA
4+0, 1000Mbit/s	2048QAM/28MHz	2 x WTM4200 inbuilt eq coupler on external OMT	1.8	POA
4+0, 2000Mbit/s	2048QAM/56MHz	2 x WTM4200 inbuilt eq coupler on external OMT	0.6	POA
4+0, 2000Mbit/s	2048QAM/56MHz	2 x WTM4200 inbuilt eq coupler on external OMT	0.9	POA
4+0, 2000Mbit/s	2048QAM/56MHz	2 x WTM4200 inbuilt eq coupler on external OMT	1.2	POA
4+0, 2000Mbit/s	2048QAM/56MHz	2 x WTM4200 inbuilt eq coupler on external OMT	1.8	POA

Contact Arvensis Consulting for a quote to provide you with a turnkey solution from idea to operational service. Pricing excludes annual RSM Spectrum Licensing or any other 3rd Party ongoing fees such as co-location, aperture lease fees and so on.
Additional services that we can provide is real time monitoring of your service, spares holding and field services call out for 24/7/365.

If you don't see what you are looking for, please contact Arvensis Consulting with your requirements at
sales@arvensis-consulting.com

8. Reseller Brands and Services

8.1 Vendor List

Arvensis Consulting, a technology solution provider and reseller of a wide range of products, we aim to fit the best solution, service or turnkey solution to your requirements. We offer vendor agnostic solutions to fit your budget or vendor specific to meet your key criteria.

If you know exactly what you need, contact us with your Bill of Materials us for a no obligation quote. We can also supply licensing, software and extended warranties for OEM vendor products.

If you are unsure of what you need, contact Arvensis Consulting so we can go through your key requirements to understand your needs and match up a product or solution for you. Below are listed some of the brands we can supply, this is not a conclusive list as we are a reseller for over 1000 vendor brands. Contact us if you don't see what you are looking for. Arvensis Consulting sales@arvensis-consulting.com

Vendor	Description
ACTi	Reseller. Camera systems, Cloud Managed Signage, Intelligent Retail Solutions +
AKCP	Reseller. Data Centre Solutions, IoT sensors, Intelligent racks +
Allied Telesys	Reseller. Routers, Switches for enterprise, SMB, Industrial. POE, WiFi, Network Transceivers, licensing +
APC	Reseller. Power solutions, UPS, DC, Backup, cooling, specialist applications +
Arvensis Consulting	OEM. Supplier for sales, solutions and consultancy for Passive Optical Networking, Network Transceivers, Optic Fibre Patch cables and 200/400G MTP/MPO Optical Cabling Solutions and more +
Asigra	Reseller. Agentless cloud backup, encryption, ransomware protection + more
Asus	Reseller. Monitors, PC components, workstations, servers, notebooks, peripherals and more +
Aten	Reseller. Power systems, AV Mixers, AV Management, KVM over IP systems +
Audiocodes	Reseller. Advanced voice networking and media processing solution +
AVAYA	Reseller. Contact Centre and Unified communications solutions, cloud solutions +
bitglass	Reseller. Cloud Access Security Brokers, Data and Threat protection + more
BrickElectric	Reseller. DC/DC Power supplies, Channel relay boards, TCP/IP controllers +
Cambium Networks	Reseller. Wireless networking solutions for Point-to-Point, Point-to-Multipoint (PtP and MIMO), WiFi, Switching, Industrial IoT, Purpose built Wireless CCTV solutions, wireless solution design and sales.
Check Point	Reseller. Cloud security for AWS, Azure, Google environments, Cyber, Endpoints +
Cisco	Indirect Partner. Full access to Cisco pricing and deals. All orders are via our Channel aperners. Cisco support agreements, reviews and cost savings can be reviewed with Arvensis Consulting as well as access to the Cisco Refurbished Hardware services
Cradlepoint	Reseller. 2,3,4G LTE Edge solutions, POE switches, whip antennas, software +
Cyberoam	Reseller. Network security, Logging and Reporting and cloud software management
Data	Reseller. Software defined storage, unified platform with subscription services +
Dell	Reseller. Servers, notebooks, workstations, software and licensing, peripherals, monitors, chipsets +
Digi	Reseller. IoT, Cellular routers, gateways, RF adaptors and modems, Serial conn +
D-Link	Reseller Partner. Home and Business routers, switches, IP Security, Nuclias Cloud, Security, UTM +
Docker	Reseller. Collaboration software environment, build, share run applications + more
DrayTek	Reseller. Routers for VPN, xDSL, Load Balancing, LTE, Fibre, Access points, switches
Eaton	Reseller. Industrial and Commercial power solutions, battery backup systems, UPS, Server rack power +
Edge	Reseller. Enterprise switches and wireless, open networking from 1Gb-400Gb +
F5	Reseller. Network security, firewalls, cyber threat detection, cloud, software + more
Firemon	Reseller. Automated security solutions, risk analysis, global policy controls + more
Fortinet	Reseller. Network Security, Unified Threat Management, AI-Security, Cloud Security, Training and more +
HP	Reseller. HP Servers, workstations, notebooks, printers, displays, software, licensing, support and more +
Huawei	Reseller. Sales for Switches, Routers, NID's and CPE's, OTN, Cellular Equipment, DMR, Wireless and WiFi +
Gigaset	Reseller. DECT repeaters and cordless phones
Grandstream	Reseller. Security and Surveillance and VoIP and WiFi Access Points. Cloud services
Jabra	Reseller. Headsets, speakerphones, video conferencing cameras +
Juniper	Indirect Partner. Full access to Juniper equipment, SLA support agreements, reviews and cost savings can be reviewed with Arvensis Consulting as well as access to the Juniper Refurbished Hardware services.
LaCie	Reseller. Rugged External Hard Drives, RAID systems for table-top or portable

L-COM	Reseller. WiFi antennas, cables, IoT, Patch Panels, Surge protectors, adaptors +
Lantronix	Reseller. Terminal Servers, IoT Gateways, Cellular modems, OOB Management, KVM Solutions +
Lenovo	Reseller. Laptops, PC's and Tablets, Smart devices, Monitors and Displays, Data Centre AI, Big Data and +
LevelOne	Reseller. Digital Signage, Networking, Surveillance, Outdoor WiFi, POE Repeater +
MicroTik	Reseller. WISP Systems, Cloud Routers, LTE products, LoRa IoT +
Mimosa	Reseller. P2P and P2MP Wireless Solutions. Part of the Airspan group
Mitel	Reseller. Calling, chat, collaborations and customer experience tools and more +
MOBOTIX	Reseller. Premier access control and IP Cameras, Thermal Imagining and technology leader using NAS +
NEC	Direct Partner to all NEC products, services and solutions including Palo Alto Networks, Infinera, DXC and Juniper Networks.
NetApp	Reseller. Leaders in Hybrid Cloud data services and management, storage + more
Netcomm	Reseller. Cellular modems, B2B Connectivity, IoT Routers, Fixed Wireless and Fibre Distribution points +
NETGEAR	Reseller. Network switches, POE, Remote Cloud Management, WiFi, AV over IP +
Netonix	Reseller. POE switches, specialist WISP switches
Netsys	Reseller. Industrial VDSL2 CPE modems, Gia Ethernet over Coax, VDSL extender +
Nokia	Reseller. Network switches, routers, from to edge network hardware +
OneSpan	Reseller. Security, authentication, fraud prevention, e-signature, digital ID, +
Opengear	Reseller. Terminal Servers, LTE Switches, Out-of Band Management systems +
Overland Storage	Reseller. Global provider for data management and protection. RDX Technology +
Palo Alto	Reseller. Firewalls, Unified Thread Management, end-point protection, 5G/IoT +
Panasonic	Reseller. DECT Systems, handsets, handset batteries, DECT repeaters +
Panorama	Reseller. Vehicle antennas for GSM, TETRA, GPS/GNSS, PMR, LTE, Cellular, IoT +
Patton	Reseller. Unified communications, networking POE, adaptors and convertors +
Peplink	Reseller. SD-WAN, Routers, Switches, Balancing Routers, WiFi, WiFe Ad Service +
Pure Storage	Reseller. Flash storage, cloud, hybrid cloud, data protection and recovery + more
QNAP	Reseller. NAS Systems, 2 bay to 16 bay, RAM, Power Supplies, parts and more +
RF Armor	Reseller. Antennas, antenna kits, bowerbeam kits. Compliment Ubiquiti antennas +
RF Elements	Reseller. Antennas, Horn sectors, brackets. Compliment Ubiquiti antennas +
Robustel	Reseller. Industrial cellular routers, IoT gateways, Cellular modems, USB Modem +
Seagate	Reseller. SSD, SATA drives for NAS, PC's or portable + more
Snom	Reseller. DECT solutions, repeaters. Handsets, headsets, desktop phones, PA +
Socomec	Reseller. UPS systems, power switching, power monitoring, for various industries +
SOPHOS	Reseller. Cybersecurity, firewalls, end-point protection with built-in AI + more
Tycon Power	Reseller. Power, solar, wireless, weather stations, POE, Surge protection + more
Ubiquiti	Reseller. WiFe solutions for PTP, PTMP, IP CCTV, switches, software, SDN + more
Veeam	Reseller. Cloud Data Management, Backup and Replication for cloud, SaaS, Apps +
Veritas	Reseller. Data protection from Ransomware, threat detection, business continuity +
VMWare	Reseller. Virtualisation, cloud and on prem solutions, hyper converged solutions +
Vodia	Reseller. IP PBX, cloud or on prem solutions. Software configurable + more
WD	Reseller. SSD, SATA, Flash, hybrid drives for NAS, PC's or portable + more
X-IO	Reseller. Bigdata analytics, data warehousing, Cloud infrastructure, security
Yealink	Reseller. Video Conferencing Solutions, DECT Solutions, IP Phones + more
Yeastar	Reseller. Cloud PBX, IP PBX, LTE VoIP gateways, IP PBX Billing software + more

If you don't see a specific vendor listed please contact us as we have not listed all of the brands we have access to
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Arvensis Consulting, Turning Complex ICT Problems into Simple Solutions

Please see our website for additional services and solutions for:

- **Used, Refurbished, 2nd Hand equipment for IT, Telco, Datacom, Broadcast and GSM**
- **Vehicle, Portable Asset tracking, fleet management solutions and IOT solutions.**
- **If it's not listed, please drop us an email and let us know your requirements.**

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