

Powered indoor unit (PIDU Plus)

This section describes the PIDU Plus and its interfaces.

PIDU Plus description

The PIDU Plus generates the ODU supply voltage from the mains supply (or from an external DC source) and injects this supply voltage into the ODU.

The PIDU Plus is connected to the ODU and network equipment using CAT5e cable with RJ45 connectors. Refer to [Cabling and lightning protection](#) on page 1-17.

The ODU for the PTP 600 Series should only be deployed using the supplied PIDU Plus PTP 300/500/600 Series.

CAUTION

Care should be taken not to connect equipment other than an ODU, LPU or PTP-SYNC for the PTP 600 Series to a PIDU Plus ODU port, as equipment damage may occur. The PIDU Plus PTP 300/500/600 Series is not interchangeable with the PIDU Plus PTP 400 Series.

PIDU Plus interfaces

The PIDU Plus interfaces are illustrated in [Figure 1-7](#) and described in [Table 1-3](#) and [Table 1-4](#).

Figure 1-7 PIDU Plus interfaces



Table 1-3 PIDU Plus interfaces

Interface	Function
100-240V 47-63Hz 1.8A	Mains power input (Figure 1-8).
DC In	Alternative DC power supply input. Refer to Redundancy and alternative powering configurations on page 1-13.
DC Out	DC power output to a second PIDU Plus. Used to provide power supply redundancy. Refer to Redundancy and alternative powering configurations on page 1-13.
ODU	RJ45 socket for connecting CAT5e cable to ODU.
LAN	RJ45 socket for connecting CAT5e cable to network.
Recovery	Used to recover the unit from configuration errors or software image corruption.

Table 1-4 PIDU Plus indicator LEDs

Indicator	Function	Description
Power	Off	No power.
	On	PIDU Plus is receiving power.
Ethernet	Off	No Ethernet traffic.
	Blink ten times	Correct start up sequence has occurred.
	Blink randomly	Normal Ethernet traffic.

Figure 1-8 PIDU Plus power input

Redundancy and alternative powering configurations

The PTP 600 Series can be powered from an external DC source and can be provided with power supply redundancy as follows:

- External DC supply only ([Figure 1-10](#)): This configuration is for use where there is no mains supply.
- External DC supply and AC supply ([Figure 1-11](#)): This configuration provides redundancy through the use of mains and DC supply.
- External DC supply and redundant AC Supply ([Figure 1-12](#)): This configuration guards against mains failure and failure of the DC output of single PTP 300/500/600 PIDU Plus.

NOTE

The use of DC supplies of less than 55v will reduce the usable distance between the PIDU Plus and ODU ([Figure 1-9](#)).

Figure 1-9 Relationship between DC voltage and cable length

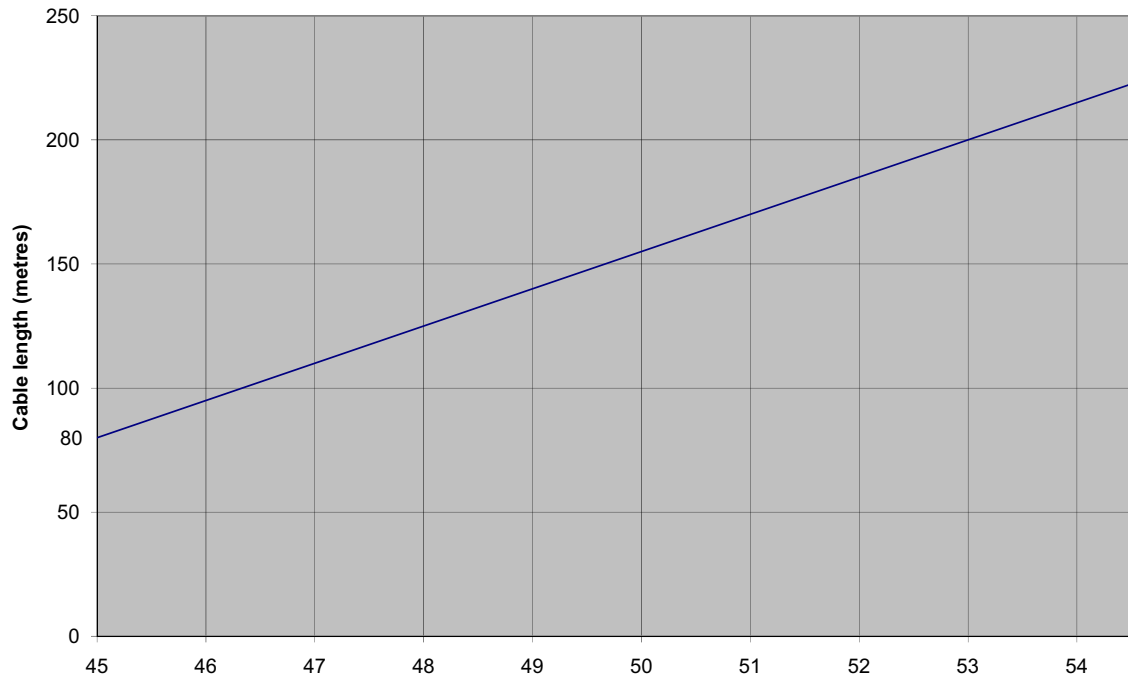


Figure 1-10 External DC supply only

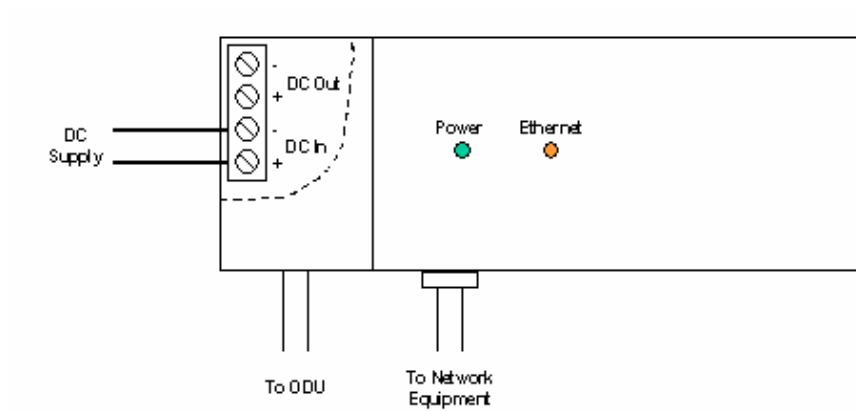


Figure 1-11 External DC supply and AC supply

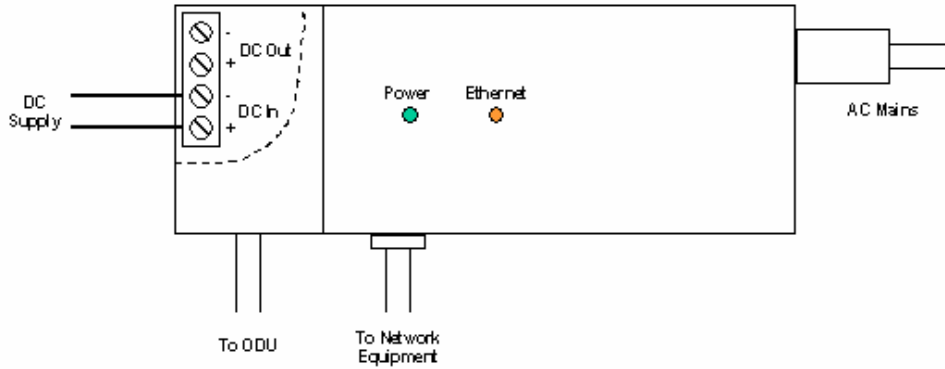
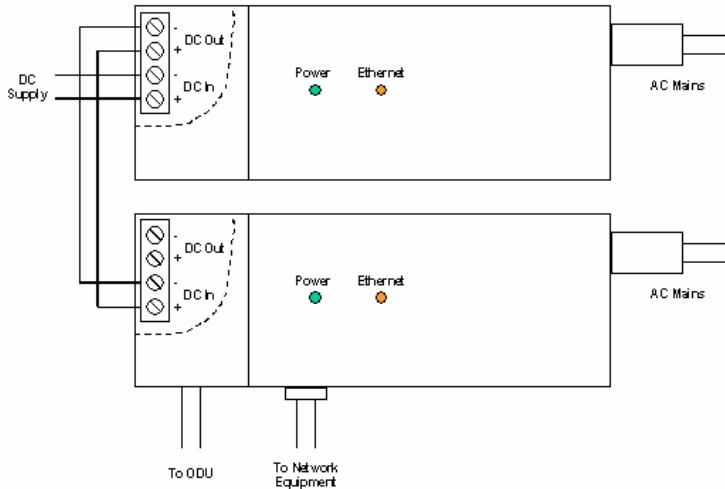


Figure 1-12 External DC supply and redundant AC supply



Remote LEDs and recovery switch

The PIDU Plus provides a facility to connect remote LEDs and Recovery switch allowing the PIDU Plus to be mounted inside an enclosure. At the left hand end of the PIDU Plus under the ODU connection cover can be found a PCB header and three jumpers. Jumpers J906 and J907 should be removed and connection to the remote LEDs and Recovery switch made to J908 as shown in [Figure 1-13](#).

Figure 1-13 Remote LED and recovery switch wiring

