

PD 663 SPI Triple Speed

PD Series 600



Introduction

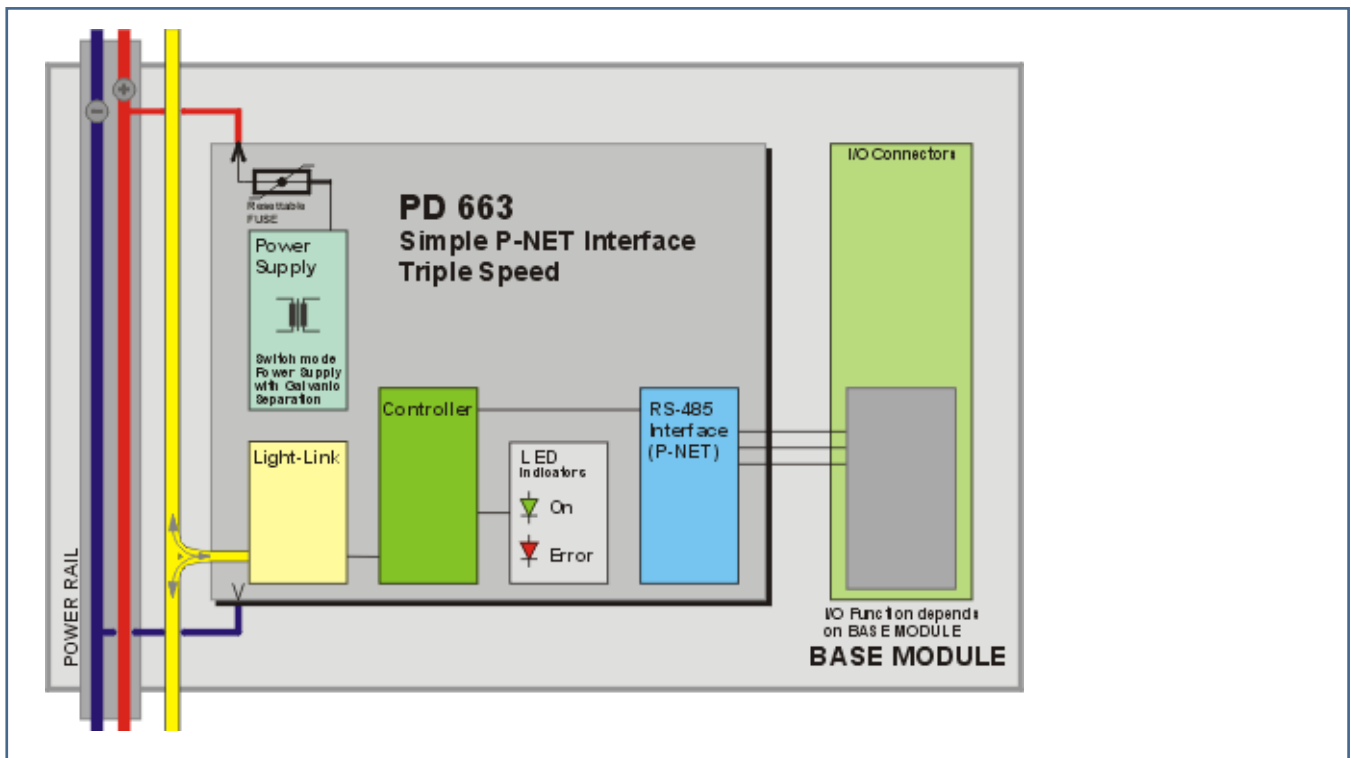
The PD 663 Simple P-NET Interface is one of a number of standard modules within the PD 600 series range. Its main purpose is to provide a transparent high-speed link between two or more clusters of PD 6XX devices that are mounted either within the same control panel, or in different control panels within a limited area. Communication between these clusters, where each is equipped with a PD 663, takes place on RS-485 P-NET at 230 kbits/s.

The maximum RS-485 cable length is 50 meters, and P-NET Bus Topology must be used.

The PD 663 device performs a direct (repeater) link between an RS-485 network segment and Light-Link, meaning that any modules included in the cluster will be regarded as part of the same network. In other words, no gateway function is involved.

Block Schematic

The diagram shows connection possibilities for a PD 663.

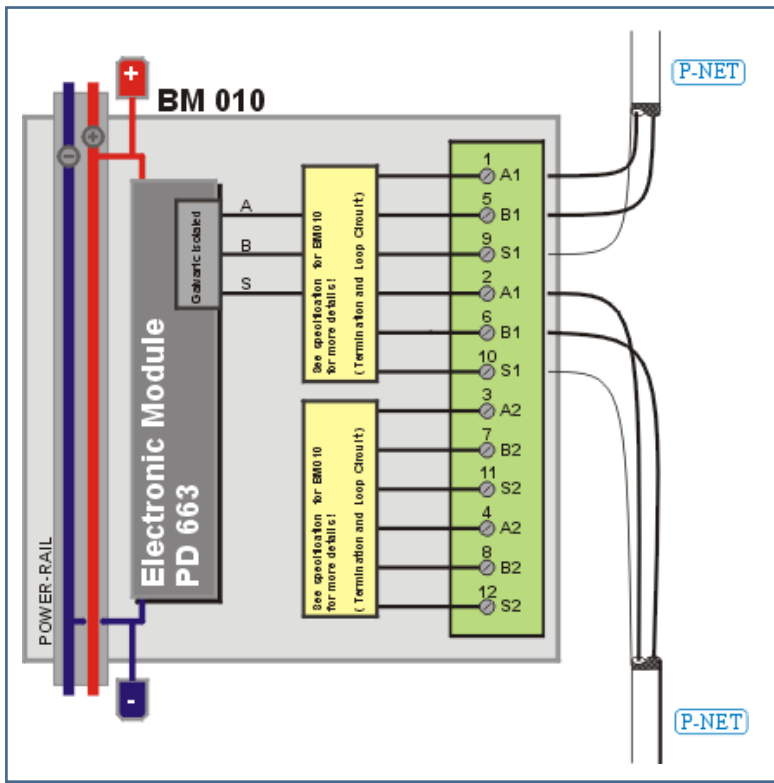


LED Indicators

Series 600 slave devices are equipped with 2 LEDs, a green (On) for indication Power supply, and a red (Error) for indicating errors in the device.

The Error LED is ON if an error occurs inside the device, which causes one of the error flags to be set to TRUE. This is for example watchdog error or error in EEPROM memory.

Wiring Diagrams



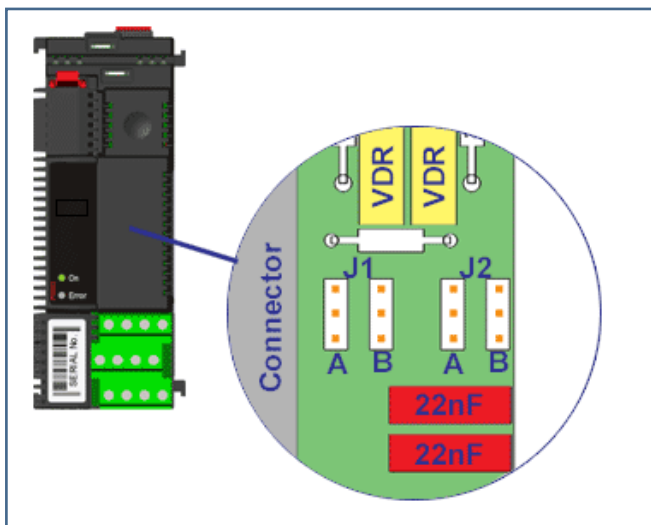
The BM 010 base module is equipped with termination circuits for the two P-NET channels. It is recommended to enable the termination circuit when the device is installed at the terminal ends of a transmission cable. Enabling/disabling the termination circuit is done via jumper settings.

Jumper location

The jumpers used to enable /disable the termination circuits are found on the printed circuit board inside the BM 010, as seen on the picture.

J1: P-NET 1

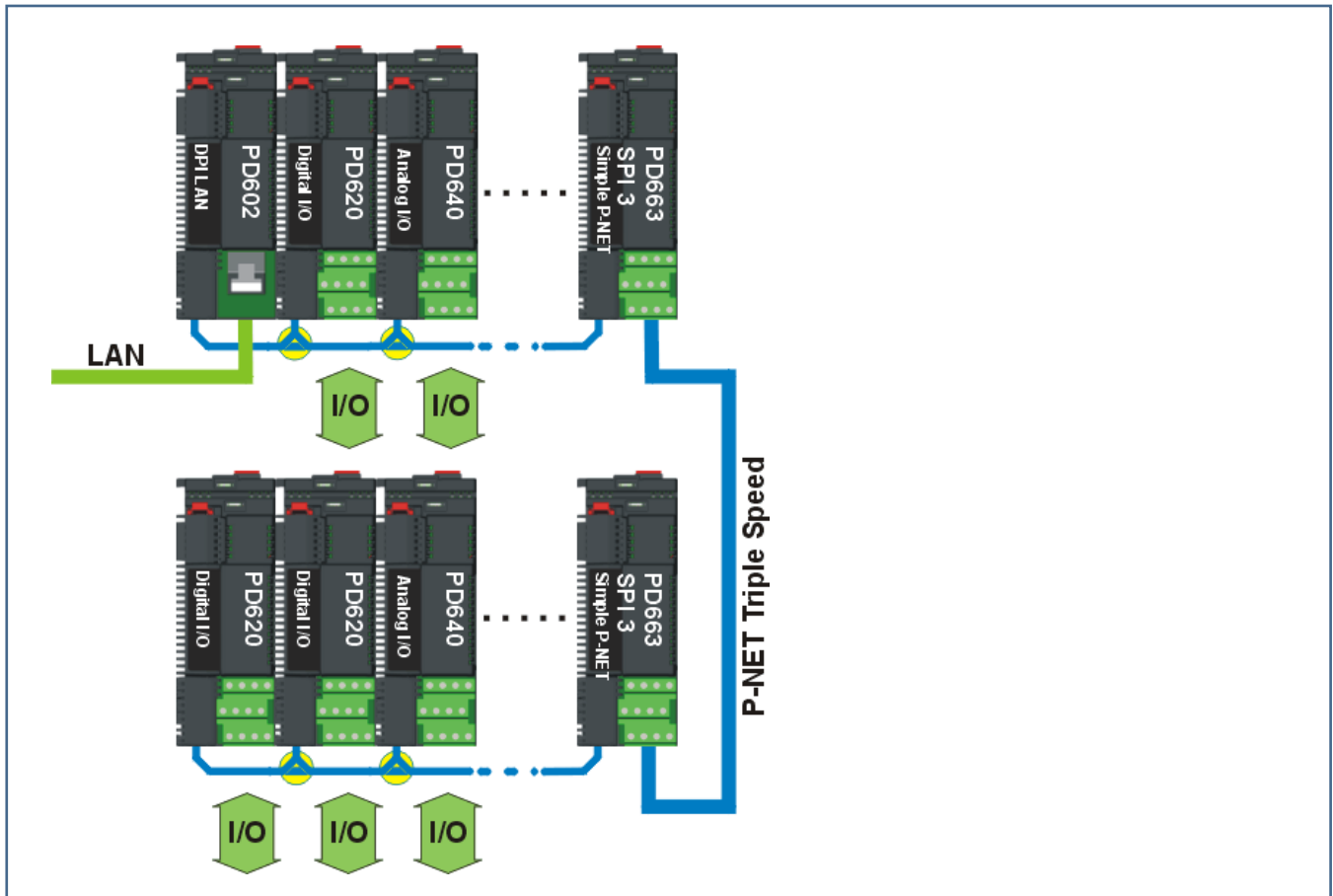
J2: P-NET 2 (NOT USED WITH PD663)



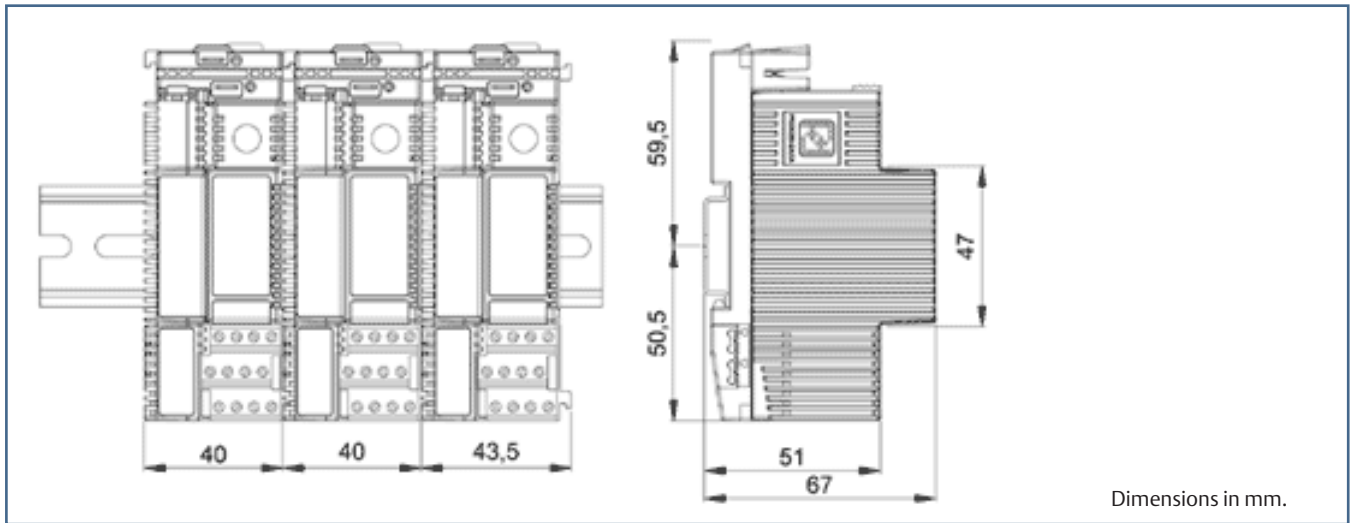
J1	J2	Description
		P-NET 1 Termination disabled P-NET 2 Termination disabled (Factory settings)
		P-NET 1 Termination disabled P-NET 2 Termination enabled
		P-NET 1 Termination enabled P-NET 2 Termination enabled
		P-NET 1 Termination enabled P-NET 2 Termination disabled

Mounting Position in a Cluster

The PD 663 should always be placed as the last device at the right hand side of the cluster (when mounted on a horizontal DIN rail). Please refer to the example below:



Technical Specifications



Weight	140 grams approx.
Power supply	18 to 32 VDC
Ripple	max. 5 %
Power consumption @ 24VDC	
Operation	max 30 mA
Current at power up	max. 100 mA
Operation Temperature	-25 °C to + 70 °C
Storage temperature	-40 °C to + 85 °C

Maritime Approvals

Meets the requirements of all the major international marine classification societies.

For more information see PDS for the PD Series 600 Introduction.

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