PD 662 P-NET Redundancy Interface

General information

The PD 662 P-NET Redundancy Interface is one of a number of standard modules within the PD 600 series range. Its main purpose is to provide a redundant and transparent link between optical Light-Link and a duplicated RS485 P-NET. The module frequently scans the RS485 communication links to check whether the communication networks are functioning correctly. The PD 662 will ensure that the local cluster of modules (i.e. the group of devices of which the PD 662 itself is a component), will receive data via one of the two RS485 P-NET ports, and that data from the local cluster will be transmitted to both RS485 P-NET ports. If, for example, P-NET port 1 is active, and a short circuit or a cable break is detected, the PD 662 will automatically switch to P-NET port 2. The module itself does not require any programming, but a P-NET slave address and a few other parameters must be configured. The PD 662 is used with a BM 010 base module.



R \$485 - P-NET1 Redundant P-NET® RS485 - P-NET2 Device Device 03 2 Ĕ щ 녌 텂 other officer other other other other PD 662 PD 662 module no **dul**e n o**dul**e n o **dul** e module module Light Light-Link Link P-NET Light-Lin k P-NET Light-Link Device Port 2 Port other ofher other **PD 662** module n o**dul**e no<mark>dul</mark>e Light-Link P-NET Light-Link

Redundancy System Block Schematic

PD 662 Block Schematic

Internal structure and connection possibilities for a PD 662.



Channel structure

The PD 662 consists of 2 channels as shown in the table.

Channel No.	Channel Name	Channel Description
0	Service	Module Ident., Address and Config.
1	Redundancy	Com. Ports, Information and Settings

Communication interfaces

The PD 662 has two galvanically isolated RS485 P-NET interfaces, and one P-NET Light-Link communication interface that is used for communicating with other locally mounted P-NET devices using the optical Light-Link interface.

LED indicators

The module is equipped with four LED indicators: A green LED (On) to indicate that power is supplied to the module, a red (Error) to indicate internal errors within the module, and finally two red LED's (#1 and #2) to indicate whether RS485 Port 1 or RS485 Port 2 is currently reporting a malfunction. If none of these two red LEDs is ON, it indicates that both RS485 nets are in a fully functional condition.

Electrical Specifications

Power supply		
Power supply DC:	Nom.	24.0 V
	min.	18.0 V
	max.	32.0 V
Ripple:	max.	5%
Power consumption @ 24Vdc		
Operation:		60 mA
Current at power up:		100 mA
EMC		
EN 61000-6-2, EN 61000-6-3		

Vibration

Test method: IEC 60068-2-6 Frequency range: Frequency / amplitude:

Sweep rate: Number of axes:

Mechanical Details

2-100 Hz 2-10 Hz : +/- 5.0 mm 10-100 Hz: +/- 2g Max. 1 octave/min 3 mutually perpendicular

