



XPL Rail 4M - 48500 Datasheet

XPL Rail 4M - 48500 is a device that forwards RS-485 data over the powerline. It is typically used in a set of two. As a DIN rail device it is mounted to switchboards and is intended to be used for transparent extension of RS-485 communication lines. It can either be directly coupled with a second device of the same kind or can be controlled by any device that is able to use the JSON API via Ethernet / powerline.

Features:

- Mountable to DIN-Rails according to DIN EN 60715
- Controlled via Powerline Communication (PLC)
- Based on HomePlug AV™ / HomePlug Green PHY™ compatible QCA7000 Chip for communication
- Can be used with all HomePlug AV™ compatible Ethernet adapters
- RS-485 interface with variable baudrate, number of databits as well as stopbit and parity settings
- Filtered output for an auxiliary power supply to improve PLC performance
- Standards: Ethernet (IEEE 802.3), EIA-485 (RS-485), ARP, ICMP, IGMPv2, IPv4, DHCPv4, Auto-IP, TCP, UDP, UDP-Multicast, HTTP, SSDP, HTTPU, REST, JSON, HTML+CSS (AJAX-based), Raw-Socket, Telnet, RFC2217

Applications:

- connection of energy meters where they can't be connected to the master via RS-485 lines
- control of RS-485 devices via REST API instead of directly sending serial data
- connecting RS-485 dimmer
- de-centralizing of RS-485 control
- control of devices with RS-485 interface via virtual COM ports
- connection of solar inverters with RS-485 interface to each other or to a central control unit

Technical Data

SUPPLY PARAMETERS	MIN	TYP	MAX	UNIT
AC Supply Voltage	85	110 / 230	265	V
AC Supply Frequency	-	50 / 60	-	Hz
AC Supply Power	-	1.3 (idle)	4.5	W
Filtered AC Output Current (L / N)	-	-	0.25	A

RS-485 PARAMETERS	MIN	TYP	MAX	UNIT
Bus Load of the Receiver			1/4	unit
ESD Protection of A & B Signals (Human Body Model)	-	-	12	kV
Signal Voltage between A & B to C	-80	-	80	V

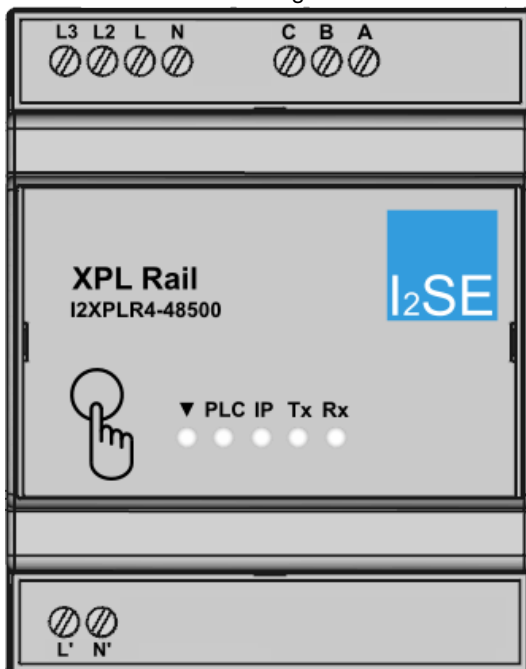
AMBIENT PARAMETERS	
Storage Temperature	-25 - 70 °C
Operating Temperature	0 - 40 °C
Relative air humidity (non condensing)	15 - 85 %



SAFETY PARAMETERS	
Insulation coordination according to	IEC 60950-1:2006
Overvoltage category	II
Pollution degree	2
Altitude	max 2000 m above sea level

Electrical Connections

The device has the following connections shown from top view.



Clamp (Printing)	Full Name	Description
N	mains N	Mains Power Input
L	mains L	Mains Power Input
N'	filtered N output	Output for auxiliary Power Supplies
L'	filtered L output	Output for auxiliary Power Supplies
L2	mains L2	Phase coupled connection for second phase
L3	mains L3	Phase coupled connection for third phase
A	RS-485 A	RS-485 Bus A / Positive Signal
B	RS-485 B	RS-485 Bus B / Negative Signal
C	RS-485 common	Common Reference of the RS-485 Bus

The clamps are only for use with the following wires for electrical connection: 2,5 mm² / 14AWG, 4,0 mm² / 12AWG, 2 * 1.5 mm² / 16AWG

Stripping Length is not allowed to be longer than 8.3 mm

Order Information

Order Code	I2XPLR4-48500
Outline dimension	4M DIN Rail (71 mm x 100 mm x 62 mm)
Weight	151 g (net)