



## XPL Rail 4M - IO600 Datasheet

XPL Rail 4M - IO600 is a device that provides 6 configurable IOs and is able to communicate over the powerline with other devices. As a DIN rail device it is mounted in switchboards and is intended to be used for automation purposes. 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
- 6 IOs, each can be configured as one of the following: open collector output, analog input (0-10 V), S0 input, digital input (24 V compatible, configurable voltage threshold in the range of 0-10 V), digital inputs can be used as switch input (using software controlled pullup resistors). **All 6 IO channels are using the same GND, they are not galvanically isolated.**
- Filtered output for an auxiliary power supply to improve PLC performance
- Supported Standards: Ethernet (IEEE 802.3), ARP, ICMP, IGMPv2, IPv4, DHCPv4, Auto-IP, TCP, UDP, UDP-Multicast, HTTP, SSDP, HTTPU, REST, JSON, HTML+CSS (AJAX-based)

Applications:

- Controlling of household appliances over PLC
- Connecting switches
- Connecting sensors
- Connecting heating and air conditioning
- Switching electronic devices on and off

## 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

IO CHANNEL PARAMETERS	MIN	TYP	MAX	UNIT
<b>Configured as Analog Input</b>				
Working Voltage	0	-	10	V
Resolution	-	2.442	.	mV
-3dB Frequency	-	100	-	Hz
Tolerance (initial, over full temperature range)	-	-	0.7% + 20 mV	
<b>Configured as Digital Input</b>				
Working Voltage	0	-	27	V
Low/High Threshold Voltage (configurable)	0	-	10	V
Threshold Resolution	-	2.442	-	mV
-3dB Frequency	-	100	-	Hz
<b>Configured as Digital Output</b>				
Switching Voltage	0	-	27	V
Open Collector Sink Current	0	-	300	mA



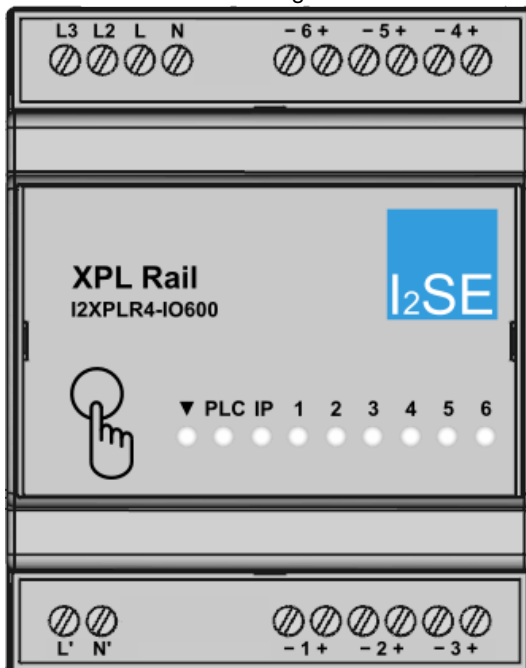
Pulse Width and Delay Time Error	-	10	-	ms
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AMBIENT PARAMETERS	
Storage Temperature	-25 - 70 °C
Operating Temperature	0 - 40 °C
Relative air humidity (non condensing)	15 - 85 %

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 Line
L3	mains L3	Phase coupled connection for third Line
+	Input/Output Positive	analog/digital Input/Output terminal, positive
-	Ground	Reference Potential for the IO channels

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

Stripping Length is not allowed to be longer than 8.3 mm



## Order Information

Order Code	I2XPLR4-IO600
Outline dimension	4M DIN Rail (71 mm x 100 mm x 62 mm)
Weight	165 g (net)