

PPDS-742-IP67
PPDS-742-IP67/DIN

Programmable (2x RS-232 and 2x RS-485) Serial-to-Ethernet Device Server with PoE and IP67 Casing

Features

- Incorporate Serial Devices in an Ethernet network
- Supports Modbus TCP to RTU/ASCII Gateway
- VxComm Utility supports 32/64-bit Windows 7 SP1/10/2012/2016
- Powerful Programmable Device Server
- Watchdog Timer suitable for use in harsh environments
- Serial Port +/-4 kV ESD Protection Circuit
- Self-Tuner ASIC Controller on the RS-485 Port
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED indicator)
- Rugged RJ-45 Connector for anti-vibration and shock
- Plastic Casing with IP67 Waterproof
- Low power consumption

Introduction

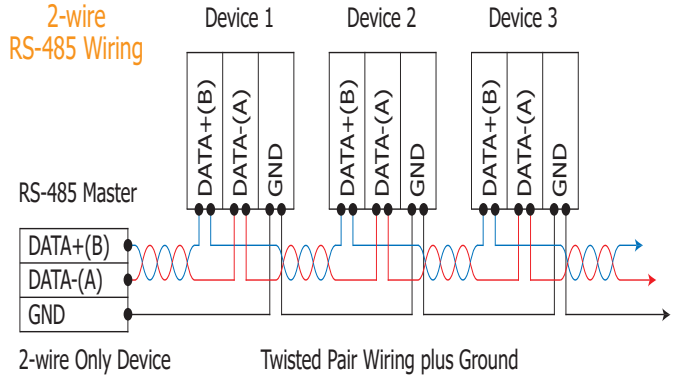
The PPDS-742-IP67 series is a family of Programmable Device Servers, also known as "Serial-to-Ethernet gateway", that are designed for linking RS-232/485 devices to an Ethernet network. The user-friendly VxComm Utility allows users to easily turn the built-in COM ports of the PPDS-742-IP67 series into standard COM ports on a PC. By virtue of its protocol independence, a small-core OS and high flexibility, the PPDS-742-IP67 series is able to meet the demands of every network-enabled application.

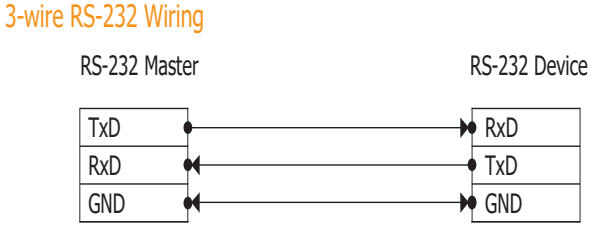
The PPDS-742-IP67 series includes a powerful and reliable Xserver programming structure that allows you to design your robust Ethernet applications in one day. The built-in, high-performance MiniOS7 boots the PPDS-742-IP67 up in just one second and gives you fastest responses.

The PPDS-742-IP67 is a special design for the toughest applications. It can be directly mounted to any machine or convenient flat surface. The rugged packaging and IP67 connectors are rated to protect against water, oil, dust, vibration, and much more.

The PPDS-742-IP67 supports PoE (Power over Ethernet) function that allows power and data to be carried over a single Ethernet cable, so a device can operate solely from the power it receives through the data cable. This innovation allows greater flexibility in office design, higher efficiency in systems design, and faster turnaround time in set-up and implementation. When there is no PoE switch on site, the PPDS-742-IP67 accepts power input from a +12 VDC ~ +48 VDC adapter.

Wiring

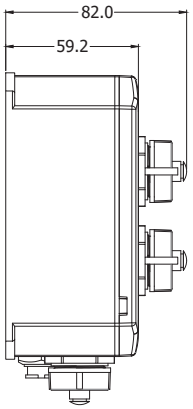




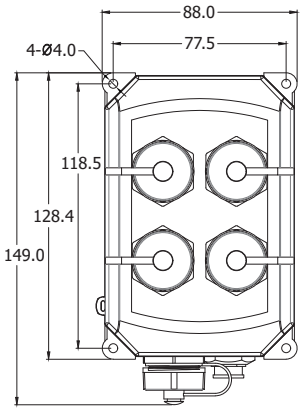
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Dimensions (Units: mm)

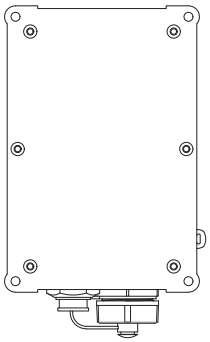
PPDS-742-IP67



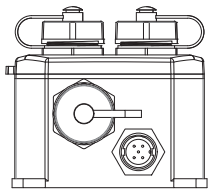
Left Side View



Front View

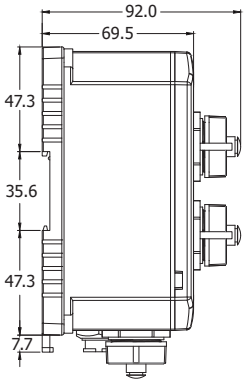


Rear View

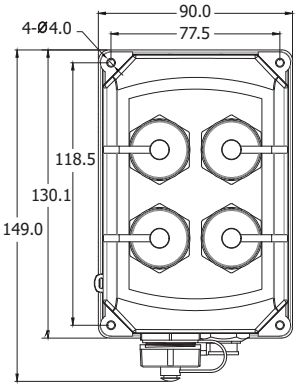


Bottom View

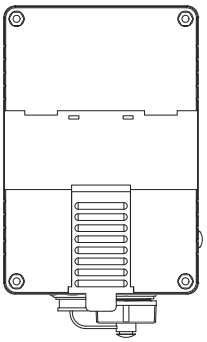
PPDS-742-IP67/DIN



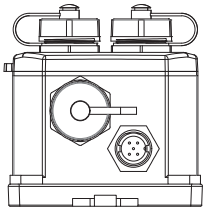
Left Side View



Front View

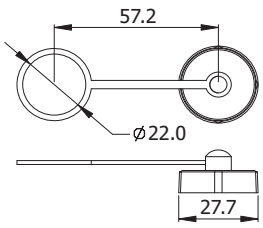


Rear View

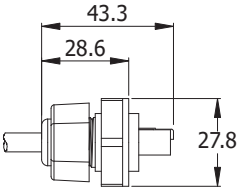


Bottom View

IP67 Ethernet Cap with Tether

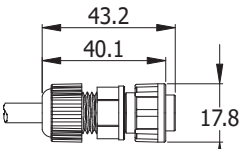


IP67 Ethernet Plug



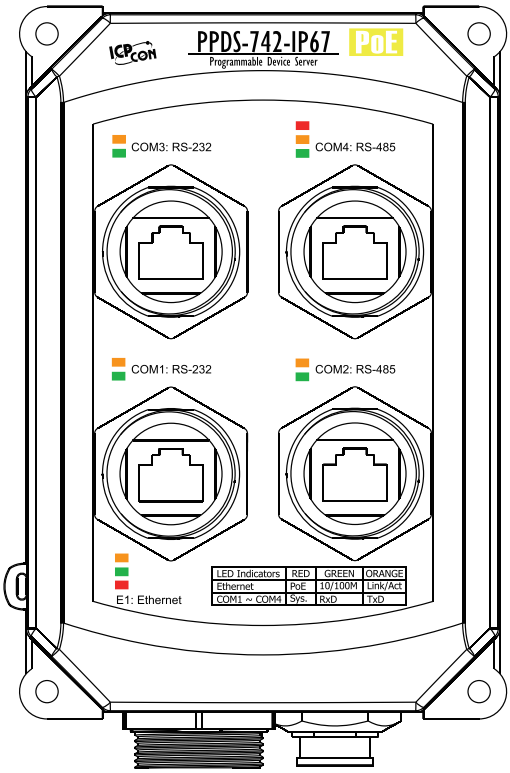
Cable Dia:
Max. 7.0 mm
Min. 5.5 mm

IP67 PWR Plug

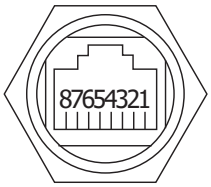


Cable Dia:
Max. 6.5 mm
Min. 5.0 mm

Pin Assignments

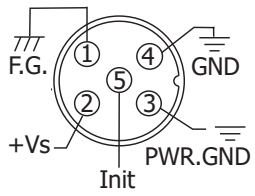


COM1 ~ COM4



Pin	5-wire RS-232	2-wire RS-485
1	--	--
2	RTS	--
3	GND	GND
4	TxD	--
5	RxD	DATA+
6	--	DATA-
7	CTS	--
8	--	--

DC +12 ~ +48 V_{DC}



Pin	Name
1	F.G.
2	+Vs
3	PWR.GND
4	GND
5	Init

LED Indicators

System	Red	Sys.
Ethernet	Red	PoE (E1)
	Green	10/100M (E1)
	Orange	Link/Act (E1)
COM1 ~ COM4	Green	RxD
	Orange	TxD

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System Specifications

Models		PPDS-742-IP67	PPDS-742-IP67/DIN
CPU			
CPU		80186, 80 MHz or compatible	
SRAM		512 KB	
Flash Memory		Flash ROM: 512 KB; Erase unit is one sector (64 KB); 100,000 erase/write cycles	
EEPROM		16 KB; Data retention: 40 years; 1,000,000 erase/write cycles	
Built-in Watchdog Timer		Yes	
Communication Interface			
COM1		5-wire RS-232	
COM2		Isolated 2-wire RS-485	
COM3		5-wire RS-232	
COM4		Isolated 2-wire RS-485	
RS-485	Bias Resistor	Yes, 1 KΩ	
	Node	254 (max.)	
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator), PoE (IEEE 802.3af, Class 1)	
COM Port Formats			
Data Bit		7, 8: for COM1 and COM2，5, 6, 7, 8: for COM3 and COM4	
Parity		None, Even, Odd, Mark, Space None parity is required when using 8 data bits and 2 stop bits on COM1/COM2.	
Stop Bit		1, 2: for COM1 ~ COM4	
Baud Rate		115200 bps max.	
LED Indicators			
System		Red: Sys, PoE	
Ethernet		Green: 10/100M (E1), Orange: Link/Act (E1)	
COM1 ~ COM4		Green: RxD, Orange: TxD	
Power			
Protection		Power Reverse Polarity Protection	
Required Supply Voltage		PoE or +12 VDC ~ +48 VDC (non-regulated) or PoE (IEEE 802.3af, Class 1)	
Power Consumption		2.2 W	
Mechanical			
Flammability		Fire Retardant Materials (UL94-V0 Level)	
Dimensions (W x H x D)		88 mm x 149 mm x 82 mm	90 mm x 149 mm x 92 mm
Installation		Wall mounting	DIN-Rail
Casing		Plastic	
Environment			
Operating Temperature		-10 °C ~ +60 °C	
Storage Temperature		-10 °C ~ +60 °C	
Humidity		5 ~ 90% RH, non-condensing	
Note: **5-wire RS-232: TxD, RxD, CTS, RTS, GND** **Isolated 2-wire RS-485: DATA+, DATA-, GND; Self-Tuner Inside; 2500 Vrms Isolation**			

Ordering Information

PPDS-742-IP67 CR	Programmable (2x RS-232 and 2x RS-485) Serial-to-Ethernet Device Server with PoE and IP67 Casing (RoHS) Includes 5-pin Waterproof Power Plug (4SIO1K0000013)
PPDS-742-IP67/DIN CR	Programmable (2x RS-232 and 2x RS-485) Serial-to-Ethernet Device Server with PoE and IP67 Casing with DIN-rail Mounting (RoHS) Includes 5-pin Waterproof Power Plug (4SIO1K0000013)

Accessories

NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PSE CR	Unmanaged 5-port 10/100 Mbps PoE (PSE) Ethernet Switch (RoHS)

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