

ICP Electronics Australia Pty Ltd

TEL: 02 9457 6011 sales@icp-australia.com.au www.icp-australia.com.au





PDS-720(D) PPDS-720(D)-MTCP

Programmable (1x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server

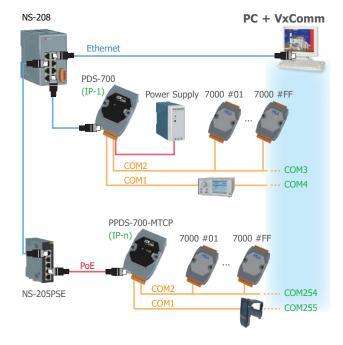
Introduction

The PDS-700 series is a family of Programmable Device Servers, also known as "Serial-to-Ethernet gateway", that are designed for linking RS-232/422/485 devices to an Ethernet network. The user-friendly VxComm Driver/Utility allows users to easily turn the built-in COM ports of the PDS-700 series into standard COM ports on a PC. By virtue of its protocol independence, a small-core OS and high flexibility, the PDS-700 series is able to meet the demands of every network-enabled application.

The PDS-700 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 PDS-700 up in just one second and gives you fastest response. It also works as a Modbus TCP to RTU/ASCII gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PPDS-700-MTCP series features true IEEE 802.3af-compliant (classification, Class 1) Power over Ethernet (PoE) using a standard category 5 Ethernet cable to receive power from a PoE switch like the NS-205PSE

The PDS-720(D) and PPDS-720(D)-MTCP is equipped with 1 RS-232 port and 1 RS-485 port. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.



F Features

- Incorporate Serial Devices in an Ethernet networkay
- "Virtual COM" Extend COM Ports
- Virtual COM supports 32-bit and 64-bit Windows 7 SP1/10/2012/2016
- Supports Modbus TCP to RTU/ASCII Gateway
- 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
- Palm-Sized with multiple Serial Ports



■ System Specifications

Models		PDS-720	PDS-720D	PPDS-720-MTCP	PPDS-720D-MTCP	
CPU					1	
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				
Commun	ication	Interface				
Non- COM1		RS-232 (TxD, RxD, RTS, CTS, GND)				
isolated	COM2	RS-485 (D2+, D2-, GND)				
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)				
PoE		-		IEEE 802.3af		
COM Por	t Forma	ıts				
Data Bit		7, 8: for COM1 and COM2				
Parity		None, Even, Odd, Mark, Space				
Stop Bit		1: for COM1 and COM2				
Baud Rate		115200 bps max.				
LED Indi	cators					
5-digit 7 Segment		-	Yes	-	Yes	
System		Red				
PoE		-		Green		
Power						
Protection		Power Reverse Polarity Protection				
Required Supply Voltage		+10 VDC ~ +30 VDC (non-regulated)		PoE or +12 Vpc ~ +48 Vpc (non-regulated)		
Power Consumpti	Power		2.7 W	2.2 W	2.9 W	
Mechanic						
Flammability		Fire Retardant Materials (UL94-V0 Level)				
Dimensions		72 mm x 35 mm x 112 mm (W x L x H)				
Installation		DIN-Rail or Wall mounting				
Environn	nent					
Operating Temperature		-25 °C ~ +75 °C				
Storage Temperature		-40 °C ~ +80 °C				
Humidity		5 ~ 90% RH, non-condensing				

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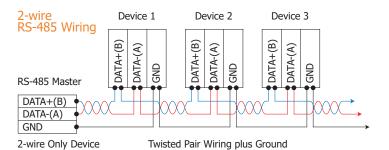
■ Pin Assignments

Termi No		Pin Assignment	
E1		Link/Act 10/100M	
	01	CTS1	
COM1	02	RTS1	
COMI	03	RxD1	
	04	TxD1	
	05	INIT*	
COM2	06	D2+	
COMZ	07	D2-	
	80	(R)+Vs	
	09	(B)GND	



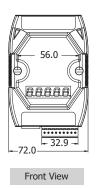


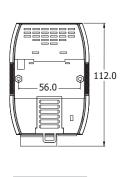
■ Wiring



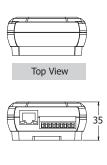


■ Dimensions (Units: mm)

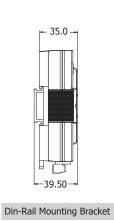


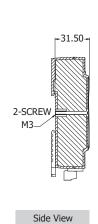


Back View



Bottom View





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Ordering Information

PDS-720 CR	Programmable (1x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server (RoHS) Includes CA-0910 Cable
PDS-720D CR	Programmable (1x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server with LED Display (RoHS) Includes CA-0910 Cable
PPDS-720-MTCP CR	Programmable (1x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server with PoE and Modbus Gateway (RoHS) Includes CA-0910 Cable
PPDS-720D-MTCP CF	Programmable (1x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server with PoE, Modbus Gateway and LED Display (RoHS) Includes CA-0910 Cable

Accessories

CA-0903 CR	DB9 Female to 5-wire Cable [RS-232], 30cm (RoHS)		
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)		
NS-205PSE CR	Unmanaged 5-port 10/100 Mbps PoE (PSE) Ethernet Switch (RoHS)		