



## PDS-782-25/D6 PDS-782D-25/D6

Programmable (7x RS-232 and 1x RS-485)  
Serial-to-Ethernet Device Server

### Features

- Incorporate Serial Devices in an Ethernet network
- "Virtual COM" Extend COM Ports
- Virtual COM supports 32-bit and 64-bit Windows 7 SP1/10/2012/2016
- Powerful Programmable Device Server
- Watchdog Timer suitable for use in harsh environments
- Power Reverse Polarity Protection
- Serial Port +/-4 kV ESD Protection Circuit
- Self-Tuner ASIC Controller on the RS-485 Port
- Built-in High Performance MiniOS7 from ICP DAS
- 5-digit LED Display (for versions with a display)
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED indicator)
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)
- Male DB-9 Connecto
- Low power consumption



### Introduction

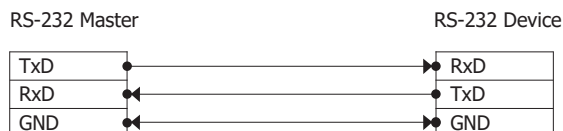
The PDS-700 series is a family of Programmable Device Servers, also known as "Serial-to-Ethernet gateway", that are designed for linking RS-232/422/485 devices to an Ethernet network. The user-friendly VxComm Driver/Utility allows users to easily turn the built-in COM ports of the PDS-700 series into 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 responses.

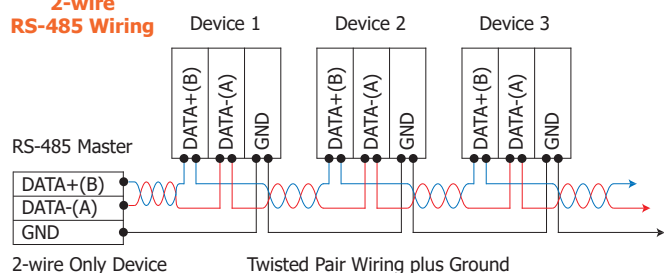
PDS-782(D)-25/D6 is equipped with 7 RS-232 ports and 1 RS-485 port. The CA-9-2505D cable converts the DB-25 connector of PDS-782(D)-25/D6 to 6 Male DB-9 connectors for easy wiring with serial devices that have female DB-9 connectors.

### Wiring

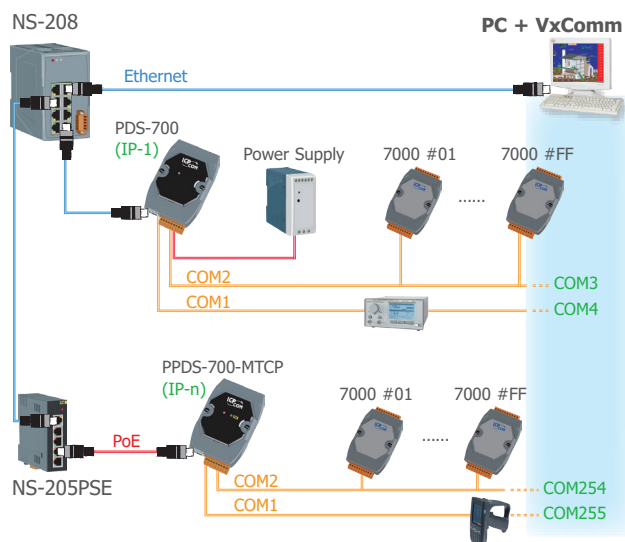
#### 3-wire RS-232 Wiring



#### 2-wire RS-485 Wiring



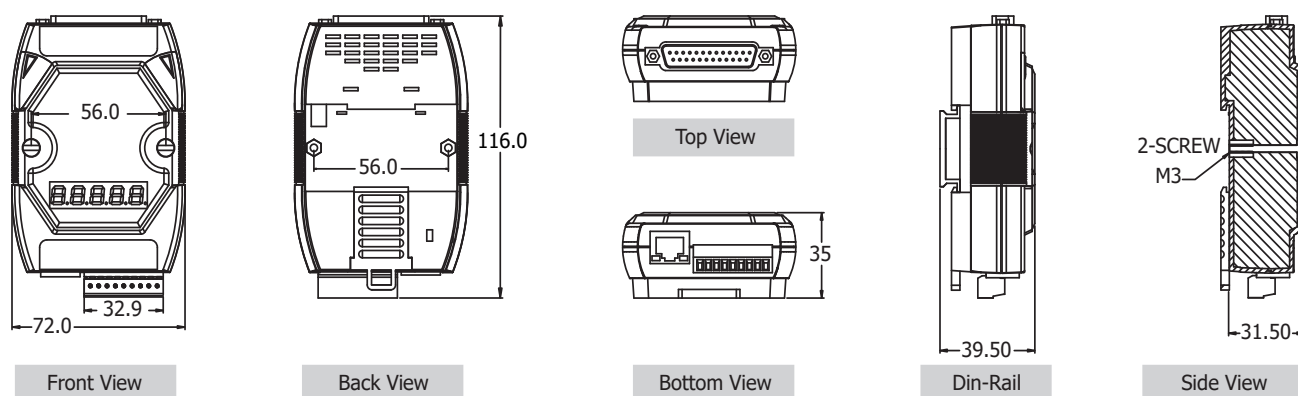
### Applications



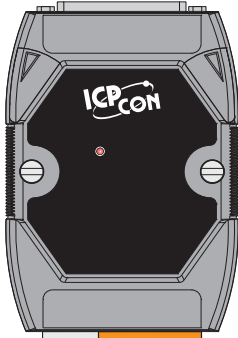
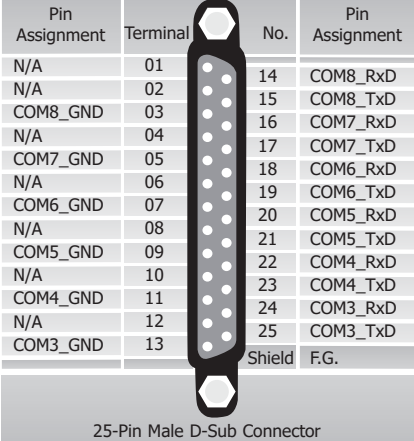
## System Specifications

Models		PDS-782-25/D6	PDS-782D-25/D6
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			
Non-isolated	COM1	RS-232 (TxD, RxD, RTS, CTS, GND)	
	COM2	RS-485 (D2+, D2-, GND)	
	COM3	RS-232 (TxD, RxD, GND)	
	COM4	RS-232 (TxD, RxD, GND)	
	COM5	RS-232 (TxD, RxD, GND)	
	COM6	RS-232 (TxD, RxD, GND)	
	COM7	RS-232 (TxD, RxD, GND)	
	COM8	RS-232 (TxD, RxD, GND)	
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)	
COM Port Formats			
Data Bit		7, 8: for COM1 and COM2 · 5, 6, 7, 8: for COM3 and COM8	
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 ~ COM8	
Baud Rate		115200 bps max.	
LED Indicators			
5-digit 7 Segment		-	Yes
System		Red	
Power			
Protection		Power Reverse Polarity Protection	
Required Supply Voltage		+10 VDC ~ +30 VDC (non-regulated)	
Power Consumption		2.0 W	2.7 W
Mechanical			
Flammability		Fire Retardant Materials (UL94-V0 Level)	
Dimensions (W x H x D)		72 mm x 116 mm x 35 mm	
Installation		DIN-Rail or Wall mounting	
Casing		Plastic	
Environment			
Operating Temperature		-25 °C ~ +75 °C	
Storage Temperature		-40 °C ~ +80 °C	
Humidity		5 ~ 90% RH, non-condensing	

## Dimensions (Units: mm)



## Pin Assignments

Terminal No.	Pin Assignment	COM3~COM8(RS-232)		Pin Assignment	Terminal No.	Pin Assignment	Terminal No.	Pin Assignment
E1	Link/Act 10/100M			N/A	01	14	05	GND
COM1	01 CTS1			N/A	02	15	04	--
	02 RTS1			COM8_GND	03	16	03	TxD
	03 RxD1			N/A	04	17	02	RxD
	04 TxD1			COM7_GND	05	18	01	--
COM2	05 INIT*			N/A	06	19		
	06 D2+			COM6_GND	07	20		
	07 D2-			N/A	08	21		
	08 (R)+Vs			COM5_GND	09	22		
	09 (B)GND			N/A	10	23		
				COM4_GND	11	24		
				N/A	12	25		
				COM3_GND	13	Shield		
						F.G.		

RS-232 Female DB-25 to Male DB-9 Connector

## Ordering Information

PDS-782-25/D6 CR	Programmable (7x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server (RoHS) Includes CA-0910 Cable and CA-9-2505D Cable
PDS-782D-25/D6 CR	Programmable (7x RS-232 and 1x RS-485) Serial-to-Ethernet Device Server with LED Display (RoHS) Includes CA-0910 Cable and CA-9-2505D 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)
DN-09-2 CR	Two Male DB9 to Screw Terminal Board (Pitch= 5.08 mm) with DIN-rail Mounting (RoHS) Includes: CA-0915 x 2 (DB9(Male) to DB9(Female) Cable [RS-232; Pin1-Pin9], 1.5M)
DN-09-2F CR	Two Male DB9 to Screw Terminal Board (Pitch= 5.08 mm) with DIN-rail Mounting (RoHS) Includes: CA-0910F x 2 (DB9(Female) to DB9(Female) Cable [RS-232; Pin1-Pin9], 1M)