

3.2. PDS-700 & PPDS-700-MTCP Programmable Device Servers



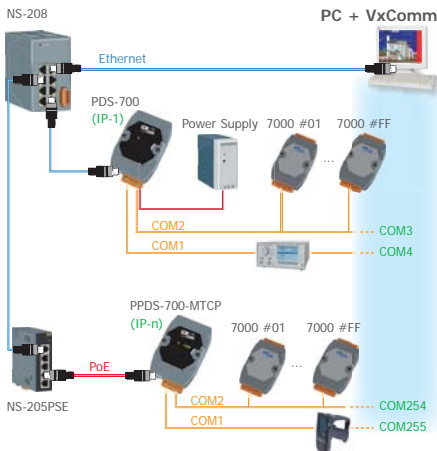
Introduction

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

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.



Applications

Factory, Building and Home Automation

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED indicator)
- PPDS-720(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-720(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)

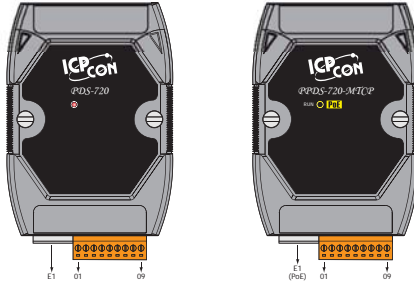


System Specifications

Models	PDS-720	PDS-720D	PPDS-720-MTCP	PPDS-720D-MTCP
CPU				
CPU	80186, 80 MHz or compatible			
SRAM	512 KB			
Flash Memory				
Flash Memory	Flash ROM: 512 KB; Erase unit is one sector (64 KB); 100,000 erase/write cycles			
EEPROM				
EEPROM	16 KB; Data retention: 40 years; 1,000,000 erase/write cycles			
Built-in Watchdog Timer				
Built-in Watchdog Timer	Yes			
Communication Interface				
Non-isolated	COM1	RS-232 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
Ethernet				
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-			IEEE 802.3af
COM Port Formats				
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 Indicators				
5-digit 7 Segment	-	Yes	-	Yes
System	Red			
PoE	-			Green
Power				
Protection				
Power Reverse Polarity Protection				
Required Supply Voltage	+10 V _{DC} ~ +30 V _{DC} (non-regulated)		PoE or +12 V _{DC} ~ +48 V _{DC} (non-regulated)	
Power Consumption				
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 112 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

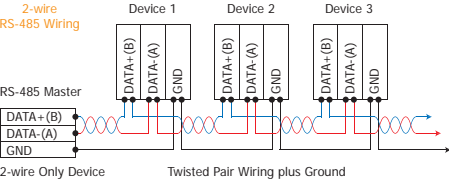
Pin Assignments

Terminal No.	Pin Assignment
E1	Link/Act 10/100M
COM1	01 CTS1 02 RTS1 03 RxD1 04 TxD1 05 INIT*
COM2	06 D2+ 07 D2- 08 (R)+Vs 09 (B)GND

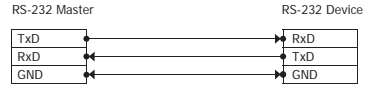


Wiring

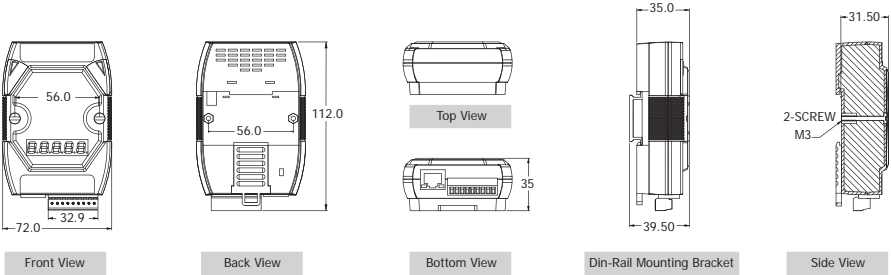
2-wire RS-485 Wiring



3-wire RS-232 Wiring



Dimensions (Unit: mm)



Ordering Information

PDS-720 CR	Programmable Device Server with 1 RS-232 port and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-720D CR	Programmable Device Server with 1 RS-232 port, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-720-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-720D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 V _{DC} /0.25 A, 6 W Power Supply
MDR-20-24	24 V _{DC} /1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{DC} /0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PC CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)



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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-721(D) and PPDS-721(D)-MTCP is equipped with 1 RS-232 port, 1 RS-485 port and D/DO. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.

Applications

Factory, Building and Home Automation

I/O Specifications

Models: PDS-721/PDS-721D/PPDS-721-MTCP/PPDS-721D-MTCP	
Digital Output	
Output Channel	7
Output Type	Open Collector (Sink/NPN)
Load Voltage	30 Vdc, max.
Load Current	100 mA, max.
Isolated Voltage	Non-isolated
Digital Input	
Input Channel	6
Input Type	Source (Dry Type), Common Ground
Off Voltage Level	+1 V max.
On Voltage Level	+3.5 ~ +30 V
Isolated Voltage	Non-isolated
Counters	Channels: 6
	Max. Count: 16-bit (65535)
	Max. Input Frequency: 100 Hz
	Min. Pulse Width: 5 ms

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-721(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-721(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Supports D/I, Latched D/I and Counter Functions
- Low power consumption
- Palm-Sized with multiple Serial Ports

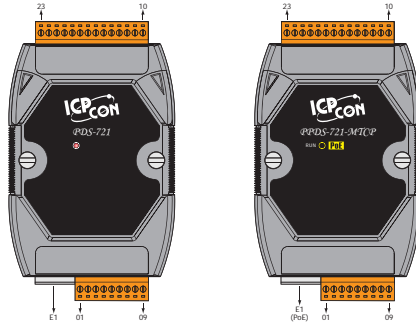


System Specifications

Models	PDS-721	PDS-721D	PPDS-721-MTCP	PPDS-721D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	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 Port Formats				
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 Indicators				
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 Vdc ~ +48 Vdc (non-regulated)		
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

Terminal No.	Pin Assignment
E1	Link/Act 10/100M
COM1	01 CTS1 02 RTS1 03 RxD1 04 TxD1 05 INIT*
COM2	06 D2+ 07 D2- 08 (R) +Vs 09 (B)GND

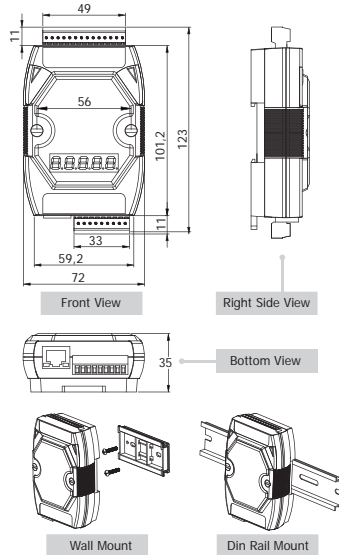


Terminal No.	Pin Assignment
DI	23 DI0 22 DI1 21 DI2 20 DI3 19 DI4 18 DI5
DO	17 DO.PWR 16 DO0 15 DO1 14 DO2 13 DO3 12 DO4 11 DO5 10 DO6

Wiring

Input Type	DI Value as 0	DI Value as 1
Relay Contact	Relay ON 	Relay Off
TTL/CMOS Logic	Voltage < 1V Logic Level Low 	Voltage > 3.5V Logic Level High
Open Collector	Open Collector On 	Open Collector Off
Output Type	DO Command as 1	DO Command as 0
Drive Relay	Relay ON 	Relay Off
Resistance Load		

Dimensions (Unit: mm)



Ordering Information

PDS-721 CR	Programmable Device Server with 1 RS-232 port and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-721D CR	Programmable Device Server with 1 RS-232 port, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-721-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-721D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 Vdc/0.25 A, 6 W Power Supply
MDR-20-24	24 Vdc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Vdc/0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PSE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)



PDS-732(D)
NEW PPDS-732(D)-MTCP
 Programmable Device Server with 2 RS-232 ports and 1 RS-485 port

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-732(D) and PPDS-732(D)-MTCP is equipped with 2 RS-232 ports, 1 RS-485 port and D/I/D. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.

Applications

Factory, Building and Home Automation

I/O Specifications

Models: PDS-732/PDS-732D/PDS-732-MTCP/PPDS-732D-MTCP	
Digital Output	
Output Channel	4
Output Type	Open Collector (Sink/NPN)
Load Voltage	30 Vdc, max.
Load Current	100 mA, max.
Isolated Voltage	Non-isolated
Digital Input	
Input Channel	4
Input Type	Source (Dry Type), Common Ground
Off Voltage Level	+1 V max.
On Voltage Level	+3.5 ~ +30 V
Isolated Voltage	Non-isolated
Counters	Channels: 4
	Max. Count: 16-bit (65535)
	Max. Input Frequency: 100 Hz
	Min. Pulse Width: 5 ms

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-732(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-732(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Supports D/I, Latched D/I and Counter Functions
- Low power consumption
- Palm-Sized with multiple Serial Ports



System Specifications

Models	PDS-732	PDS-732D	PPDS-732-MTCP	PPDS-732D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (Tx/D, Rx/D, RTS, CTS, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-	IEEE 802.3af		
COM Port Formats				
Data Bit	7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3			
Parity	None, Even, Odd, Mark, Space			
Stop Bit	1: for COM1 and COM2 1, 2: for COM3			
Baud Rate	115200 bps max.			
LED Indicators				
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 Vdc ~ +48 Vdc (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

Terminal No.	Pin Assignment
E1	Link/Act 10/100M
COM1	01 CTS1 02 RTS1 03 RxD1 04 TxD1 05 INIT*
COM2	06 D2+ 07 D2- 08 (R)+Vs 09 (B)GND

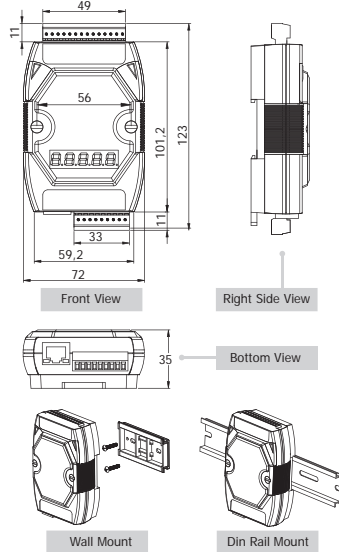


Terminal No.	Pin Assignment
DO	23 DO3 22 DO2 21 DO1 20 DO0 19 DO.PWR
DI	18 GND 17 DI3 16 DI2 15 DI1 14 DI0
COM3	13 RxD3 12 TxD3 11 RTS3 10 CTS3

Wiring

Input Type	DI Value as 0	DI Value as 1
	Relay Contact	Relay ON
TTL/CMOS Logic	Voltage < 1V 	Voltage > 3.5V
Open Collector	Open Collector On 	Open Collector Off
Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay		
Resistance Load		

Dimensions (Unit: mm)



Ordering Information

PDS-732 CR	Programmable Device Server with 2 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-732D CR	Programmable Device Server with 2 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-732-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 2 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-732D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 2 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 Vdc/0.25 A, 6 W Power Supply
MDR-20-24	24 Vdc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Vdc/0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0915 x 2 (9-Pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)



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.

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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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-734(D) and PPDS-734(D)-MTCP is equipped with 1 RS-232 port, 1 RS-485 port, 1 RS-422/485 port and DI/DO. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.

Applications

Factory, Building and Home Automation

I/O Specifications

Models: PDS-734/PDS-734D/PPDS-734-MTCP/PPDS-734D-MTCP	
Digital Output	
Output Channel	4
Output Type	Open Collector (Sink/NPN)
Load Voltage	30 V _{DC} , max.
Load Current	100 mA, max.
Isolated Voltage	Non-isolated
Digital Input	
Input Channel	4
Input Type	Source (Dry Type), Common Ground
Off Voltage Level	+1 V max.
On Voltage Level	+3.5 ~ +30 V
Isolate Voltage	Non-isolated
Counters	Channels: 4
	Max. Count: 16-bit (65535)
	Max. Input Frequency: 100 Hz
	Min. Pulse Width: 5 ms

RS-232/RS-422/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-734(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-734(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Supports D/I, Latched D/I and Counter Functions
- Low power consumption
- Palm-Sized with multiple Serial Ports

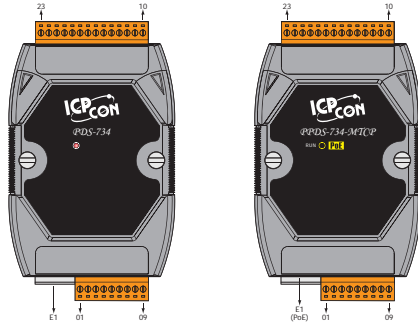


System Specifications

Models	PDS-734	PDS-734D	PPDS-734-MTCP	PPDS-734D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-422 (Tx/D+, Tx/D-, Rx/D+, GND) or RS-485 (D3+, D3-, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-		IEEE 802.3af	
COM Port Formats				
Data Bit	7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3			
Parity	None, Even, Odd, Mark, Space			
Stop Bit	1: for COM1 and COM2 1, 2: for COM3			
Baud Rate	115200 bps max.			
LED Indicators				
5-digit 7 Segment	-	Yes	-	Yes
System	Red			
PoE	-		Green	
Power				
Protection	Power Reverse Polarity Protection			
Required Supply Voltage	+10 V _{DC} ~ +30 V _{DC} (non-regulated)		PoE or +12 V _{DC} ~ +48 V _{DC} (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

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

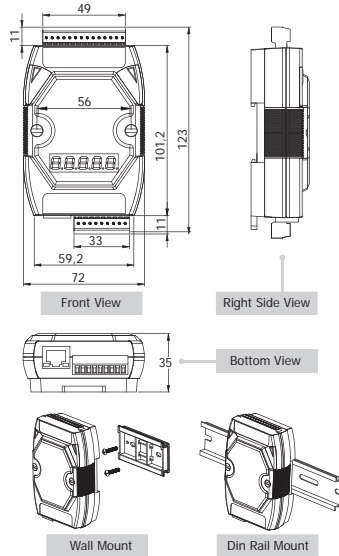


Terminal No.	Pin Assignment
23	DO3
22	DO2
21	DO1
20	DO0
19	DO.PWR
18	GND
17	DI3
16	DI2
15	DI1
14	DI0
COM3	13 RxD3-
	12 RxD3+
11	TxD3-/D3-
10	TxD3+/D3+

Wiring

Input Type	DI Value as 0	DI Value as 1
	Relay Contact	Relay ON
TTL/CMOS Logic	Voltage < 1V 	Voltage > 3.5V
Open Collector	Open Collector On 	Open Collector Off
Output Type	DO Command as 1	DO Command as 0
	Drive Relay	Relay ON
Resistance Load		

Dimensions (Unit: mm)



Ordering Information

PDS-734 CR	Programmable Device Server with 1 RS-232 port, 1 RS-485 port and 1 RS-422/485 port (RoHS) Includes One CA-0910 Cable
PDS-734D CR	Programmable Device Server with 1 RS-232 port, 1 RS-485 port, 1 RS-422/485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-734-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port, 1 RS-485 port and 1 RS-422/485 port (RoHS) Includes One CA-0910 Cable
PPDS-734D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port, 1 RS-485 port, 1 RS-422/485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 Vdc/0.25 A, 6 W Power Supply
MDR-20-24	24 Vdc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Vdc/0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PCE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)



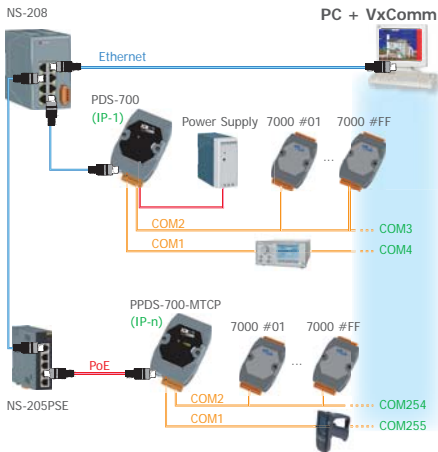
Introduction

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-742(D) and PPDS-742(D)-MTCP is equipped with 3 RS-232 ports and 1 RS-485 port. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.



Applications

Factory, Building and Home Automation

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-742(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-742(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)

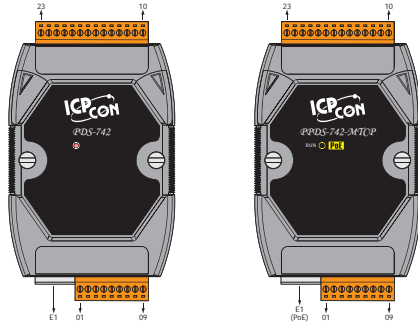


System Specifications

Models	PDS-742	PDS-742D	PPDS-742-MTCP	PPDS-742D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM4	RS-232 (Tx/D, Rx/D, RTS, CTS, GND, DSR, DTR, DCD, RI)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-	IEEE 802.3af		
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			
Stop Bit	1: for COM1 and COM2 1, 2: for COM3 and COM4			
Baud Rate	115200 bps max.			
LED Indicators				
5-digit 7 Segment	-	Yes	-	Yes
System	Red			
PoE	-	Green		
Power				
Protection	Power Reverse Polarity Protection			
Required Supply Voltage	+10 V _{DC} ~ +30 V _{DC} (non-regulated)		PoE or +12 V _{DC} ~ +48 V _{DC} (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

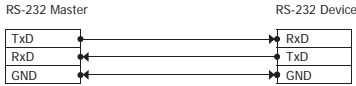
Terminal No.	Pin Assignment
E1	Link/Act 10/100M
COM1	01 CTS1 02 RTS1 03 RxD1 04 TxD1 05 INIT*
COM2	06 D2+ 07 D2- 08 (R) +Vs 09 (B)GND



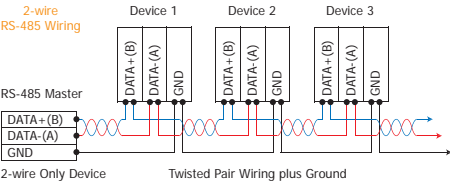
Terminal No.	Pin Assignment
23	D14
22	DCD4
21	DTR4
20	DSR4
COM4	19 CTS4 18 RTS4 17 TxD4 16 RxD4 15 GND4 14 GND3 13 RxD3 COM3 12 TxD3 11 RTS3 10 CTS3

Wiring

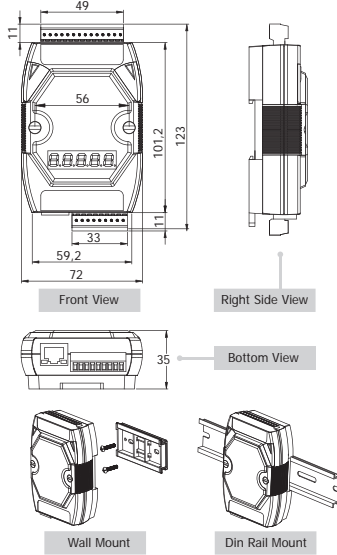
3-wire RS-232 Wiring



2-wire RS-485 Wiring



Dimensions (Unit: mm)



Ordering Information

PDS-742 CR	Programmable Device Server with 3 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-742D CR	Programmable Device Server with 3 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-742-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 3 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-742D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 3 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 V _{DC} /0.25 A, 6 W Power Supply
MDR-20-24	24 V _{DC} /1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{DC} /0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0915 x 2 (9-Pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)



PDS-743(D)
NEW PPDS-743(D)-MTCP
 Programmable Device Server with 3 RS-232 ports and 1 RS-485 port

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-743(D) and PPDS-743(D)-MTCP is equipped with 3 RS-232 ports, 1 RS-485 port and D/I/D. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.

Applications

Factory, Building and Home Automation

I/O Specifications

Models: PDS-743/PDS-743D/PDS-743-MTCP/PPDS-743D-MTCP	
Digital Output	
Output Channel	4
Output Type	Open Collector (Sink/NPN)
Load Voltage	30 Vdc, max.
Load Current	100 mA, max.
Isolated Voltage	Non-isolated
Digital Input	
Input Channel	4
Input Type	Source (Dry Type), Common Ground
Off Voltage Level	+1 V max.
On Voltage Level	+3.5 ~ +30 V
Isolated Voltage	Non-isolated
Counters	
	Channels: 4
	Max. Count: 16-bit (65535)
	Max. Input Frequency: 100 Hz
	Min. Pulse Width: 5 ms

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-743(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-743(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Supports D/I, Latched D/I and Counter Functions
- Low power consumption
- Palm-Sized with multiple Serial Ports

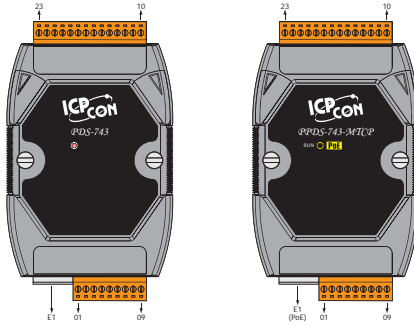


System Specifications

Models	PDS-743	PDS-743D	PPDS-743-MTCP	PPDS-743D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (Tx/D, Rx/D, GND)		
	COM4	RS-232 (Tx/D, Rx/D, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-		IEEE 802.3af	
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			
Stop Bit	1: for COM1 and COM2 1, 2: for COM3 and COM4			
Baud Rate	115200 bps max.			
LED Indicators				
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 Vdc ~ +48 Vdc (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

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

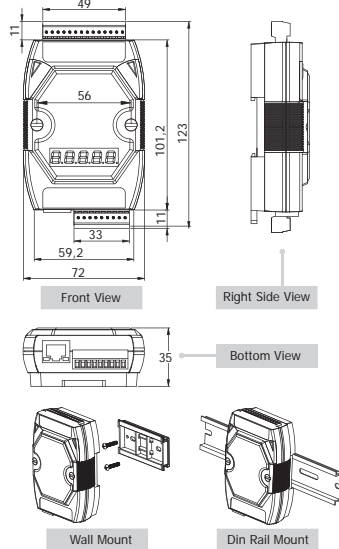


Terminal No.	Pin Assignment
23	DO3
22	DO2
21	DO1
20	DO0
19	DO.PWR
18	GND
17	DI3
16	DI2
15	DI1
14	DI0
COM3	13 TxD3
	12 RxD3
COM4	11 TxD4
	10 RxD4

Wiring

Input Type	DI Value as 0	DI Value as 1
	Relay Contact	Relay ON
TTL/CMOS Logic	Voltage < 1V 	Voltage > 3.5V
Open Collector	Open Collector On 	Open Collector Off
Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay		
Resistance Load		

Dimensions (Unit: mm)



Ordering Information

PDS-743 CR	Programmable Device Server with 3 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-743D CR	Programmable Device Server with 3 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-743-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 3 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-743D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 3 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 Vdc/0.25 A, 6 W Power Supply
MDR-20-24	24 Vdc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Vdc/0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0915 x 2 (9-pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-pin Female-Female D-Sub Cable 1.0 m)



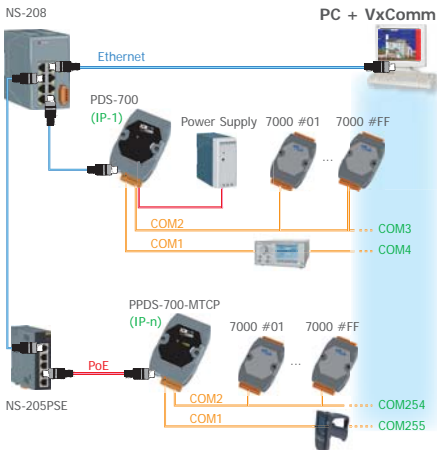
Introduction

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-752(D) and PPDS-752(D)-MTCP is equipped with 4 RS-232 ports and 1 RS-485 port. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.



Applications

Factory, Building and Home Automation

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-752(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-752(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)



System Specifications

Models	PDS-752	PDS-752D	PPDS-752-MTCP	PPDS-752D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM4	RS-232 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM5	RS-232 (Tx/D, Rx/D, RTS, CTS, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	- IEEE 802.3af			
COM Port Formats				
Data Bit	7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3 – COM5			
Parity	None, Even, Odd, Mark, Space			
Stop Bit	1: for COM1 and COM2 1, 2: for COM3 – COM5			
Baud Rate	115200 bps max.			
LED Indicators				
5-digit 7 Segment	-	Yes	-	Yes
System	Red			
PoE	Green			
Power				
Protection	Power Reverse Polarity Protection			
Required Supply Voltage	+10 V _{DC} – +30 V _{DC} (non-regulated)		PoE or +12 V _{DC} – +48 V _{DC} (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C – +75 °C			
Storage Temperature	-40 °C – +80 °C			
Humidity	5 – 90% RH, non-condensing			

Pin Assignments

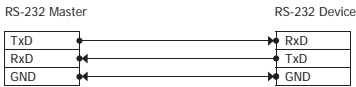
Terminal No.	Pin Assignment
E1	Link/Act
	10/100M
COM1	01 CTS1
	02 RTS1
	03 RxD1
	04 TxD1
	05 INIT*
COM2	06 D2+
	07 D2-
	08 (R)+Vs
	09 (B)GND



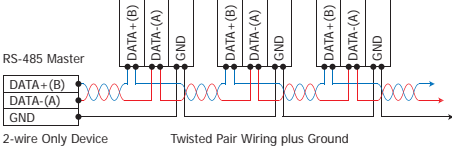
Terminal No.	Pin Assignment
COM5	23 RxD5
	22 TxD5
	21 RTS5
	20 CTS5
	19 GND
COM4	18 RxD4
	17 TxD4
	16 RTS4
	15 CTS4
	14 GND
COM3	13 RxD3
	12 TxD3
	11 RTS3
	10 CTS3

Wiring

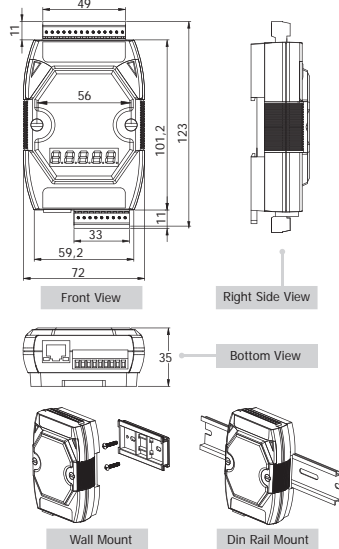
3-wire RS-232 Wiring



2-wire RS-485 Wiring



Dimensions (Unit: mm)



Ordering Information

PDS-752 CR	Programmable Device Server with 4 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-752D CR	Programmable Device Server with 4 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-752-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 4 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-752D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 4 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 V _{DC} /0.25 A, 6 W Power Supply
MDR-20-24	24 V _{DC} /1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{DC} /0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PSE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0915 x 2 (9-Pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)



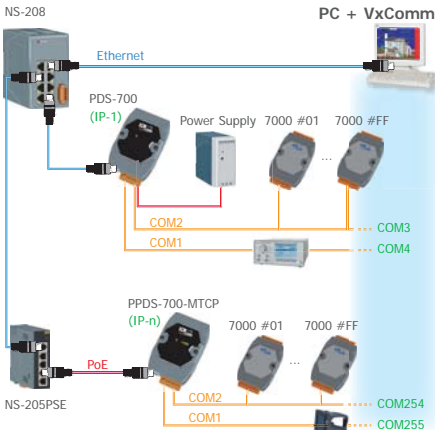
Introduction

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-755(D) and PPDS-755(D)-MTCP is equipped with 1 RS-232 port and 4 RS-485 ports. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.



Applications

Factory, Building and Home Automation

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-755(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-755(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)

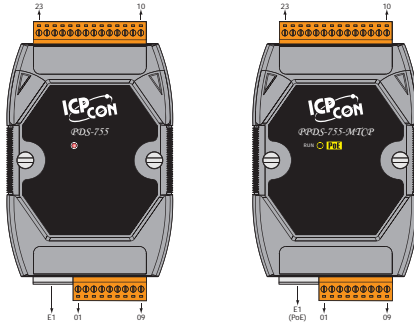


System Specifications

Models	PDS-755	PDS-755D	PPDS-755-MTCP	PPDS-755D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-485 (DATA+, DATA-, GND)		
	COM4	RS-485 (DATA+, DATA-, GND)		
	COM5	RS-485 (DATA+, DATA-, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-	IEEE 802.3af		
COM Port Formats				
Data Bit	7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3 – COM5			
Parity	None, Even, Odd, Mark, Space			
Stop Bit	1: for COM1 and COM2 1, 2: for COM3 – COM5			
Baud Rate	115200 bps max.			
LED Indicators				
5-digit 7 Segment	-	Yes	-	Yes
System	Red			
PoE	-	Green		
Power				
Protection	Power Reverse Polarity Protection			
Required Supply Voltage	+10 V _{DC} ~ +30 V _{DC} (non-regulated)		PoE or +12 V _{DC} ~ +48 V _{DC} (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

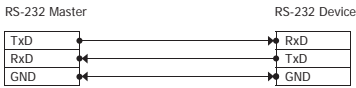
Terminal No.	Pin Assignment
E1	Link/Act
	10/100M
COM1	01 CTS1
	02 RTS1
	03 RxD1
	04 TxD1
	05 INIT*
COM2	06 D2+
	07 D2-
	08 (R)+Vs
	09 (B)GND



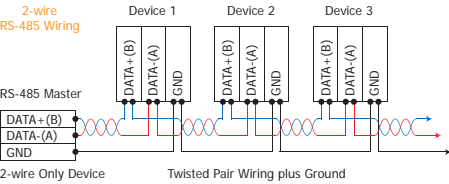
Terminal No.	Pin Assignment
COM5	23 DATA+
	22 DATA-
	21 --
	20 --
	19 --
COM4	18 --
	17 DATA+
	16 DATA-
	15 --
COM3	14 --
	13 --
	12 --
	11 DATA+
	10 DATA-

Wiring

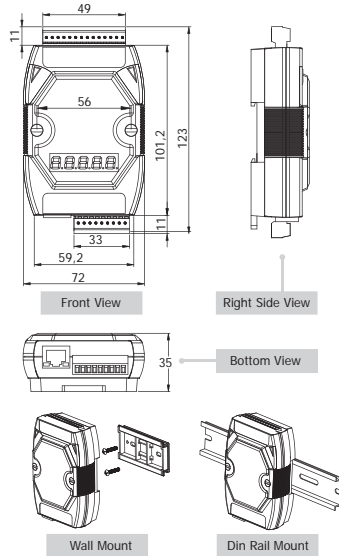
3-wire RS-232 Wiring



2-wire RS-485 Wiring



Dimensions (Unit: mm)



Ordering Information

PDS-755 CR	Programmable Device Server with 1 RS-232 port and 4 RS-485 ports (RoHS) Includes One CA-0910 Cable
PDS-755D CR	Programmable Device Server with 1 RS-232 port, 4 RS-485 ports and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-755-MTCTP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port and 4 RS-485 ports (RoHS) Includes One CA-0910 Cable
PPDS-755D-MTCTP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port, 4 RS-485 ports and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 V _{DC} /0.25 A, 6 W Power Supply
MDR-20-24	24 V _{DC} /1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{DC} /0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PCE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)



PDS-762(D)

NEW PPDS-762(D)-MTCP

Programmable Device Server with 5 RS-232 ports and 1 RS-485 port

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-762(D) and PPDS-762(D)-MTCP is equipped with 5 RS-232 ports, 1 RS-485 port and D/I/DO. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.

Applications

Factory, Building and Home Automation

I/O Specifications

Models: PDS-762/PDS-762D/PPDS-762-MTCP/PPDS-762D-MTCP	
Digital Output	
Output Channel	2
Output Type	Open Collector (Sink/NPN)
Load Voltage	30 Vdc, max.
Load Current	100 mA, max.
Isolated Voltage	Non-isolated
Digital Input	
Input Channel	1
Input Type	Source (Dry Type), Common Ground
Off Voltage Level	+1 V max.
On Voltage Level	+3.5 ~ +30 V
Isolated Voltage	Non-isolated
Counters	Channels: 1
	Max. Count: 16-bit (65535)
	Max. Input Frequency: 100 Hz
	Min. Pulse Width: 5 ms

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-762(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-762(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Supports D/I, Latched D/I and Counter Functions
- Low power consumption
- Palm-Sized with multiple Serial Ports



System Specifications

Models	PDS-762	PDS-762D	PPDS-762-MTCP	PPDS-762D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (Tx/D, Rx/D, GND)		
	COM4	RS-232 (Tx/D, Rx/D, GND)		
	COM5	RS-232 (Tx/D, Rx/D, GND)		
	COM6	RS-232 (Tx/D, Rx/D, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-		IEEE 802.3af	
COM Port Formats				
Data Bit	7, 8; for COM1 and COM2 5, 6, 7, 8; for COM3 - COM6			
Parity	None, Even, Odd, Mark, Space			
Stop Bit	1; for COM1 and COM2 1, 2; for COM3 - COM6			
Baud Rate	115200 bps max.			
LED Indicators				
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 Vdc ~ +48 Vdc (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

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

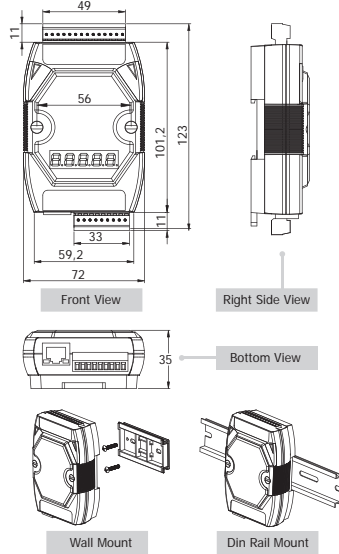


Terminal No.	Pin Assignment
23	DO1
22	DO0
21	DO.PWR
20	DI0
19	GND
COM6	18 TxD6
	17 RxD6
COM5	16 TxD5
	15 RxD5
COM4	14 GND
	13 TxD4
COM3	12 RxD4
	11 TxD3
10	RxD3

Wiring

Input Type	DI Value as 0	DI Value as 1
	Relay Contact	Relay ON
TTL/CMOS Logic	Voltage < 1V 	Voltage > 3.5V
Open Collector	Open Collector On 	Open Collector Off
Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay		
Resistance Load		

Dimensions (Unit: mm)



Ordering Information

PDS-762 CR	Programmable Device Server with 5 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-762D CR	Programmable Device Server with 5 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-762-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 5 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-762D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 5 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 Vdc/0.25 A, 6 W Power Supply
MDR-20-24	24 Vdc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Vdc/0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0915 x 2 (9-Pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)



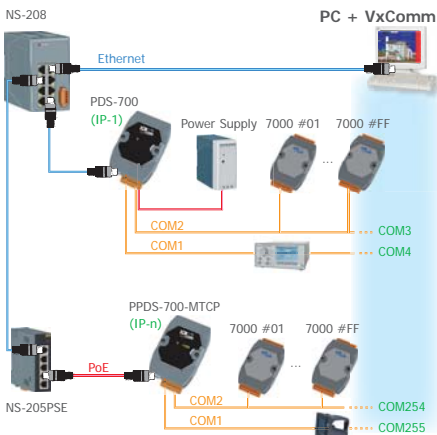
Introduction

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.

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 PPDS-700-MTCP also works as a Modbus/TCP to Modbus/RTU gateway that supports most SCADA/HMI communications based on the Modbus/TCP protocol.

The PDS-782(D) and PPDS-782(D)-MTCP is equipped with 7 RS-232 ports and 1 RS-485 port. The removable on-board terminal block connector is designed for easy and robust wiring in industrial situations.



Applications

Factory, Building and Home Automation

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- PPDS-782(D)-MTCP supports Modbus/TCP and Modbus/RTU
- PPDS-782(D)-MTCP supports PoE (IEEE 802.3af, Class 1)
- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)

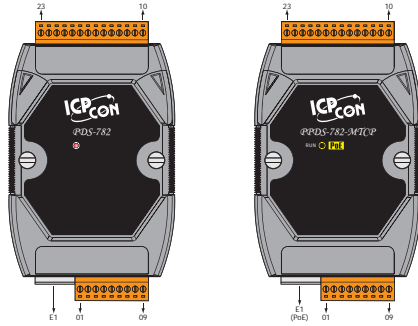


System Specifications

Models	PDS-782	PDS-782D	PPDS-782-MTCP	PPDS-782D-MTCP
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 (Tx/D, Rx/D, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (Tx/D, Rx/D, GND)		
	COM4	RS-232 (Tx/D, Rx/D, GND)		
	COM5	RS-232 (Tx/D, Rx/D, GND)		
	COM6	RS-232 (Tx/D, Rx/D, GND)		
	COM7	RS-232 (Tx/D, Rx/D, GND)		
	COM8	RS-232 (Tx/D, Rx/D, GND)		
Ethernet	10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE	-		IEEE 802.3af	
COM Port Formats				
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 Indicators				
5-digit 7 Segment	-	Yes	-	Yes
System	Red			
PoE	-		Green	
Power				
Protection	Power Reverse Polarity Protection			
Required Supply Voltage	+10 V _{DC} ~ +30 V _{DC} (non-regulated)		PoE or +12 V _{DC} ~ +48 V _{DC} (non-regulated)	
Power Consumption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical				
Flammability	Fire Retardant Materials (UL94-V0 Level)			
Dimensions	72 mm x 123 mm x 35 mm (W x H x D)			
Installation	DIN-Rail or Wall mounting			
Environment				
Operating Temperature	-25 °C ~ +75 °C			
Storage Temperature	-40 °C ~ +80 °C			
Humidity	5 ~ 90% RH, non-condensing			

Pin Assignments

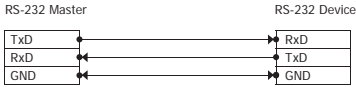
Terminal No.	Pin Assignment
E1	Link/Act
	10/100M
COM1	01 CTS1
	02 RTS1
	03 RxD1
	04 TxD1
COM2	05 INIT*
	06 D2+
	07 D2-
	08 (R)+Vs
	09 (B)GND



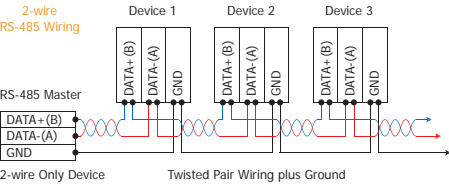
Terminal No.	Pin Assignment
COM8	23 TxD8
	22 RxD8
COM7	21 TxD7
	20 RxD7
COM6	19 GND
	18 TxD6
COM6	17 RxD6
	16 TxD5
COM5	15 RxD5
	14 GND
COM4	13 TxD4
	12 RxD4
COM3	11 TxD3
	10 RxD3

Wiring

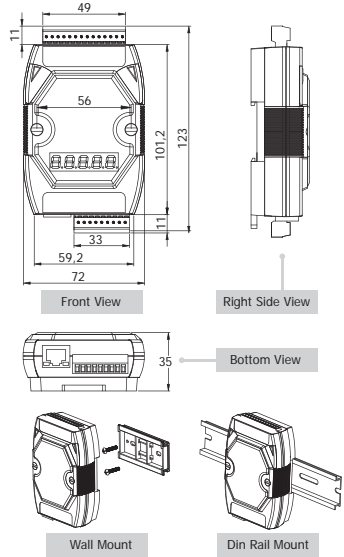
3-wire RS-232 Wiring



2-wire RS-485 Wiring



Dimensions (Unit: mm)



Ordering Information

PDS-782 CR	Programmable Device Server with 7 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PDS-782D CR	Programmable Device Server with 7 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable
PPDS-782-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 7 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable
PPDS-782D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 7 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable

Accessories

GPSU06U-6	24 Vdc/0.25 A, 6 W Power Supply
MDR-20-24	24 Vdc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Vdc/0.52 A, 25 W Power Supply with Din-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
NS-205PSE CR	Unmanaged Ethernet Switch with 4 PoE Ports and 1 RJ-45 Uplink (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0915 x 2 (9-Pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header. Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)



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

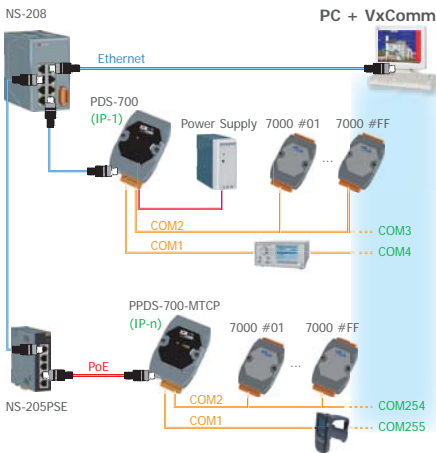
Programmable Device Server with 7 RS-232 ports and 1 RS-485 port

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.



Applications

Factory, Building and Home Automation

RS-232/RS-485

Features

- Incorporate Serial Devices in an Ethernet network
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- 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
- 5-digit LED Display (for versions with a display)
- RoHS Compliant with no Halogen
- Built-in High Performance MiniOS7 from ICP DAS
- 10/100 Base-TX Ethernet, RJ-45 Port (Auto-negotiating, auto MDI/MDI-X, LED Indicator)
- ODM Service Is Available
- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)
- Male DB-9 Connector




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 (Tx,D, Rx,D, RTS, CTS, GND)
	COM2	RS-485 (D2+, D2-, GND)
	COM3	RS-232 (Tx,D, Rx,D, GND)
	COM4	RS-232 (Tx,D, Rx,D, GND)
	COM5	RS-232 (Tx,D, Rx,D, GND)
	COM6	RS-232 (Tx,D, Rx,D, GND)
	COM7	RS-232 (Tx,D, Rx,D, GND)
	COM8	RS-232 (Tx,D, Rx,D, 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 – COM8	
Parity	None, Even, Odd, Mark, Space	
Stop Bit	1: for COM1, COM2 1, 2: for COM3 – COM8	
Baud Rate	115200 bps max.	
LED Indicators		
5-digit 7 Segment	-	Yes
System	Red	
Power		
Protection	Power Reverse Polarity Protection	
Required Supply Voltage	+12 Vdc ~ +48 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	
Environment		
Operating Temperature	-25 °C ~ +75 °C	
Storage Temperature	-40 °C ~ +80 °C	
Humidity	5 ~ 90% RH, non-condensing	


Pin Assignments

Pin Assignment	Terminal	No.	Pin Assignment
N/A	01	14	COM8_RxD
N/A	02	15	COM8_TxD
COM8_GND	03	16	COM7_RxD
N/A	04	17	COM7_TxD
COM7_GND	05	18	COM6_RxD
N/A	06	19	COM6_TxD
COM6_GND	07	20	COM5_RxD
N/A	08	21	COM5_TxD
COM5_GND	09	22	COM4_RxD
N/A	10	23	COM4_TxD
COM4_GND	11	24	COM3_RxD
N/A	12	25	COM3_TxD
COM3_GND	13	Shield	F.G.



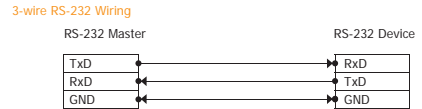
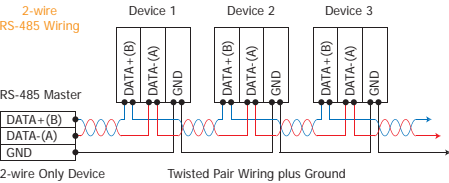
25-Pin Male D-Sub Connector

Pin Assignment	Terminal	No.	Pin Assignment
GND	05	09	--
--	04	08	--
TxD	03	07	--
RxD	02	06	--
--	01		

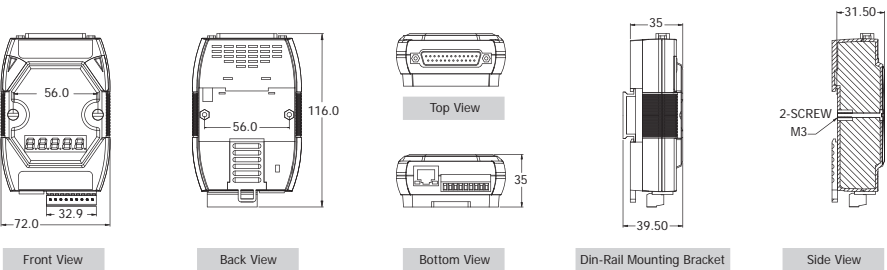


RS-232 Female DB-25 to Male DB-9 Connector

Wiring



Dimensions (Unit: mm)



Ordering Information

PDS-782-25/D6 CR	Programmable Device Server with 7 RS-232 ports and 1 RS-485 port (RoHS) Includes One CA-0910 Cable and One CA-9-2505D Cable
PDS-782D-25/D6 CR	Programmable Device Server with 7 RS-232 ports, 1 RS-485 port and an LED Display (RoHS) Includes One CA-0910 Cable and One CA-9-2505D Cable

Accessories

GPSU06U-6	24 V _{DC} /0.25 A, 6 W Power Supply
MDR-20-24	24 V _{DC} /1 A, 24 W Power Supply with DIN-Rail Mounting
CA-0903	9-Pin Female D-Sub and RS-232 Connector Cable, 30 cm Cable
CA-0910	9-Pin Female D-Sub and 3-wire RS-232 Cable, 1 m Cable
CA-9-2505D	DB-25 Male (D-Sub) to 6-port DB-9 Male (D-Sub) Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)
DN-09-2	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header Includes CA-0915 x 2 (9-Pin Male-Female D-Sub Cable 1.5 m)
DN-09-2F	I/O Connector Block with DIN-Rail Mounting and Two 9-Pin Male Header Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)