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



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

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

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
- 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)



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 in 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 ond day. The bullt-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

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.



Factory, Building and Home Automation

		PDS-720	PDS-720D	PPDS-720-MTCP	PPDS-720D-MTCP
CPU					
CPU		80186, 80	MHz or comp	oatible	
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 T	imer	Yes			
Communication	n Interfa	ice			
Non-	COM1	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
isolated	COM2	RS-485 (D2	2+, D2-, GNI	0)	
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE		-		IEEE 802.3	af
COM Port Forr	mats				
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	S				
5-digit 7 Segment		-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Reve	erse Polarity	Protection	
Required Supply Volta	age	+10 Vpc ~ (non-regula		PoE or +12 Vpc ~ +48 \ (non-regulated)	
Power Cons	umption	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			

RS-232 Device

RyD

TxD

• GND

Pin Assignments _____







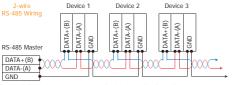
3-wire RS-232 Wiring RS-232 Master

TxD

RxD

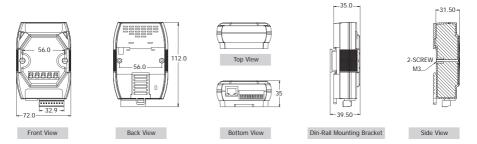
GND

Wiring



2-wire Only Device Twisted Pair Wiring plus Ground

☑ 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)
FD3=720D CK	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)
FFD3=720=WTCF CK	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

GPSU06U-6	24 Vpc/0.25 A, 6 W Power Supply
MDR-20-24	24 Voc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Voc/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)



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 dives 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-206PSE. 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 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-721/PDS-721D/PPDS-721-MTCP/PPDS-721D-MTCP			
Digital Output			
Output Channel	7		
Output Type	Open Collector (Sink/NPN)		
Load Voltage	30 Voc, 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		
	Channels: 6		
Counters	Max. Count: 16-bit (65535)		
Counters	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

PoE

- 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



		PDS-721	PDS-721D	PPDS-721-MTCP	PPDS-721D-MT
CPU					
CPU		80186, 80	MHz or comp	oatible	
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 T	imer	Yes			
Communication	n Interfa	ice			
Non-	COM1	RS-232 (T)	D, RxD, RTS	, CTS, GND)	
isolated	COM2	RS-485 (D	2+, D2-, GNE	0)	
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE		-		IEEE 802.3	Baf
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	s				
5-digit 7 Se	gment	-	Yes	-	Yes
System		Red			
PoE		-		Green	
Power					
Protection		Power Reverse Polarity Protection			
Required Supply Volta	age	+10 Vpc ~ (non-regul		PoE or +12 Vpc ~ +48 V (non-regulated)	
Power Cons	umption	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			

Termi No		Pin Assignment
E1		Link/Act 10/100M
	01	CTS1
00141	02	RTS1
COM1	03	RxD1
	04	TxD1
05		INIT*
COM2	06	D2+
COM2	07	D2-
08		(R)+Vs
	09	(B)GND





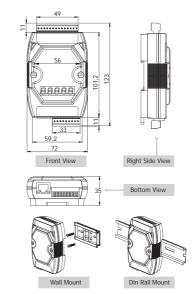
	_	
Termi No		Pin Assignment
	23	DI0
	22	DI1
DI	21	DI2
DI	20	DI3
	19	DI4
	18	DI5
	17	DO.PWR
	16	D00
	15	DO1
DO	14	DO2
DO	13	DO3
	12	DO4
	11	DO5
	10	D06

■ Wiring __

Input Type	DI Value as 0	DI Value as 1
	Relay ON	Relay Off
Relay Contact	□ DIX GND	Relay Open DIX GND
	Voltage < 1V	Voltage > 3.5V
TTL/CMOS Logic	Logic Level Low Condition	Logic Level High Logic GND
	Open Collector On	Open Collector Off
Open Collector	□ DIX GND	or ↓x □⊖ DIx GND

Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay	DO.PWR DOX DO.GND	DO.PWR DOx DO.GND
Resistance Load	* DO.PWR DOX DO.GND	DO.PWR DOx DO.GND

■ 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)
PD5-721D CR	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)
FFD3=721=WITCF CK	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)
FFD3=721D=WITCF CK	Includes One CA-0910 Cable

Accessories____

GPSU06U-6	24 Voc/0.25 A, 6 W Power Supply
MDR-20-24	24 Voc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V∞/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)



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 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

Digital Output		
Output Channel	4	
Output Type	Open Collector (Sink/NPN)	
Load Voltage	30 Vpc, 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	
	Channels: 4	
Counters	Max. Count: 16-bit (65535)	
Counters	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

PoE

- 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



CPU	Systen	n Spe	ecincat	10115		
SRAM	Models		PDS-732 PDS-732D PPDS-732-MTCP PPDS-7.		PPDS-732D-MTCP	
SRAM	CPU					
Flash Memory Flash ROM: 512 KB; Erase unit is one sector (64 KB); 100.000 erase/write cycles EEPROM			80186, 80	MHz or comp	oatible	
Flash Memory	SRAM		512 KB			
Built-in Yes	Flash Memory		Erase unit	Erase unit is one sector (64 KB);		
Vest	EEPROM					
Non- Solated		imer	Yes			
Non-	Communication	n Interfa	ice			
Solated COM2 RS-485 (D2+, D2+, GND)		COM1	RS-232 (T	kD, RxD, RTS	, CTS, GND)	
COM3 RS-232 (TxD, RxD, RTS, CTS, GND)		COM2	RS-485 (D	2+, D2-, GNE	0)	
A	isolated	COM3	RS-232 (T:	xD, RxD, RTS	, CTS, GND)	
Data Bit 7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3	Ethernet					negotiating,
Data Bit	PoE		-		IEEE 802.3	Baf
Parity None, Even, Odd, Mark, Space	COM Port Formats					
Stop Bit	Data Bit					
1, 2: for COM3	Parity		None, Even, Odd, Mark, Space			
LED Indicators 5-digit 7 Segment System Red PoE - Green Power Protection Required Supply Voltage Conn-regulated) Power Consumption Rechanical Flammability 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	Stop Bit					
S-digit 7 Segment -	Baud Rate		115200 bp	s max.		
System Red	LED Indicators					
PoE - Green Power Green Green Power Protection Power Reverse Polarity Protection Required +10 V _{xc} → +30 V _{xc} (non-regulated) PoE or +12 V _{xc} → +46 (non-regulated) Power Consumption 2.0 W 2.7 W 2.2 W 2.9 W Mechanical 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	5-digit 7 Segment		-	Yes	-	Yes
Power Protection Power Reverse Polarity Protection Required +10 V ₀ c − +30 V ₀ c PoE or +12 V ₀ c − +45 V ₀ c			Red			
	PoE		-		Green	
	Power					
Supply Voltage (non-regulated) (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	Protection		Power Reverse Polarity Protection			
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						
Fiammability Fire Retardant Materials (UL94-VO 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			2.0 W	2.7 W	2.2 W	2.9 W
Dimensions 72 mm x 123 mm x 35 mm (W x H x D)	Mechanical					
Installation DIN-Rail or Wall mounting Environment Operating Temperature -25 °C ~ +75 °C	Flammability		Fire Retardant Materials (UL94-V0 Level)			
Environment Operating Temperature -25 °C ~ +75 °C	Dimensions		72 mm x 123 mm x 35 mm (W x H x D)			
Operating Temperature -25 °C - +75 °C	Installation		DIN-Rail or Wall mounting			
Temperature -25 C - +75 C	Environment					
Storage 40 °C + 90 °C			-25 °C ~ +75 °C			
Temperature -40 °C ~ +80 °C			-40 °C ~ +80 °C			
Humidity 5 ~ 90% RH, non-condensing	Humidity		5 ~ 90% RH, non-condensing			

Terminal No.		Pin Assignment
E1		Link/Act 10/100M
	01	CTS1
00141	02	RTS1
COM1	03	RxD1
	04	TxD1
	05	INIT*
COM2	06	D2+
COM2	07	D2-
	80	(R)+Vs
	09	(B)GND





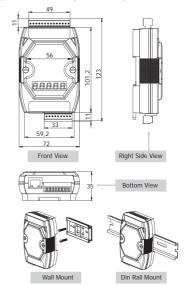
Terminal No.		Pin Assignment
	23	DO3
	22	DO2
DO	21	DO1
	20	DO0
	19	DO.PWR
18		GND
	17	DI3
DI	16	DI2
DI	15	DI1
	14	DI0
	13	RxD3
сомз	12	TxD3
	11	RTS3
	10	CTS3

Wiring _____

Input Type	DI Value as 0	DI Value as 1
	Relay ON	Relay Off
Relay Contact	□⊜ DIX □⊝ GND	Relay Open
	Voltage < 1V	Voltage > 3.5V
TTL/CMOS Logic	Logic Level Low Logic GND	Logic Level High Logic GND
	Open Collector On	Open Collector Off
Open Collector	□ □ DIX GND	□ DIX GND

Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay	DO.PWR DOx DO.GND	DO.PWR DOx DO.GND
Resistance Load	DO.PWR DOX DO.GND	DO.PWR DOx DO.GND

■ Dimensions (Unit: mm) _____



■ Ordering Information _____

PDS-732 CR	Programmable Device Server with 2 RS-232 ports and 1 RS-485 port (RoHS)
PD3-732 GR	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)	
PD3-732D CR	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)	
PPD3-732-WITCP CR	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)
PPD3-732D-WITCP CR	Includes One CA-0910 Cable

Accessories_____

GPSU06U-6	24 V _{bc} /0.25 A, 6 W Power Supply
MDR-20-24	24 Voz/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{bc} /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-734(D)
NEW PPDS-734(D)-MTCP

1 RS-232 port, 1 RS-485 port and 1 RS-422/485 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-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.

Digital Output			
Output Channel	4		
Output Type	Open Collector (Sink/NPN)		
Load Voltage	30 Vpc, 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		
	Channels: 4		
Counters	Max. Count: 16-bit (65535)		
Counters	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	п орс	Jonroati	0113		
		PDS-734	PDS-734D	PPDS-734-MTCP	PPDS-734D-MTCP
CPU					
CPU		80186, 80	MHz or comp	oatible	
SRAM		512 KB			
Flash Memo	ıry		: 512 KB; is one sector ase/write cy		
EEPROM			a retention: erase/write o		
Built-in Watchdog T	imer	Yes			
Communication	n Interfa	ice			
	COM1	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
Non-	COM2	RS-485 (D	2+, D2-, GNE	0)	
isolated		RS-422 (T)	D+, TxD-, R	xD+, RxD-,	GND) or
	COM3	RS-485 (D:	3+, D3-, GNI	0)	
Ethernet		10/100 Bas auto MDI/N	se-TX, RJ-45 MDI-X, LED ii	port (Auto-r ndicator)	egotiating,
PoE		-		IEEE 802.3	laf
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 bp	s max.		
LED Indicators					
5-digit 7 Segment		-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Rev	erse Polarity	Protection	
Required Supply Volta	age	+10 Vpc ~ +30 Vpc (non-regulated) PoE or +12 Vpc (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			

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





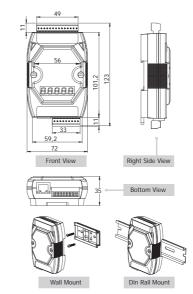
Terminal No.		Pin Assignment
	23	DO3
	22	DO2
DO	21	DO1
	20	DO0
	19	DO.PWR
18		GND
	17	DI3
ъ.	16	DI2
DI	15	DI1
	14	DIO
	13	RxD3-
сомз	12	RxD3+
	11	TxD3-/D3-
	10	TxD3+/D3+

■ Wiring —

Input Type	DI Value as 0	DI Value as 1
	Relay ON	Relay Off
Relay Contact	□ DIX GND	Relay Open Dix GND
	Voltage < 1V	Voltage > 3.5V
TTL/CMOS Logic	Logic Level Low Condition	Logic Level High Logic GND
	Open Collector On	Open Collector Off
Open Collector	On - DIX GND	or - X

Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND
Resistance Load	* DO.PWR DO.GND	DO.PWR DOX DO.GND

■ 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)
PDS-734 CR	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)
PD3-734D CR	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)
FFD3=734=WITCF CK	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)
FFD3=734D=WTCF CK	Display (RoHS). Includes One CA-0910 Cable

Accessories_____

GPSU06U-6	24 Voc/0.25 A, 6 W Power Supply
MDR-20-24	24 Voc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V∞/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)

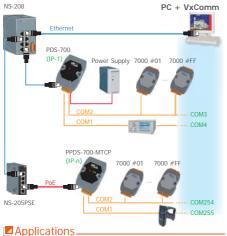


The PDS-700 series is a family of Programmable Device Servers, also known as "Serial-to-Ethernet gateway", that are designed for linking RS-232/422/485 devices to an Ethernet network. The user-friendly VxComm Driver/Utility allows users to easily turn the built-in COM ports of the PDS-700 series into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



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)

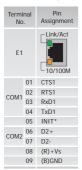
PoE

- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)



System	п орс	Jonroati	0113		
Models		PDS-742	PDS-742D	PPDS-742-MTCP	PPDS-742D-MTCP
CPU					
CPU		80186, 80	MHz or comp	oatible	
SRAM		512 KB			
Flash Memory			: 512 KB; is one sector ase/write cy		
EEPROM		16 KB; Data retention: 40 years; 1,000,000 erase/write cycles			
Built-in Watchdog Timer		Yes			
Communication	n Interfa	ce			
	COM1	RS-232 (T)	D, RxD, RTS	, CTS, GND)	
Non-	COM2	RS-485 (D	2+, D2-, GNI	0)	
isolated	COM3	RS-232 (T)	D, RxD, RTS	, CTS, GND)	
	COM4	RS-232 (TxD, RxD, 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 802.3	laf
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				
5-digit 7 Segment		-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Rev	erse Polarity	Protection	
Required Supply Volta	age	+10 Vpc ~ +30 Vpc P		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					
Flammabilit	V	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			
Trainiary 0 7070 km, non-conductioning					

Pin Assignments



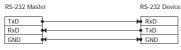


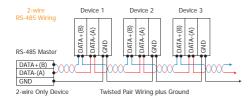


Termi No		Pin Assignment
	23	DI4
	22	DCD4
	21	DTR4
	20	DSR4
COM4	19	CTS4
	18	RTS4
	17	TxD4
	16	RxD4
	15	GND4
	14	GND3
COM3	13	RxD3
	12	TxD3
	11	RTS3
	10	CTS3

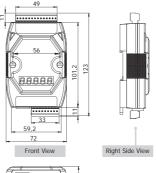
Wiring



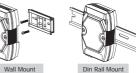




Dimensions (Unit: mm) _







Ordering Information —

PDS-742 CR	Programmable Device Server with 3 RS-232 ports and 1 RS-485 port (RoHS)
PD3-742 CR	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)	
PD3-742D CR	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)
PPD3-742-WITCP CR	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)
PPD3-742D-WITCP CR	Includes One CA-0910 Cable

	5.155
GPSU06U-6	24 V _{bc} /0.25 A, 6 W Power Supply
MDR-20-24	24 Voz/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{bc} /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)



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 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-743/PDS-743D/PPDS-743-MTCP/PPDS-743D-MTCP					
Digital Output	Digital Output				
Output Channel	4				
Output Type	Open Collector (Sink/NPN)				
Load Voltage	30 Vpc, 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				
	Channels: 4				
Counters	Max. Count: 16-bit (65535)				
Counters	Max. Input Frequency: 100 Hz				
	Min. Pulse Width: 5 ms				

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

PoE

- 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			MHz or comp	oatible	
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 T	imer	Yes			
Communication	n Interfa	ice			
	COM1	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
Non-	COM2	RS-485 (D2	2+, D2-, GNI	0)	
isolated	COM3	RS-232 (T)	D, RxD, GNE	0)	
	COM4	RS-232 (T)	D, RxD, GNE	0)	
Ethernet			se-TX, RJ-45 MDI-X, LED ir		negotiating,
PoE		-		IEEE 802.3	Baf
COM Port Formats					
Data Bit		7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3 and COM4			
Parity	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				
5-digit 7 Segment		-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Reverse Polarity Protection			
Required Supply Volta	age	+10 Vpc ~ (non-regula			
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	Operating Temperature		-25 °C ~ +75 °C		
Storage Temperature		-40 °C ~ +80 °C			
Humidity		5 ~ 90% RH, non-condensing			

Termi No		Pin Assignment
E1		Link/Act 10/100M
	01	CTS1
00141	02	RTS1
COM1	03	RxD1
	04	TxD1
05		INIT*
COM2	06	D2+
COM2	07	D2-
	80	(R)+Vs
09		(B)GND





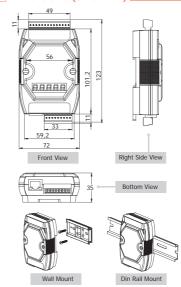
Terminal No.		Pin Assignment		
	23	DO3		
	22	DO2		
DO	21	DO1		
	20	D00		
	19	DO.PWR		
18		GND		
	17	DI3		
DI	16	DI2		
DI	15	DI1		
	14	D10		
COM3	13	TxD3		
COIVIS	12	RxD3		
00144	11	TxD4		
COM4	10	RxD4		

■ Wiring __

Input Type	DI Value as 0	DI Value as 1	
	Relay ON	Relay Off	
Relay Contact	Relay Close Dix GND	Relay Open	
	Voltage < 1V	Voltage > 3.5V	
TTL/CMOS Logic	Logic Level Low Logic GND	Logic Level High Logic GND	
	Open Collector On	Open Collector Off	
Open Collector			

Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND
Resistance Load	* DO.PWR DOX DO.GND	DO.PWR DOX DO.GND

■ Dimensions (Unit: mm) _____



■Ordering Information

PDS-743 CR	Programmable Device Server with 3 RS-232 ports and 1 RS-485 port (RoHS)
PD3-743 CR	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)	
PD3-743D CR	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)
PPD3-743-WITCP CR	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)
PPD3-743D-WITCP CR	Includes One CA-0910 Cable

GPSU06U-6	24 Vpc/0.25 A, 6 W Power Supply
MDR-20-24	24 V∞/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Voc/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)



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-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.



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)

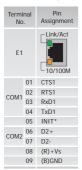
PoE

- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)



Models		PDS-752	PDS-752D	PPDS-752-MTCP	PPDS-752D-MTCF
CPU					
CPU		80186, 80	MHz or comp	atible	
SRAM		512 KB			
Flash Memo	iry	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 T	imer	Yes			
Communication	n Interfa	ice			
	COM1	RS-232 (TxD, RxD, RTS, CTS, GND)			
	COM2		2+, D2-, GNE		
Non- isolated	COM3	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
isolatea	COM4	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
	COM5	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE		-		IEEE 802.3	laf
COM Port Form	mats				
Data Bit		7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3 ~ COM5			
Parity		None, Even, Odd, Mark, Space			
Stop Bit			1 and COM2 DM3 ~ COM5	i	
Baud Rate		115200 bps max.			
LED Indicators	S				
5-digit 7 Segment		-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Reve	erse Polarity	Protection	
Required Supply Voltage		+10 V _{DC} ~ (non-regula		PoE or +12 (non-regul	Voc ~ +48 Voc ated)
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			
	е				
		-40 °C ~ +	80 °C		

Pin Assignments



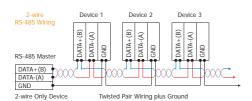




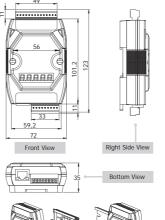
Terminal No.		Pin Assignment
	23	RxD5
COM5	22	TxD5
COIVIS	21	RTS5
	20	CTS5
	19	GND
	18	RxD4
COM4	17	TxD4
COIVI4	16	RTS4
	15	CTS4
	14	GND
	13	RxD3
COM3	12	TxD3
COIVIS	11	RTS3
	10	CTS3

■ Wiring





Dimensions (Unit: mm) _







☑ Ordering Information _____

0	
PDS-752 CR	Programmable Device Server with 4 RS-232 ports and 1 RS-485 port (RoHS)
PD3-732 GR	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)
PDS-752D CR	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)
PPDS-752-WITCP CR	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)
PPD3-732D-WITCP CR	Includes One CA-0910 Cable

GPSU06U-6	24 V _{bc} /0.25 A, 6 W Power Supply
MDR-20-24	24 Voz/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{bc} /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)



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.



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)

PoE

- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)



Models		PDS-755	PDS-755D	DDUC'122' SUITU	ppns.755n.MTC
CPU		FD3=733	F D3=733D	PP DO 130 MITOR	FFD3-733D-MICE
CPU		00104 00	MHz or comp	atiblo	
SRAM		512 KB	IVITZ OF COTTI	Janbie	
JKAW		Flash ROM	. E12 VD.		
Flash Memo	ory	Erase unit	is one sector ase/write cyc		
EEPROM		16 KB; Data retention: 40 years; 1,000,000 erase/write cycles			
Built-in Watchdog	imer	Yes			
Communicatio	n Interfa	ice			
	COM1	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
Man	COM2	RS-485 (D2	2+, D2-, GNI	0)	
Non- isolated	COM3	RS-485 (D/	ATA+, DATA-	, GND)	
13014104	COM4	RS-485 (D/	ATA+, DATA-	, GND)	
	COM5	RS-485 (D/	ATA+, DATA-	, GND)	
Ethernet			se-TX, RJ-45 MDI-X, LED ir		egotiating,
PoE		-		IEEE 802.3	laf
COM Port For	mats				
Data Bit		7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3 ~ COM5			
Parity		None, Ever	n, Odd, Mark	, Space	
Stop Bit			1 and COM2 DM3 ~ COM5	5	
Baud Rate		115200 bps max.			
LED Indicator	s				
5-digit 7 Segment		-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Rev	erse Polarity	Protection	
Required Supply Voltage		+10 Vpc ~ (non-regula		PoE or +12 (non-regul	Vpc ~ +48 Vpc ated)
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 Temperatur	e	-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
	01	CTS1
00141	02	RTS1
COM1	03	RxD1
	04	TxD1
	05	INIT*
COM2	06	D2+
COIVIZ	07	D2-
	08	(R)+Vs
09		(B)GND

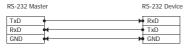


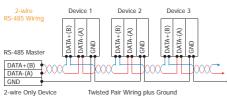


Terminal No.		Pin Assignment
COM5	23	DATA+
COIVIS	22	DATA-
	21	
	20	
	19	
	18	
COM4	17	DATA+
COIVI4	16	DATA-
	15	
	14	
13		
12		
COM3	11	DATA+
COIVIS	10	DATA-

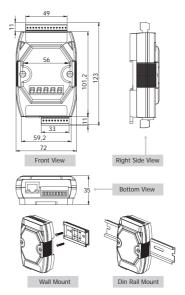
Wiring

3-wire RS-232 Wiring





■ Dimensions (Unit: mm) _



Ordering Information

PDS-755 CR	Programmable Device Server with 1 RS-232 port and 4 RS-485 ports (RoHS)
PD3-733 CR	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)
PD3-755D CR	Includes One CA-0910 Cable
PPDS-755-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port and 4 RS-485 ports (RoHS)
FFD3=733=WITCF CK	Includes One CA-0910 Cable
PPDS-755D-MTCP CR	Programmable Device Server with PoE, Modbus/TCP, 1 RS-232 port, 4 RS-485 ports and an LED Display (RoHS)
FFD3*733D*WTCF CK	Includes One CA-0910 Cable

GPSU06U-6	24 Voc/0.25 A, 6 W Power Supply
MDR-20-24	24 Voc/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V∞/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-762(D)
NEW PPDS-762(D)-MTCP

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

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 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.

Digital Output		
Output Channel	2	
Output Type	Open Collector (Sink/NPN)	
Load Voltage	30 Voc, 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	
	Channels: 1	
Counters	Max. Count: 16-bit (65535)	
Counters	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







Systen	n Spe	ecificati	ons		
Models		PDS-762	PDS-762D	PPDS-762-MTCP	PPDS-762D-MTCP
CPU					
CPU		80186, 80	MHz or comp	oatible	
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 T	imer	Yes			
Communicatio	n Interfa	ice			
	COM1	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
	COM2	RS-485 (D2	2+, D2-, GNI	0)	
Non-	COM3		D, RxD, GNI		
isolated	COM4		D, RxD, GNE		
	COM5		D, RxD, GNE		
	COM6		D, RxD, GNE		
	COIVIO		e-TX, RJ-45		ogotiating
Ethernet			MDI-X, LED in	ndicator)	0 0
PoE		-		IEEE 802.3	laf
COM Port Forr	mats				
Data Bit		7, 8: for COM1 and COM2 5, 6, 7, 8: for COM3 ~ COM6			
Parity		None, Ever	i, Odd, Mark	, Space	
Stop Bit			1 and COM2 OM3 ~ COM6	5	
Baud Rate		115200 bps	s max.		
LED Indicators					
5-digit 7 Se	ament		Yes		Yes
System	9	Red			
PoE		- Green			
Power				210011	
Protection		Power Reve	erse Polarity	Protection	
Required		+10 Vpc ~			Vpc ~ +48 Vpc
Supply Volta	age	(non-regulated)		(non-regul	
Power Cons	_	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical					
Flammabilit	V	Fire Retard	ant Materials	(UL94-V0 L	evel)
Dimensions			72 mm x 123 mm x 35 mm (W x H x D)		
Installation		DIN-Rail or Wall mounting			
Environment					
Operating Temperature	e	-25 °C ~ +75 °C			
Storage Temperatur		-40 °C ~ +80 °C			
Humidity		5 ~ 90% RH, non-condensing			

nal	Pin Assignment
	Link/Act 10/100M
01	CTS1
02	RTS1
03	RxD1
04	TxD1
05	INIT*
06	D2+
07	D2-
80	(R)+Vs
09	(B)GND
	01 02 03 04 05 06 07 08





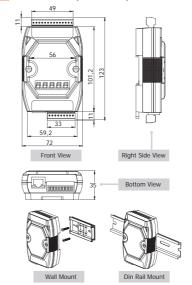
No	nal	Pin Assignment
	23	DO1
DO	22	D00
	21	DO.PWR
DI	20	DI0
19		GND
COM6	18	TxD6
	17	RxD6
COM5	16	TxD5
COMO	15	RxD5
	14	GND
COM4	13	TxD4
CON14	12	RxD4
сомз	11	TxD3
	10	RxD3

■ Wiring —

Input Type	DI Value as 0	DI Value as 1
	Relay ON	Relay Off
Relay Contact	Relay Close Dix GND	Relay Open Dix GND
	Voltage < 1V	Voltage > 3.5V
TTL/CMOS Logic	Logic Eevel Low CND CND CND	Logic Level High
	Open Collector On	Open Collector Off
Open Collector		□ DIX GND

Output Type	DO Command as 1	DO Command as 0
	Relay ON	Relay Off
Drive Relay	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND
Resistance Load	DO.PWR DOX DO.GND	DO.PWR DOX DO.GND

■ Dimensions (Unit: mm) _____



■ Ordering Information _____

PDS-762 CR	Programmable Device Server with 5 RS-232 ports and 1 RS-485 port (RoHS)	
PD3-702 CR	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)	
PDS-762D CR	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)	
PPD3-762-WITCP CR	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)	
PPD3-762D-WITCP CR	Includes One CA-0910 Cable	

Accessories_____

GPSU06U-6	24 Voc/0.25 A, 6 W Power Supply
MDR-20-24	24 Voz/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 V _{pc} /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)



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 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.



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)

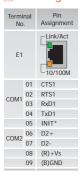
PoE

- Low power consumption
- Palm-Sized with multiple Serial Ports
- Made from fire retardant materials (UL94-V0 Level)



Syster	n Spe	ecincati	0118		
Models		PDS-782	PDS-782D	PPDS-782-MTCP	PPDS-782D-MTCP
CPU					
CPU		80186, 80	MHz or comp	oatible	
SRAM		512 KB			
Flash Memo	ory			ase unit is or /write cycles	
EEPROM		16 KB; Data retention: 40 years; 1,000,000 erase/write cycles			
Built-in Watchdog 1	imer	Yes			
Communication	n Interfa	ice			
	COM1	RS-232 (Tx	D, RxD, RTS	, CTS, GND)	
	COM2	RS-485 (D2	2+, D2-, GNE	D)	
	COM3	RS-232 (Tx	D, RxD, GNE	0)	
Non-	COM4	RS-232 (Tx	D, RxD, GNE	D)	
isolated	COM5	RS-232 (Tx	D, RxD, GNE	D)	
	COM6	RS-232 (Tx	D, RxD, GNE	0)	
	COM7	RS-232 (Tx	D, RxD, GNE	D)	
	COM8	RS-232 (Tx	D, RxD, GNE))	
Ethernet		10/100 Base-TX, RJ-45 port (Auto-negotiating, auto MDI/MDI-X, LED indicator)			
PoE		-		IEEE 802.3	af
COM Port For	mats				
Data Bit		7, 8: for CC	0M1 and COI	M2	
Parity		None, Ever	, Odd, Mark	, Space	
Stop Bit		1: for COM	1 and COM2		
Baud Rate		115200 bps	s max.		
LED Indicator	s				
5-digit 7 Se	gment	-	Yes	-	Yes
System		Red			
PoE		- Green			
Power					
Protection		Power Reve	erse Polarity	Protection	
Required Supply Volta	age	+10 Vpc ~ +30 Vpc (non-regulated)		PoE or +12 Voc ~ +48 Voc (non-regulated)	
Power Cons	umption	2.0 W	2.7 W	2.2 W	2.9 W
Mechanical					
Flammabilit	у	Fire Retard	ant Materials	s (UL94-V0 L	evel)
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 Temperatur	е	-40 °C ~ +80 °C			
Humidity		5 ~ 90% R	H, non-cond	lensing	

Pin Assignments



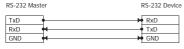


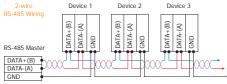


Terminal No.		Pin Assignment
00140	23	TxD8
COM8	22	RxD8
COM7	21	TxD7
COIVI	20	RxD7
	19	GND
0014/	18	TxD6
COM6	17	RxD6
COM5	16	TxD5
COM5	15	RxD5
	14	GND
COM4	13	TxD4
COM4	12	RxD4
COM3	11	TxD3
CUIVI3	10	RxD3

Wiring

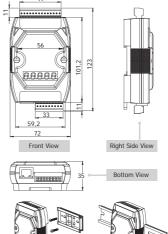
3-wire RS-232 Wiring





2-wire Only Device Twisted Pair Wiring plus Ground

■ Dimensions (Unit: mm) _







■Ordering Information —

PDS-782 CR	Programmable Device Server with 7 RS-232 ports and 1 RS-485 port (RoHS)
PD3-762 CR	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)	
PD3-762D CR	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)
PPDS-762-WITCP CR	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)
PPD3-762D-WITCP CK	Includes One CA-0910 Cable

GPSU06U-6	24 Voc/0.25 A, 6 W Power Supply
MDR-20-24	24 V∞/1 A, 24 W Power Supply with DIN-Rail Mounting
DIN-KA52F-48	48 Voc/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

PProgrammable Device Server with 7 RS-232 ports and 1 RS-485 ports.

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



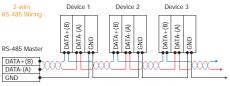
		PDS-782-25/D6	PDS-782D-25/D6	
CPU				
CPU		80186, 80 MHz or co	ompatible	
SRAM		512 KB		
Flash Memory		Flash ROM: 512 KB; Erase unit is one sector (64 KB); 100,000 erase/write cycles		
EEPROM		16 KB; Data retention: 40 years; 1,000,000 erase/write cycles		
Built-in Watchdog Timer		Yes		
Communication Interface		100		
COM1		RS-232 (TxD, RxD, RTS, CTS, GND)		
	COM2	RS-485 (D2+, D2-, GND)		
	COM3	RS-232 (TxD, RxD, 0		
	COM4	RS-232 (TXD, RXD, GND)		
Non-isolated	COM5	RS-232 (TXD, RXD, GND) RS-232 (TXD, RXD, GND)		
	COM6	RS-232 (TxD, RxD, GND)		
	COM7	RS-232 (TxD, RxD, GND)		
	COM8	RS-232 (TxD, RxD, GND)		
	001110	10/100 Base-TX, RJ-45 Port		
Ethernet		(Auto-negotiating, auto MDI/MDI-X,		
		LED indicator)		
COM Port Format	S			
Data Bit		7, 8: for COM1 and COM2		
Data BII		5, 6, 7, 8: for COM3 ~ COM8		
Parity		None, Even, Odd, Mark, Space		
Stop Bit		1: for COM1, COM2		
Stop bit		1, 2: for COM3 ~ COM8		
Baud Rate		115200 bps max.		
LED Indicators				
5-digit 7 Segme	ent	-	Yes	
System		Red		
Power				
Protection		Power Reverse Polarity Protection		
Required Supply Voltage		+12 Vpc ~ +48 Vpc (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	Q	No.	Pin Assignment
N/A	01		14	COM8_RxD
N/A	02	• .	15	COM8_TxD
COM8_GND	03	I - 1	16	COM7_RxD
N/A	04		17	COM7_TxD
COM7_GND	05	• .	18	COM6_RxD
N/A	06		19	_
COM6_GND	07	• •	20	COM6_TxD
N/A	08	• •		COM5_RxD
COM5_GND	09	• •	21	COM5_TxD
N/A	10	• •	22	COM4_RxD
COM4_GND	11	. •	23	COM4_TxD
N/A	12		24	COM3_RxD
COM3_GND	13		25	COM3_TxD
CONS_GIVE	15		Shield	F.G.
2	25-Pin Male	e D-Sub	Connect	or

Pin Assignment	Terminal	Q	No.	Pin Assignment
GND	05		09	
	04	•	08	
TxD	03	I• °I		
RxD	02	I. •I	07	
	01	•	06	
	- 01			
RS-232 Fe	male DB-	25 to M	ale DB-9	Connector

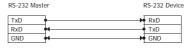
Wiring



2-wire Only Device Twisted Pair Wiring plus Ground

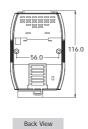
RS-232 Master

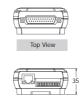
3-wire RS-232 Wiring



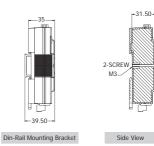
■ Dimensions (Unit: mm) __







Bottom View



Ordering Information

- 1	_ or dorning	memater-
PDS-782-25/D6 CR	Programmable Device Server with 7 RS-232 ports and 1 RS-485 port (RoHS)	
	PD3-762-23/D6 CR	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

GPSU06U-6	24 V _{DC} /0.25 A, 6 W Power Supply	
MDR-20-24	24 Voc/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	
DIN-09-2	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	
DIN-09-2F	Includes CA-0910F x 2 (9-Pin Female-Female D-Sub Cable 1.0 m)	