PDS-842 *NEW*

PDS-882 *NEW*

Programmable Device Server with I/O Expansion Slot(s)

CE FC RoHS

PDS-882

PDS-842

Features ▶▶▶▶

- Linux kernel 2.6.19 Inside
- Standard PDS-8x2 SDK for Windows and Linux operating systems
- Virtual COM for 32-bit and 64-bit Windows XP/2003/Vista/7
- Watchdog Timer suitable for use in harsh environments
- Dual-LAN, 10/100 Base-TX Ethernet (Auto-negotiating, auto MDI/MDI-X, LED indicator)
- Made from fire-retardant materials (UL94-V0 Level)

- Incorporate Serial Devices in an Ethernet network
- "Virtual COM" extends PC COM ports
- Programmable Internet/Ethernet Controller
- Power Reverse Polarity Protection
- DB-9 RS-232 console port
- ESD Protection and Frame Ground Design
- Low power consumption

Introduction

The PDS-842 and PDS-882 programmable device servers (PDS) are compact, modular, intelligent, rugged, and are designed for networking RS-232/422/485 serial devices to an Ethernet network. The PDS-842 has 4 I/O expansion slots, while the PDS-882 has 8 I/O expansion slots that can be used to attach various 2- or 4-port serial communication modules. Therefore, a maximum of 16 serial ports can be installed on the PDS-842 or a maximum of 32 serial ports can be installed on the PDS-882.

By using the PDS-842 or PDS-882, users can transparently access serial devices over the Internet.

This PDS, coupled with a large built-in RAM buffer, allows for fast transmission and prevents congestion of serial data on the network. A built-in powerful 32-bit RISC processor offers exceptional performance at low power consumption.

The PDS-842 and PDS-882 provides two Ethernet ports, which can be used to implement redundant Ethernet communication and separate Ethernet communication (one for global Internet, one for private Ethernet). To prevent the PDS-842 and PDS-882 from failing due to power loss, the power module is designed with two inputs, so that the module can continue working even if one power input fails, and, meanwhile, there is a relay output available for informing users about the power failure.

PWR2
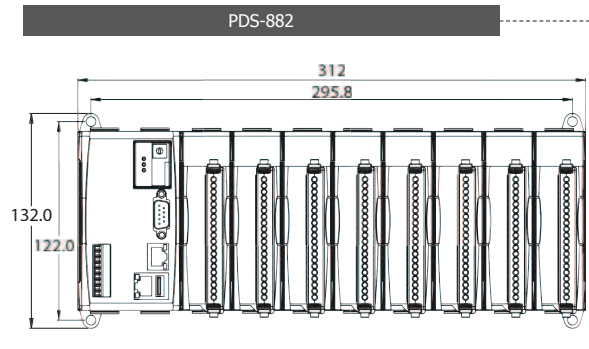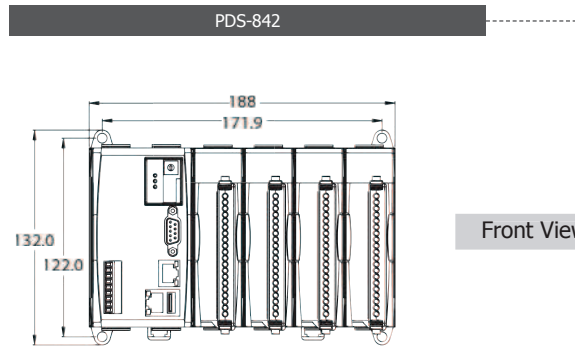Back-up Power supply

PWR1
+24 Vdc Power supply

PDS-842

Relay Output
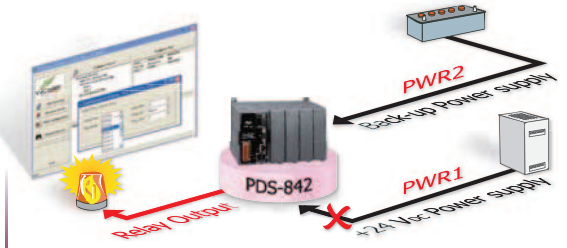
Applications

○ Factory, Building and Home Automation

System Specifications

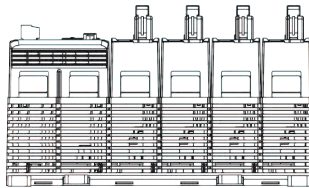| Models	PDS-842	PDS-882
CPU		
CPU	PXA270 or compatible (32-bit and 520 MHz)	
SRAM	64 MB	
Flash Memory	64 MB	
EEPROM	16 KB	
NVRAM	–	
RTC (Real Time Clock)	No	
64-bit Hardware Serial Number	Yes	
Built-in Watchdog Timer	Yes	
I/O Expansion Slots	4 Slots	8 Slots
Programmable LED Indicator	1	
Communication Interface		
COM1 (Console)	RS-232 (TXD, RXD, GND)	
COM2	RS-485 (D+, D-); 3000 V_{DC} isolated	
Ethernet	RJ-45 x 2, Dual 10/100 Base-TX Ethernet Controller (Auto-negotiating, auto MDI/MDI-X, LED indicator)	
COM Port Formats		
Speed	115200 bps max.	
Data Bit	7, 8	
Parity	None, Even, Odd	
Stop Bit	1	
Power		
ESD Protection	Yes (with Frame Ground)	
Protection	Power Reverse Polarity Protection	
Redundant Power Inputs	Yes, with one relay for warning alarm	
Required Supply Voltage	+18 V_{DC} ~ +48 V_{DC} (non-regulated)	
Power Consumption	8.4 W (0.35 A @ 24 V_{DC})	9.1 W (0.38 A @ 24 V_{DC})
Mechanical		
Flammability	Fire-Retardant Materials (UL94-V0 Level)	
Dimensions (W x L x H)	188 mm x 132 mm x 111 mm	312 mm x 132 mm x 111 mm
Installation	DIN-Rail or Wall mounting	
Environment		
Operating Temperature	-25 °C ~ +75 °C	
Storage Temperature	-30 °C ~ +85 °C	
Humidity	5 ~ 95% RH, non-condensing	

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Serial Device Server

Dimensions (Unit: mm)

PDS-842	PDS-882

Front View

Bottom View

Rear View

Pin Assignments

PDS-842/PDS-882

COM1: RS-232

TxD
RxD
GND

Terminal Block

PWR1
P.GND — Redundant Power 1
PWR2
P.GND — Redundant Power 2
R.COM
R.NO — Relay
D+
D− COM2 — RS-485
— Frame Ground
F.G.

Left Side View   Right Side View

11.0
37.2
35.6
37.2
11.0
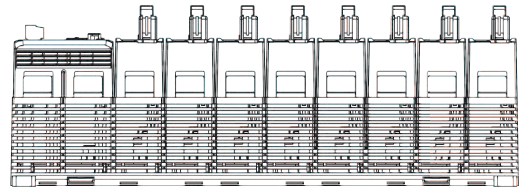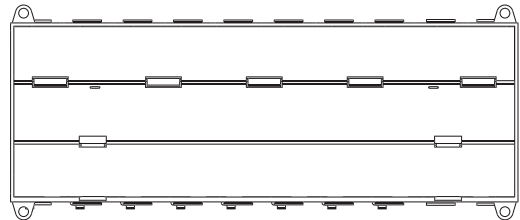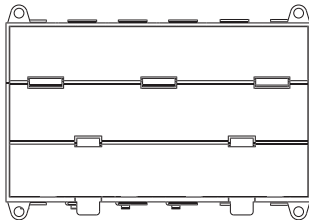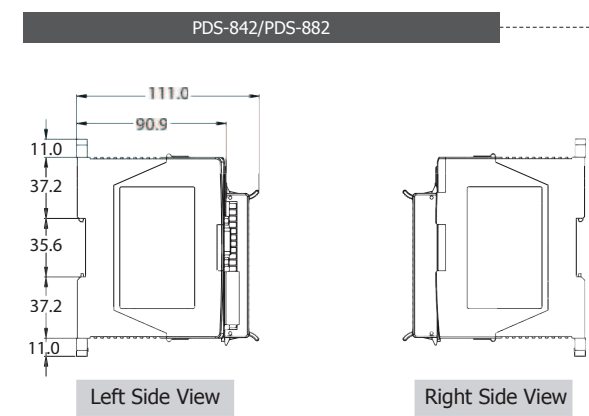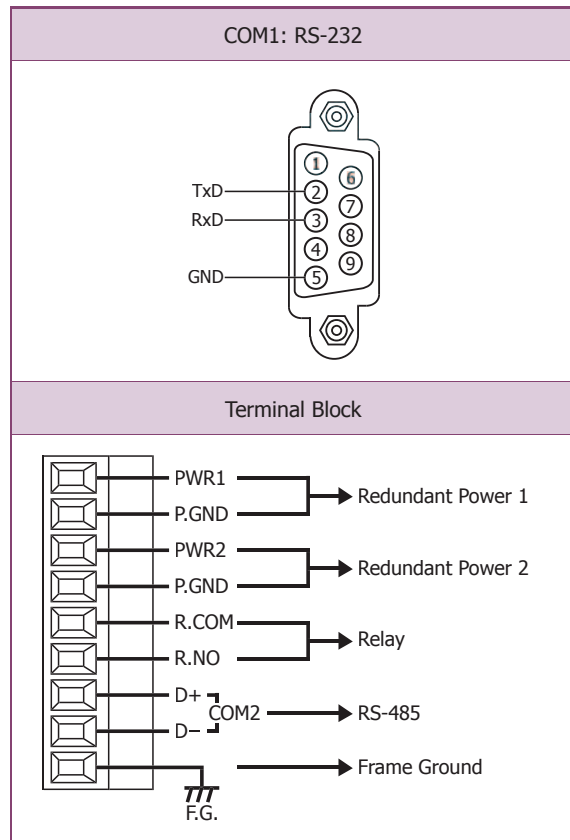
Ordering Information

PDS-842 CR	Programmable Device Server with 4 Expansion Slots (RoHS).
PDS-882 CR	Programmable Device Server with 8 Expansion Slots (RoHS).

Accessories

KA-52F	24 V$_{DC}$/1.04 A, 25 W Power Supply
DIN-KA52F	24 V$_{DC}$/1.04 A, 25 W Power Supply with DIN-Rail Mounting
MDR-60-24	24 V$_{DC}$/2.5 A, 60 W Power Supply with DIN-Rail Mounting
CA-0915	9-Pin Male-Female D-Sub Cable, 1.5 m Cable
NS-205 CR	Unmanaged 5-port Industrial Ethernet Switch (RoHS)

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Serial Device Server