

DRPC-100

Fanless Embedded DIN-Rail Mounting System with Intel® Atom™ N2800 Dual Core Processor

Features

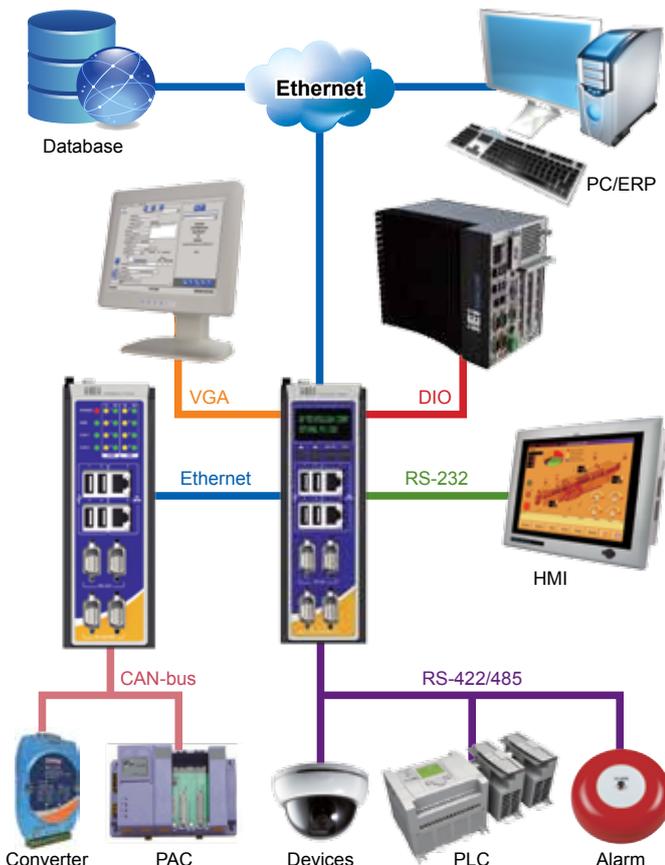
- ◆ Intel® Atom™ N2800 processor supported
- ◆ Low power consumption [N2800 + NM10 (6.5w + 1.5w)]
- ◆ Intel® GMA 3650 with 640 MHz and supports Blu-ray 2.0, DirectX 9, MPEG-2, H.264, C-1 and 1080p decoding
- ◆ Supports 1066 MHz DDR3 SO-DIMM (up to 4 GB)
- ◆ Supports one mSATA, one SATA DOM and one CompactFlash®
- ◆ Wide range (9V~28V) DC power input
- ◆ One PCIe Mini expansion slot for add-on function purpose
- ◆ Supports two GbE, four USB 2.0, two RS-232, two RS-422/485, two CAN-bus and one 8-bit DIO
- ◆ Serial, CAN-bus and Digital I/O interfaces with isolation protection
- ◆ Extended temperature fanless design supports -25°C to 65°C (with SSD)
- ◆ Dual PCIe GbE LAN for high speed network application
- ◆ Programmable OLED Display



DRPC-100 is designed for harsh environment applications, such as high surge ESD automation environments, factory automation, heavy vehicle application and building automation (elevator, warehouse with air-conditioning control system and environment monitoring).

Communication Gateway

For high surge ESD automation environments, the DRPC-100 provides isolated digital IO, CAN-bus and serial communication ports.



Micro Controller for Building Automation

With rich I/O ports, such as COM, USB, Ethernet, CAN-bus, DIO and VGA, the DRPC-100 is able to be like a micro controller for building automation.

Fanless

The DRPC-100 series provides the best components for generating less heat, while maintaining high system performance. With the fanless design, the DRPC-100 reduces system failure caused by fans and extends the lifetime of the device.



Wide Range DC Power Input

The DRPC-100 series accepts a wide range DC power input, allowing it to be powered anywhere, no matter if a 12V, 24V DC source or 19V power adapter is available.

Wide Range Temperature

The DRPC-100 series is designed to withstand wide temperature ranges. With this design, the DRPC-100 series can even be installed in a high-temperature roadside cabinet.

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6 Panel Solutions Introduction

A DIN rail is a metal rail of a standard type widely used for mounting circuit breakers and industrial control equipment inside equipment racks. These products are typically made from cold rolled carbon steel sheet with a zinc-plated and chromated bright surface finish. The term derives from the original specifications having been published by Deutsches Institut für Normung (DIN) in Germany, which have since been adopted as European (EN) and international (ISO) standards.



Rich I/O Function

• Four USB Ports

Four USB ports can completely satisfy other USB devices or access requirements.

• Dual GbE Ethernet Ports

Dual GbE Ethernet ports offer a diverse range of network communication options, helping users easily create an integrated industrial application that requires Ethernet protocols.

• Serial Ports Interface with Isolation

Serial ports help millions of serial devices connect to the network for industrial applications. Our RS-232/422/485 serial ports provide powerful communication performance for all industrial device connectivity.

• CAN-bus Interface with Isolation

Controller Area Network (CAN or CAN-bus) is a vehicle bus standard designed to communicate or detect errors with each other within a vehicle, industrial automation and medical equipment. This drastically reduces the chance of data loss and ensures system reliability and is suitable for intelligent networking I/O devices such as sensors or actuator of machines or plants.

• 8-bit Digital I/O, 4-bit input/4-bit output Interface with Isolation

The DIO channels are quite useful for remote controlling, such as device power on/off, LEDs on/off, counter and cash drawer control.

OLED indicator Function

• Programmable OLED Display

Users can program their own APIs to show any information by the OLED display.

• Programmable Function Keys

Users can program the four keys to control DRPC-100 & OLED display.

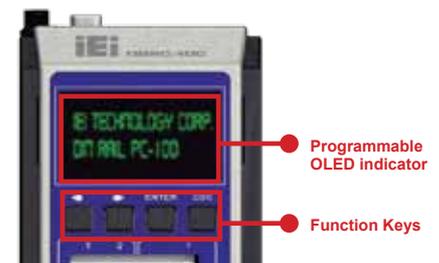
• Terminal Screen & Status Display

It not only shows text format but also graphic forma.

• Protocol & Demo Source code Open

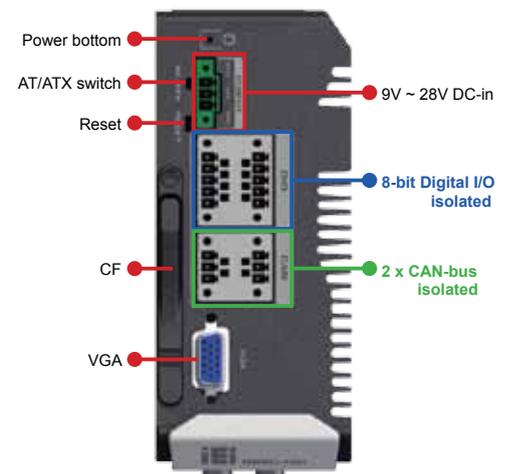
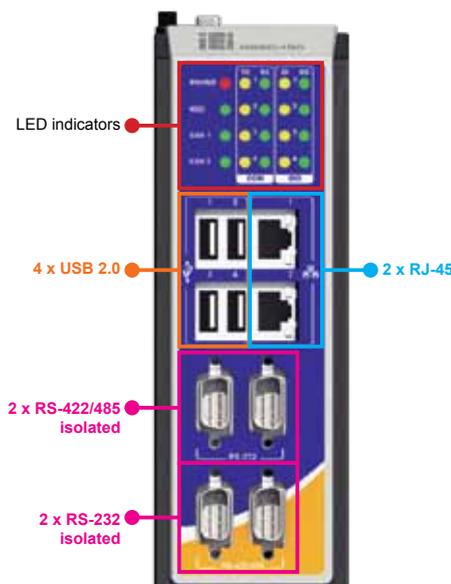
IEI provides the protocol & demo source code for uses to program their own usage.

OLED indicator



DRPC-100 LED Front View

DRPC-100 OLED Front View



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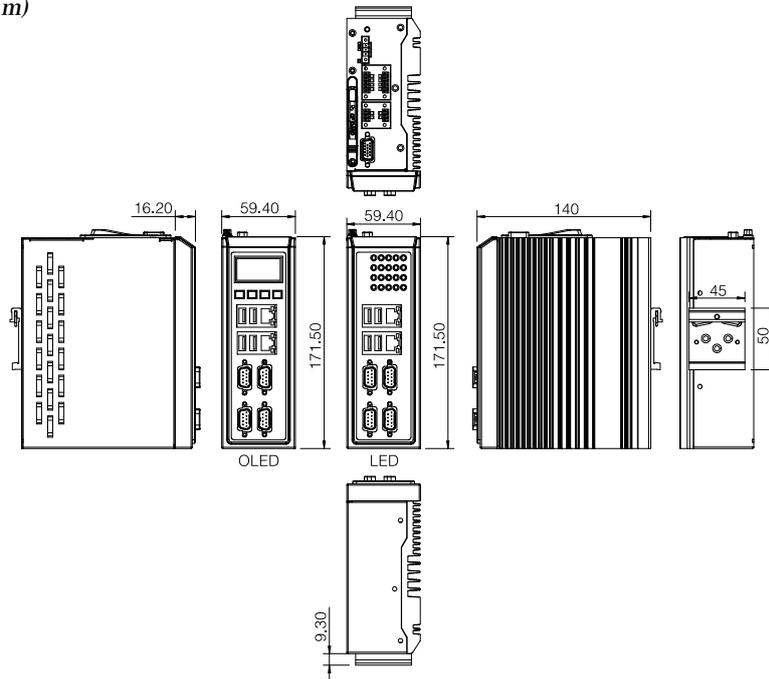
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Panel Solutions Introduction

Dimensions (Unit: mm)



Specifications

Model Name		DRPC-100
Chassis	Chassis Construction	Extruded aluminum alloy for fanless support move to next line
	Chassis Dimensions (WxDxH)	59.4 x 140 x 170 mm
	Chassis Color	Black
Motherboard	Fanless	Yes
	Processor	Intel® Atom™ N2800 dual core 1.86 GHz
	System Chipset	Intel® NM10
	Memory	One 2G 204-pin 1066 MHz DDR3 SO-DIMM (max. 4 GB capacity)
	Ethernet	Dual GbE by RTL8111E controllers
Storage	SATA	mSATA & SATA DOM support CF card support (top side)
	USB	4 x USB 2.0 (front side)
System Function	Ethernet	2 x RJ-45
	RS-232	2 x DB-9 with 3KV isolation protection (front side)
	RS-422/485	2 x DB-9 with 3KV isolation protection (front side)
	Display	1 x VGA port (Top side , Up to 1920 x 1200 @ 60Hz)
	DIO	1 x Phoenix terminal block w / 3KV isolation protection, 8 bit Digital I/O, 4 bit input / 4 bit output
	CAN-bus	1 x Phoenix terminal block with 3KV isolation protection, supporting 2-port CAN-bus (top side)
	Interior Expansions	1 x PCIe Mini slot
	Buttons	Power on, reset button (top side)
Power	Power Input	PWR1 : 9 to 28 VDC (3-pin terminal block)
	Power Consumption	12V@1.85A (Intel® Atom™ N2800 dual core 1.86 GHz & DDR3 1066MHz 2GB memory)
	ATX/AT Mode	ATX/AT switch (top side)
Reliability	Mounting	DIN rail
	Operation Temperature	-25°C to 65°C (SSD)
	Humidity	5% ~ 95%, non-condensing
	Storage Temperature	-25°C to 70°C
	Operating Shock	Half-sine shock test 5G/11ms, 3 shocks per axis
	Operating Vibration	MIL-STD-810F 514.5 C-1 (HDD), MIL-STD-810F 514.5 C-2 (SSD)
	Weight (Net/Gross)	1Kg / 2Kg
	Safety & EMC	CE/FCC

Packing List

1 x DRPC-100	
5 x terminal block (3 x 3-pin, 2 x 5pin)	1 x Utility CD
1 x DIN rail mounting bracket	1 x One Key Recovery CD

Ordering Information

Part No.	Description
DRPC-100-CV-LED-R10	Extended temperature fanless embedded system with Intel® Atom™ N2800, with 2GB DDR3 memory, two GbE, four USB 2.0, two RS-232, two RS-422/485, two CAN-bus, one 8-bit DIO, 9V~28V DC, -20°C to 65°C, LED indicators, RoHS
DRPC-100-CV-OLED-R10	Extended temperature fanless embedded system with Intel® Atom™ N2800, with 2GB DDR3 memory, two GbE, four USB 2.0, two RS-232, two RS-422/485, two CAN-bus, one 8-bit DIO, 9V~28V DC, -20°C to 65°C, OLED indicator, RoHS
32102-026500-100-RS	Power cable 200mm, (A)DC JACK to (B) 3-pin terminal block P=3.5
63000-FSP036RAB610-RS	Adapter power, FSP, FSP036-RAB, Vin : 90~264VAC, 36W, Erp (NO LOAD 0.3W), Vout : 12VDC, Φ2.1/Φ5.5/lock, CCL, RoHS
32000-000002-RS	17.5cm European Standard power cord
32000-000025-RS	18.3cm American Standard power cord
IPE-5200IM-xxx	Flash disk, mSATA, SLC, 0°C ~70°C, R : 160MB/s, W : 150MB/s, 2GB~32GB
IPE-5200VM-xxx	Flash disk, mSATA, SLC, -40°C~85°C, R : 160MB/s, W : 150MB/s, 2GB~32GB

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