

DRPC-100-CV 120-BT

■ Fanless DIN-Rail Embedded System

■ Intel® E3845 1.91GHz/Intel® N2800 1.86GHz Solution

Features

DRPC-120-BT

- Intel® Atom™ E3845 1.91GHz
- 1 x 2.5" SATA HDD/SSD drive bay
- DDR3L 1.35V SO-DIMM support
- Programmable OLED display
- 8-bit digital I/O (4-bit inputs/outputs)
- IEI iRIS-2400 solution



DRPC-100-CV

- Intel® Atom™ N2800 1.86GHz
- Serial, CAN-bus and digital I/O interfaces with isolation protection
- 1 x PCIe Mini expansion slot for add-on function purpose
- Programmable OLED display



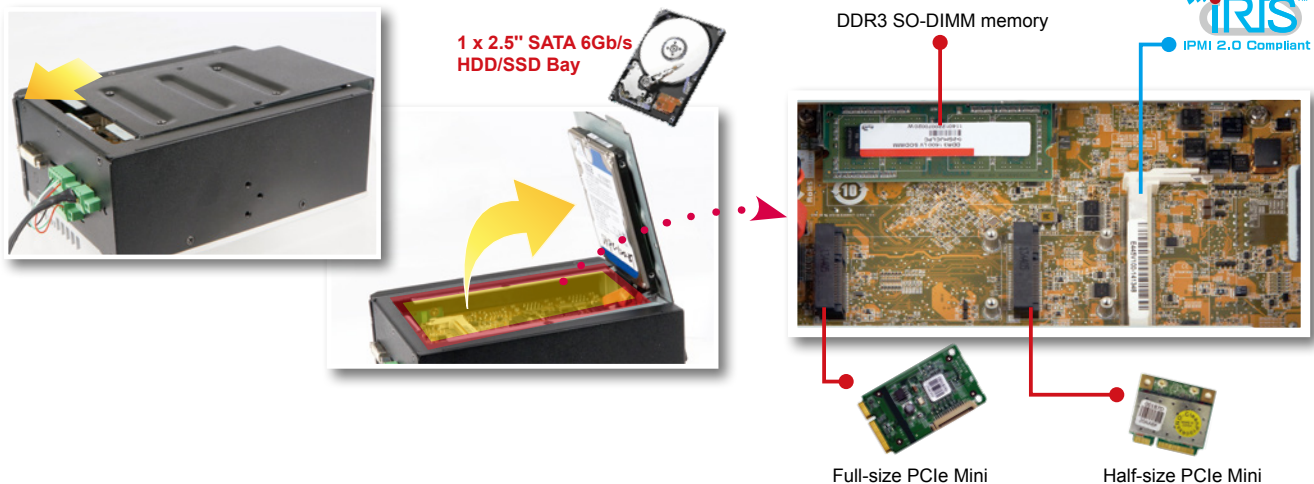
DRPC-120-BT



DRPC-100-CV

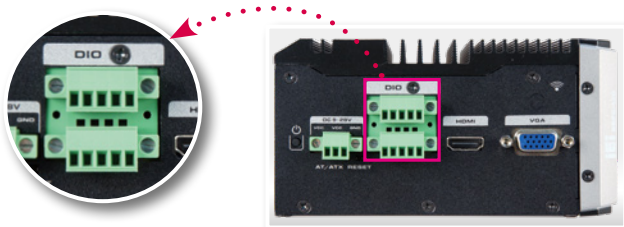
User Friendly Installation

The DRPC-120 is designed with an easy removable back cover for users to install SATA HDD, PCIe Mini cards, DDR3 memory modules or iRIS-2400 modules conveniently.



8-Channel Digital I/O

The DRPC-120 is outfitted with 8-channel (4-bit input and 4-bit output) digital I/O to provide digital input and output signals for control of industrial devices.



Fanless

The DRPC-100/120 series provides the best components for generating less heat, while maintaining high system performance. With the fanless design, the DRPC-100/120 reduces system failure caused by fans and extends the lifetime of the device.



iRIS Solution

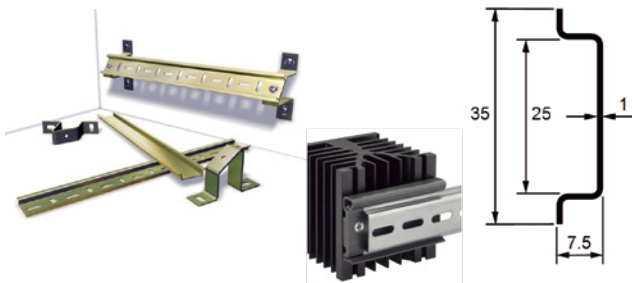


IPMI 2.0 Compliant

By installing the IEC iRIS-2400 module, the DRPC-120 is capable to complete your IoT application through the advanced remote control features, such as power management and control, remote KVM for device status monitoring, sending active alerts and warning messages by e-mail or SMS.

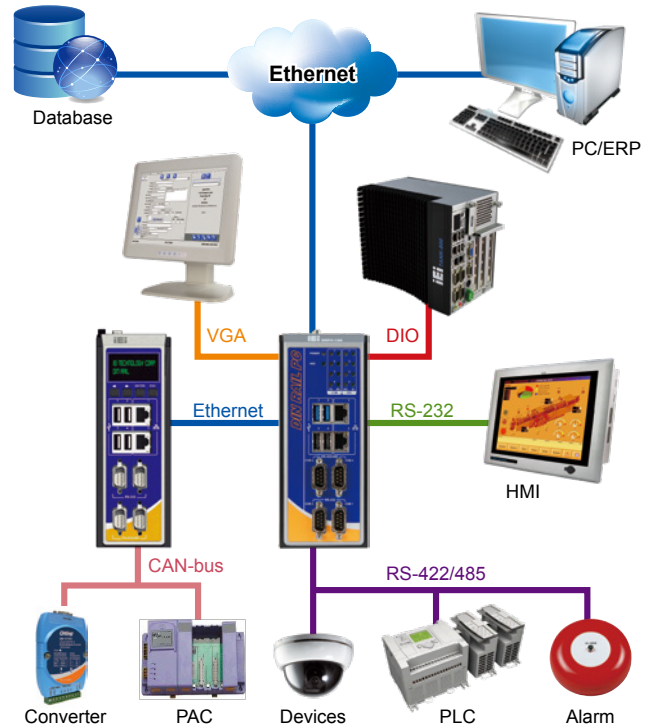
DIN Rail Standard

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.



Communication Gateway

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



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.

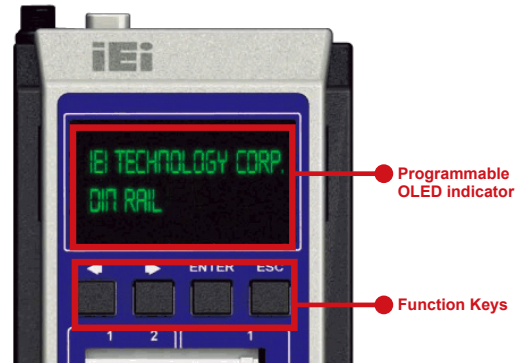
• Terminal Screen & Status Display

It supports both text format and graphic format.

• Protocol & Demo Source Code Open

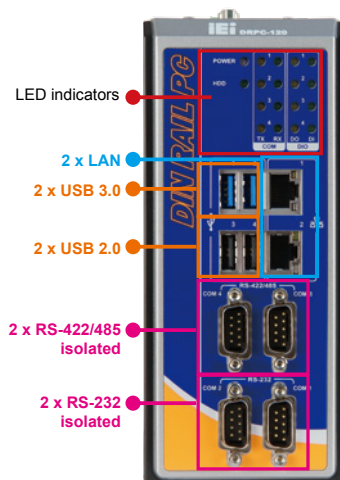
IEI provides the protocol & demo source code for users to program their own usage.

DRPC-100/120 OLED indicator

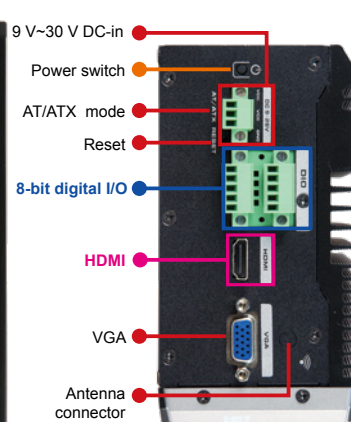


Fully Integrated I/O

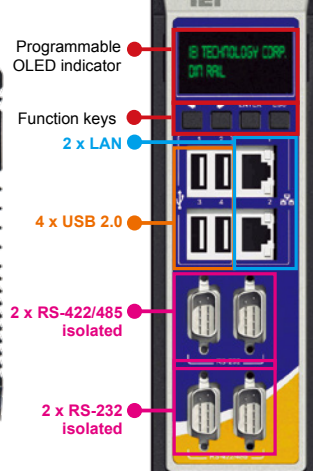
DRPC-120 Front View



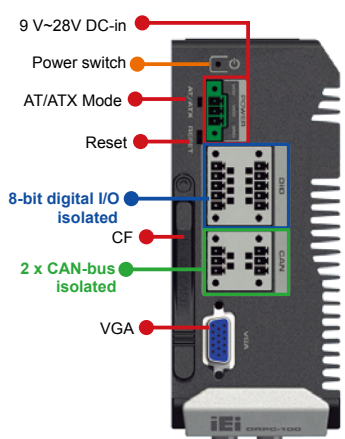
DRPC-120 Top Side View



DRPC-100 Front View



DRPC-100 Top Side View



Specifications

Model Name		DRPC-120-BT	DRPC-100-CV
Chassis	Color	Black	Black
	Dimensions (WxDxH) (mm)	74.08 x 140 x 171.5	59.4 x 140 x 171.5
	System Fan	Fanless	Fanless
	Chassis Construction	Extruded aluminum alloys	Extruded aluminum alloys
Motherboard	CPU	Intel® Atom™ E3845 1.91 GHz	Intel® Atom™ N2800 1.86 GHz
	Chipset	SoC	Intel® NM10
	System Memory	1 x 204-pin DDR3L SO-DIMM 2 GB pre-installed (system max: 8GB)	1 x 204-pin DDR3 SO-DIMM 2 GB pre-installed (system max: 4GB)
IPMI	iRIS Solution	1 x iRIS-2400 (optional)	N/A
Storage	Hard Drive	1 x 2.5" SATA 3Gb/s HDD/SSD bay	N/A
	CF card	N/A	1
I/O Interfaces	USB 3.0	2	N/A
	USB 2.0	2	4
	Ethernet	2 x RJ-45 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller	2 x RJ-45 Realtek 8111E PCIe GbE
	COM Port	2 x RS-232 (DB-9 w/3KV isolation protection*) 2 x RS-422/485 (DB-9 w/3KV isolation protection*)	2 x RS-232 (DB-9 w/3KV isolation protection*) 2 x RS-422/485 (DB-9 w/3KV isolation protection*)
	Digital I/O	8-bit digital I/O, 4-bit input/4-bit output	1 x Phoenix terminal block w/ 3KV isolation protection 8-bit digital I/O, 4-bit input/4-bit output
	CAN-bus	N/A	1 x Phoenix terminal block w/ 3KV isolation protection, supporting 2-port CAN-bus
	Display	1 x VGA, 1 x HDMI	1 x VGA
	Resolution	Up to 1920 x 1200 @ 60Hz	Up to 1920 x 1200 @ 60Hz
	Wireless	1 x 802.11a/b/g/n/ac (optional)	1 x 802.11a/b/g/n/ac (optional)
	Other	N/A	SATA DOM support
Expansions	PCIe Mini	1 x Half-size PCIe Mini slot (w/o USB signal) 1 x Full-size PCIe Mini slot (supports mSATA, colay with SATA)**	1 x Full-size PCIe Mini slot (supports mSATA, colay with SATA)
Power	Power Input	3-pin terminal block: 9 V ~ 28 V DC	3-pin terminal block: 9 V ~ 28 V DC
	Power Consumption	12 V@ 2.1 A (Intel® Atom™ E3845 with 2 GB memory)	12 V@1.85 A (Intel® Atom™ N2800 with 2 GB DDR3 memory)
Reliability	Mounting	DIN-rail	DIN-rail
	Operating Temperature	-20°C ~ 60°C with air flow (mSATA), 5% ~ 95%, non-condensing	-25°C ~ 65°C with air flow (mSATA), 5% ~ 95%, non-condensing
	Operating Shock	Half-sine wave shock 5G, 11ms, 3 shocks per axis	Half-sine wave shock 3G, 11ms, 3 shocks per axis
	Operating Vibration	MIL-STD-810F 514.5C-2 (with SSD)	MIL-STD-810F 514.5C-2
	Weight (Net/Gross)	1.4 kg/2.5 kg	1 kg/2 kg
	Safety/EMC	CE/FCC	CE/FCC
OS	Supported OS	Microsoft® 8, Microsoft® Windows® Embedded Standard 7 E	Microsoft® Windows® Embedded Standard 7 E, Microsoft® Windows® XP Embedded

* COM port isolation: 3 kV for 1 sec, 2.5 kV for 1 minute

** DRPC-120-QGW-E5-LED/4G-R10 has only one Half-size PCIe Mini slot

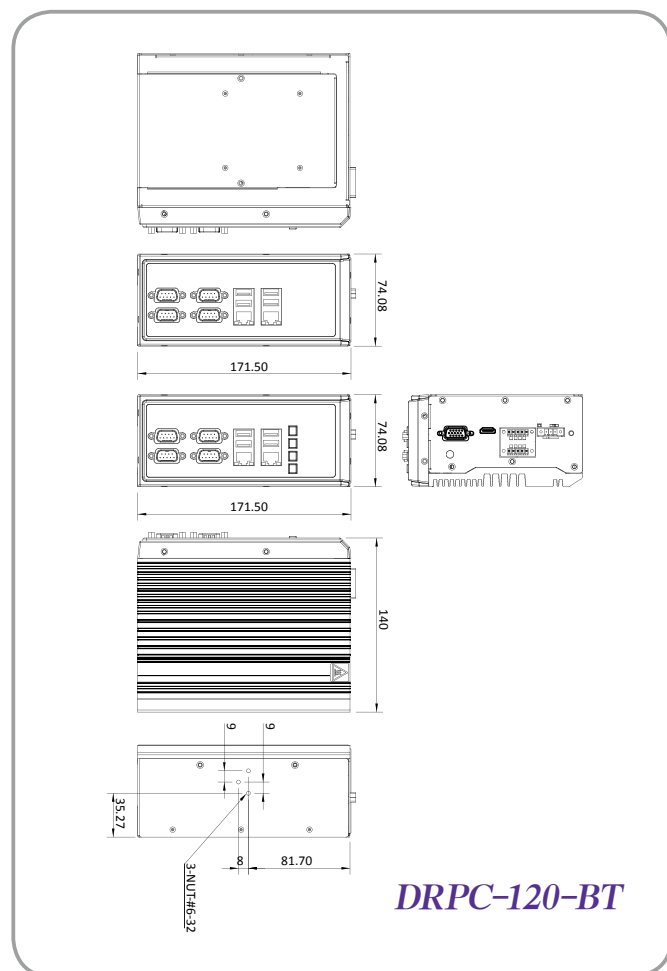
Ordering Information

Part No.	Description
DRPC-120-BTi-E5-OLED/2G-R10	Fanless embedded system, Intel® Bay-Trail E3845 1.91 GHz, TDP 10W, 2GB DDR3L pre-installed memory, one VGA, one HDMI, 8 CH DIO, iRIS-2400 optional, 9 V~28 V DC, OLED indicators, R10, RoHs
DRPC-120-BTi-E5-LED/2G-R10	Fanless embedded system, Intel® Bay-Trail E3845 1.91 GHz, TDP 10W, 2GB DDR3L pre-installed memory, one VGA, one HDMI, 8 CH DIO, iRIS-2400 optional, 9 V~28 V DC, LED indicators, R10, RoHs
DRPC-120-QGW-E5-LED/4G-R10	Fanless embedded system with Intel® Bay-Trail E3845 1.91 GHz, TDP 10W, 4 GB DDR3L pre-installed memory, with QTS-Gateway, 1 x VGA, 1 x HDMI, 8 CH DIO, iRIS-2400 optional, 9 V~28 V DC, LED indicators, RoHs
DRPC-100-CV-LED-R10	Extended temperture fanless embedded system with Intel® Atom™ N2800, with 2 GB DDR3 memory, two GbE, four USB 2.0, two RS-232, two RS-422/485, two CAN-bus, one 8-bit DIO, 9 V~28V DC, -20°C to 65°C, LED indeicators, RoHS
DRPC-100-CV-OLED-R11	Extended temperture fanless embedded system with Intel® Atom™ N2800, with 2 GB DDR3 memory, two GbE, four USB 2.0, two RS-232, two RS-422/485, two CAN-bus, one 8-bit DIO, 9 V~28V DC, -20°C to 65°C, OLED indeicators, RoHS

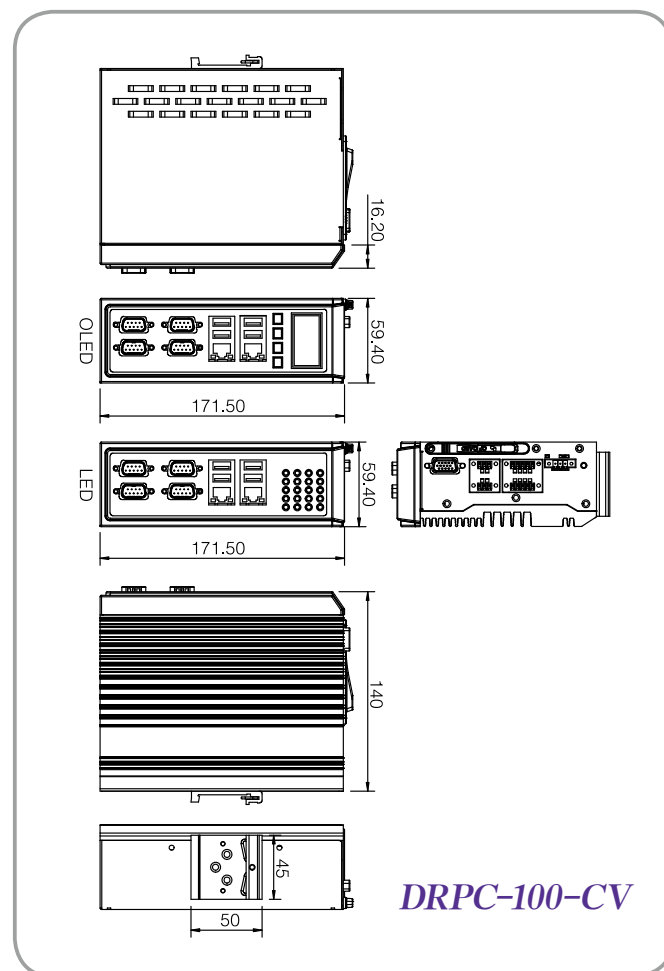
Packing List

1 x Screw kit	1 x Mounting bracket
1 x SATA cable & SATA power cable	

Dimensions (Unit: mm)



Dimensions (Unit: mm)



Options

DRPC-120-BT series

Item	Part No.	Description
OS: Windows Embedded 7	DRPC-120-WES7E-R10 (CD-ROM)	OS Image with Windows® Embedded Standard 7 E for DRPC-120 Series, CD-ROM, RoHS
Wireless kit	EMB-WIFI-KIT01-R20	1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 250mm RF cable, 2 x Antenna, RoHS
Adapter	63040-010036-121-RS	Adapter Power, FSP, FSP036-RBBN2, Vin: 90V~264VAC, 36W, Erp(NO LOAD 0.1W), Vout:12VDC, Φ2.5/Φ5.5/lock, CCL, RoHS
Power Cable	32102-026500-100-RS	Power cable 200mm, (A) DC jack to (B) 3-pin terminal block P=3.5
Power Cord	32702-000400-200-RS	European power cord
DIN-Rail mounting kit	DK-DRPC-R10	Rugged DIN-Rail mounting kit only for DRPC series

DRPC-100-CV series

Item	Part No.	Description
OS: Win XPE (4GB CF card)	DRPCCF-100-CV-XPE-R10	OS Image with XPE, for DRPC-100-CV Series, W/CompactFlash® Memory Card 4GB
OS: Windows Embedded 7 (4GB CF card)	DRPCCF-100-CV-WES7E-R10	OS Image with Windows® Embedded Standard 7 E for DRPC-100-CV Series, in 4 GB CompactFlash® card
Wi-Fi module	27310-000012-RS	Wireless LAN module, Wi-Fi with Bluetooth 4.0/3.0+HS, AzureWave, AW-CB161H, IEEE802.11a/b/g/n/ac, 2.412 GHz~2.472 GHz, 5.15 GHz~5.85 GHz, PCIe Mini, a(13dBm), b(16dBm), g(13dBm), n(12dBm), ac(10dBm), 3.3 V, Realtek RTL8821AE, 1T1R, RoHS
Antenna	32505-000900-100-RS	External antenna, WLAN, RG 178,108MM, peak gain 2.0DBI, Exceltek, 2.4 GHz~2.5 GHz/5.15 GHz~5.85 GHz, reverse SMA plug, RoHS
RF cable	32501-000600-100-RS	Antenna, RF cable, RF cable, outside diameter:1.13 mm, 500 mm, 0 GHz~6 GHz, (A) Reverse SMA jack, one nut + two washer, (B) I-PEX, RoHS
Adapter	63040-010036-121-RS	Adapter Power, FSP, FSP036-RBBN2, Vin:90~264VAC, 36W, Erp(NO LOAD 0.1W), Vout:12VDC, Φ2.5/Φ5.5/lock, CCL, RoHS
Power cable	32102-026500-100-RS	Power cable 200mm, (A) DC jack to (B) 3-pin terminal block P=3.5
Power cord	32702-000400-200-RS	European power cord
DIN-rail mounting kit	DK-DRPC-R10	Rugged DIN-Rail mounting kit only for DRPC series

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[R11](#) [DRPC-120-QGW-E5-LED/4G-R10](#)