# DRPC-120-BT

- Fanless DIN-Rail Embedded System
- Intel® E3845 1.91GHz Solution



#### **Features**

- 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











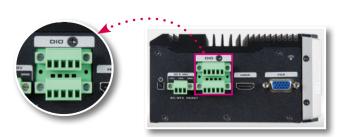
#### User Friendly Installation -

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



#### iRIS Solution -



By installing the IEI 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 IPMI 2.0 Compliant device status monitoring, sending active

alerts and warning messages by e-mail or SMS.

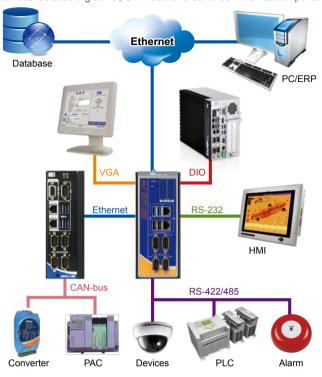
#### DIN Rail Standard -

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 series 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 OLED display.

Terminal Screen & Status Display

It supports both text format and graphic format.

Protocol & Demo Source Code Open

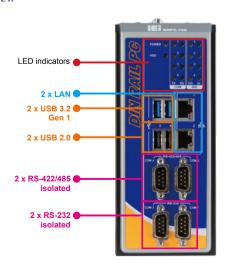
IEI provides the protocol & demo source code for users to program their own usage.

#### DRPC-120 OLED indicator

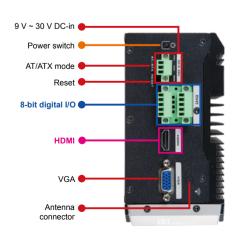


#### Fully Integrated I/O \_

#### Front View



Top Side View



# Specifications

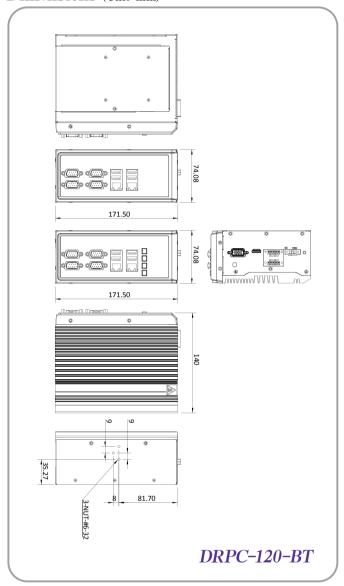
Specifications				
Model Name		DRPC-120-BT		
Chassis	Color	Black		
	Dimensions (WxDxH) (mm)	74.08 x 140 x 171.5		
	System Fan	Fanless		
	Chassis Construction	Extruded aluminum alloys		
Motherboard	CPU	Intel® Atom™ E3845 1.91 GHz		
	Chipset	SoC		
	System Memory	1 x 204-pin DDR3L SO-DIMM 2 GB pre-installed (system max: 8GB)		
IPMI	iRIS Solution	1 x iRIS-2400 (optional)		
Storago	Hard Drive	1 x 2.5" SATA 3Gb/s HDD/SSD bay		
Storage	CF card	N/A		
	USB 3.2 Gen 1 (5Gb/s)	2		
	USB 2.0	2		
	Ethernet	2 x RJ-45 1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller		
	COM Port	2 x RS-232 (DB-9 w/3kV isolation protection*) 2 x RS-422/485 (DB-9 w/3kV isolation protection*)		
I/O Interfaces	Digital I/O	8-bit digital I/O, 4-bit input/4-bit output		
	Display	1 x VGA, 1 x HDMI		
	Resolution	Up to 1920 x 1200 @ 60Hz		
	Wireless	1 x 802.11a/b/g/n/ac (optional)		
	Other	1 x Power button 1 x Reset button 1 x AT/ATX switch		
Expansions	PCIe Mini	1 x Half-size (PCle) 1 x Full-size (PCle/ USB 2.0/ SATA)		
Power	Power Input	3-pin terminal block: 9 V ~ 28 V DC		
	Power Consumption	12 V@ 2.1 A (Intel® Atom™ E3845 with 2 GB memory )		
	Mounting	DIN-rail		
	Operating Temperature	-20°C $\sim$ 60°C with air flow (mSATA), 5% $\sim$ 95%, non-condensing		
Reliability	Operating Shock	Half-sine wave shock 5G, 11ms, 3 shocks per axis		
	Operating Vibration	MIL-STD-810F 514.5C-2 (with SSD)		
	Weight (Net/Gross)	1.4 kg/2.5 kg		
	Safety/EMC	CE/FCC		
os	Supported OS	Microsoft® 8, Microsoft® Windows® Embedded Standard 7 E		
* COM port isolation: 3 kV for 1 sec. 2.5 kV for 1 minute				

<sup>\*</sup> COM port isolation: 3 kV for 1 sec, 2.5 kV for 1 minute

# 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 preinstalled 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 preinstalled memory, one VGA, one HDMI, 8 CH DIO, iRIS-2400 optional, 9 V ~ 28 V DC, LED indicators, R10, RoHs

### Dimensions (Unit: mm)



## **Options**

Options			
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	63040-010036-210- RS	Adapter Power;FSP;FSP036- RHBN3;9NA0362707;;Vin:90 ~ 264VA C;36W;Dim:37.8*89.8*27.0mm;Plug=7 .5mm;Cable=1500mm;Erp(NO LOAD 0.075W);Vout:12VDC;Ф2.5/Ф5.5/ 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	

# Packing List

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