

# DRPC-230-ULT5

- Fanless DIN-Rail Embedded System
- Whiskey Lake 8<sup>th</sup> Intel® Core™ Solution (up to 4 cores)



## Features

- Intel® Core™ i5-8365UE/ Celeron™ 4205U
- Triple GbE LAN Ports
- Multiple USB 3.2 Gen 2 (10Gb/s)
- Multiple COM Ports
- Modulized Flexible Expansion



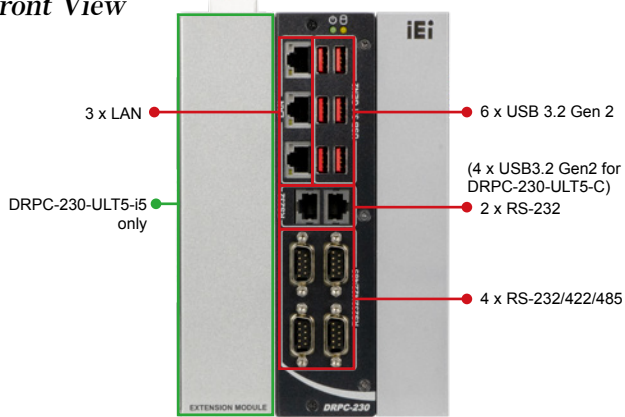
## Specifications

Model Name		DRPC-230-ULT5-i5/S	DRPC-230-ULT5-i5	DRPC-230-ULT5-C/S
Chassis	Color	Black & Silver		
	Dimensions (WxDxH)	81 x 150 x 190	127 x 150 x 190	81 x 150 x 190
	System Fan	Fanless		
	Chassis Construction	Extruded aluminum alloy		
Motherboard	CPU	Intel® Core™ i5-8365UE 1.6 GHz (up to 4.1 GHz, quad-core, TDP 15W)		Intel® Celeron™ 4205U 1.8 GHz (dual-core, TDP 15W)
	Chipset	SoC		
	System Memory	2 x SO-DIMM DDR4 2400 (8GB pre-installed)		
Storage	Hard Drive	1 x 2.5" SATA 6Gb/s HDD/SSD bay		
I/O Interfaces	USB	6 x USB 3.2 Gen2		4 x USB 3.2 Gen2 2 x USB 2.0
	Ethernet	3 x RJ-45: 1 x GbE by Intel® I219 2 x GbE by Intel® I210		
	COM Port	4 x RS232/422/485 with AFC (DB9) 2 x RS232 (RJ-45)		
	Digital I/O	8-bit Digital I/O (4-in/ 4-out)(pin header)		
	Display	1 x HDMI (up to 3840 x 2160@30Hz) 1 x DP (up to 4096 x 2304@60Hz)		
	Wireless	1 x 802.11a/b/g/n/ac (optional)		
	TPM	1 x TPM 2.0 (2 x 10 pin)(optional)		
	Other	1 x Power Button, 1 x Reset Button, 1 x AT/ATX Switch, 1 x LED for Power (Green), 1 x LED for HDD (Yellow)		
Expansions	PCIe Mini	1 x Full-size with SIM card slot (PCIe/USB 3.0/SATA)		
	M.2	1 x 2230 A-key (PCIe x 1/USB 2.0)		1 x 2230 A-key (PCIe x 1)
	Backplane	-	1 x PCIe Gen3 x 4, 1 x USB 2.0	-
Power	Power Input	Terminal block: 12 ~ 24V DC (Reserved internal 40W power with 12V DC output)		
	Power Consumption	12V @ 4.98A (Intel® Core™ i5-8365UE with 8GB memory)		
Reliability	Mounting	DIN-Rail		
	Operating Temperature	-20°C ~ 70°C with air flow (SSD), 10% ~ 95% non-condensing*		
	Storage Temperature	-40°C ~ 85°C with air flow (SSD), 10% ~ 95% non-condensing		
	Operating Shock	Half-sine wave shock 5G, 11ms, 100 shocks per axis (SSD)		
	Operating Vibration	MIL-STD-810G 514.6C-1 (SSD)		
	Weight (Net/Gross)	2.9KG/ 3.2KG	3.2KG/ 3.5KG	2.9KG/ 3.2KG
	Safety/EMC	CE/ FCC		
Watchdog Timer	Programmable 1 ~ 255 sec/min			
OS	Supported OS	Microsoft® Windows 10, Linux		

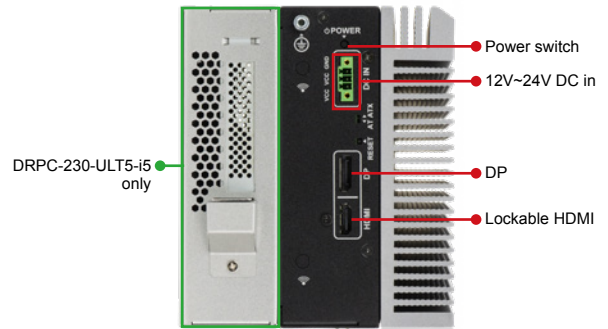
\* CPU can remain high performance and run at or above its base frequency without any thermal throttling under 60°C.

Fully Integrated I/O

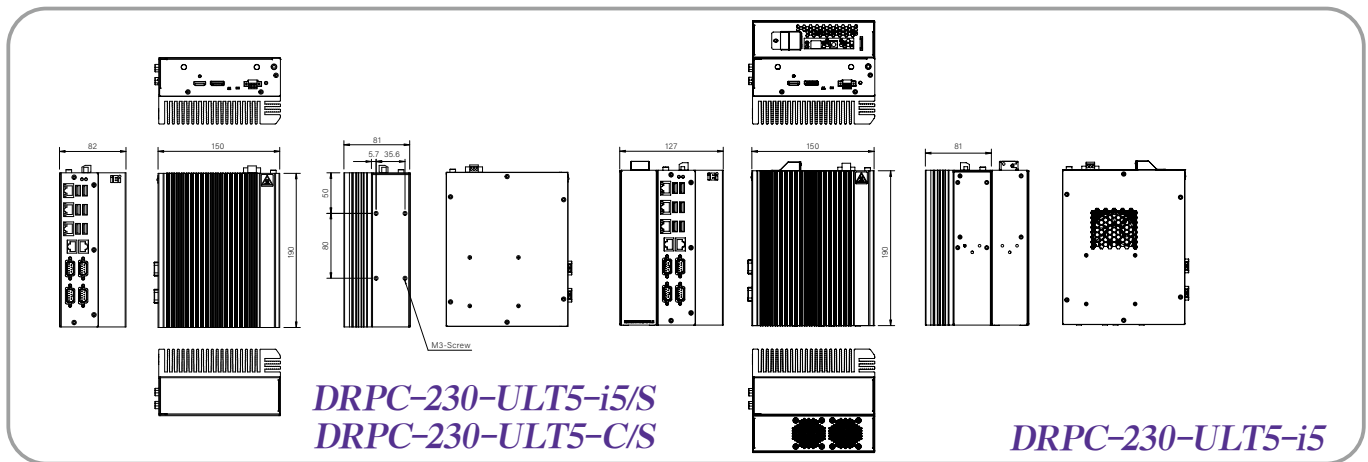
Front View



Top View



Dimensions (Unit: mm)



Ordering Information

Part No.	Description
DRPC-230-ULT5-i5/8G/S-R11	Fanless embedded system, Intel® Whiskey Lake i5-8365UE 1.6GHz (quad core, TDP 15W), 8GB DDR4 pre-installed memory, HDMI/DP, 3 PCIe GbE, 6 COM, 12~24V DC and RoHS
DRPC-230-ULT5-i5/8G-R11	Fanless embedded system, Intel® Whiskey Lake i5-8365UE 1.6GHz (quad core, TDP 15W), 8GB DDR4 pre-installed memory, HDMI/DP, 3 PCIe GbE, 6 COM, 12~24V DC, PCIe x4 expansion layer and RoHS
DRPC-230-ULT5-C/8G/S-R11	Fanless embedded system, Intel® Whiskey Lake Celeron™ 4205U 1.8GHz (dual core, TDP 15W), 8GB DDR4 pre-installed memory, HDMI/DP, 3 PCIe GbE LAN, 6 COM, 12~24V DC and RoHS

Options

Item	Part No.	Description
Adapter <sup>1</sup>	63040-010060-211-RS	Adapter Power;FSP:FSP060-DHAN3;9NA0608097;;Vin:90~264VAC;60W;Dim:62.0*110*31.5mm;Plug=7.5mm;Cable=1200mm;Erp(NO LOAD 0.21W);Vout:12VDC;Φ2.5/Φ5.5/lock;CCL;RoHS
Adapter <sup>1/2</sup>	63040-010096-230-RS	Adapter Power;FSP:FSP096-AHAN3;9NA0961412 ;Active PFC;Vin:90~264VAC;96W;Dim:75.6 x 151.3 x 25.4mm;Plug=7.5mm;Cable=1500mm;Erp(NO LOAD 0.15W);Vout:12VDC;Φ2.5/Φ5.5/lock;CCL;RoHS
Power cable <sup>1</sup>	32102-026500-100-RS	WIRE CABLE;POWER CABLE;;2;200MM;18AWG;(A)DC JACK 5.5 x 2.5, NUT+WASHER;(B)TERMINAL BLOCK:3P P=3.5;SHANGHAI YING YU;RoHS
Power cord	32000-000002-RS	European power cord
RJ-45 to D-SUB cable	32005-004600-200-RS	ROUND CABLE;RS-232/422/485;RS-232 CABLE;2;300MM;26AWG;(A)D-SUB 9P MALE+4#40 Screw;(B)RJ-45 8P8C PLUG, Iron+Sheathed;Wins Precision;RoHS
Wifi module <sup>3</sup>	27319-000009-RS	Wireless Lan Module;Wireless LAN & Bluetooth M.2 Module;Sparklan;R9701810011;IEEE802.11a/b/g/n/ac;2.412GHz~2.4835GHz, 5.15GHz~5.85GHz;M.2 2230;;3.3V;22 x 30 x 2.15mm;QCNFA364A;QCA6174A-5;2x2 MIMO;Dual Band;WCBN808A-Q2;CCL;RoHS
Antenna <sup>3</sup>	32505-000900-100-RS	External Antenna;WLAN;RG 178;108MM;TANK-700-QM67-R10;PEAK GAIN 2.0DBI;Exceltek;2.4-2.5GHz;5.15-5.85GHz;REVERSE SMA PLUG;RoHS
RF cable <sup>3</sup>	32501-004000-100-RS	RF;RF CABLE;LINE DIAMETER:0.81mm;250MM;50Ω;Sparklan;0-6GHz;VSWR≤1.3;I-PEX MHF-4 Plug;REVERSE SMA JACK;NUT x 1;WASHER x 1;RoHS
TPM Module	TPM-IN03-R10	20-pin Infineon SPI TPM 2.0 module, software mangement tool, firmware V7.63
System fan <sup>4</sup>	31100-000365-RS	FAN;+12V;4PIN;YEN SUN;40 x 40 x 10mm;6500RPM;TWO BALL BEARING;LINE LENGTH:150MM;3.4+/-0.1MM;FD124010HB;FD124010HB-NBG(2W7T);AXIAL FAN;WITH FRAME;6.599CFM;7~13.2V;29dB;75000hur;UL, CUL, TUV;CCL;RoHS
Accelerator cards <sup>4</sup>	Mustang-V100-MX8 Mustang-V100-MX4	Computing Accelerator Card with 8 x Movidius Myriad X MA2485 VPU, PCIe Gen2 x 4 interface, RoHS Computing Accelerator Card with 4 x Intel® Movidius™ Myriad™ X MA2485 VPU, PCIe Gen2 x 2 interface, RoHS
OS: Windows Embedded 10	DRPC-230-ULT5-W10E64-V-R10	OS Image with Windows® Embedded Standard 10 E Value 64-bit 2019 for DRPC-230-ULT5 Series, with DVD-ROM, RoHS

<sup>1</sup> It is required to order Power Cable together with Adapter for power usage  
<sup>2</sup> Please select 96W adapter if intend to add accelerator cards  
<sup>3</sup> Each Wi-Fi module needs two antennas and two RF cables to fully support Wi-Fi function  
<sup>4</sup> Only applicable for DRPC-230-ULT5-i5/8G-R10

Packing List

- 1 x Din-rail mounting kit
- 1 x Screw kit