Vecow

RCX-1000 PEG

NVIDIA TESLA
NVIDIA QUADRO
NVIDIA GEFORCE RTX

Workstation-grade Intel® Xeon®/Core™ i7/i5/i3 (CFL-R) Expandable GPU Computing System with NVIDIA® Tesla®/Quadro®/GeForce® Graphics

- 8 cores 9th Generation Intel® Xeon®/Core™ i7/i5/i3 (Coffee Lake Refresh) with workstation-grade Intel® C246 Chipset
- 4 DDR4 2666MHz Memory, up to 128GB (ECC/Non-ECC)
- 6 external USB 3.1 Gen 2 support up to 10Gbps data transfer
- Supports up to 300W NVIDIA® or AMD Graphics card
- NVIDIA® Tesla®/Quadro®/GeForce® graphics card, powered by advanced NVIDIA Turing/Pascal architecture, delivers leading AI computing productivity
- Multiple DVI, HDMI and DisplayPort display interfaces support max 7 independent displays, up to 8K Resolution
- 2 Independent GigE LAN, iAMT 12.0 supported
- 2 External SIM Socket for WiFi/4G/3G/LTE/GPRS/UMTS
- 4 Front-access 2.5" SSD Tray, RAID 0, 1, 5, 10 supported
- 32 Isolated DIO, 4 COM RS-232/422/485
- 2 M.2 Socket : 1 M.2 Key M, 1 M.2 Key E
- System-oriented power optimization, up to 300W independent graphics card
- Supports wide range power input with 80V Surge Protection
- Configurable Ignition Power Control

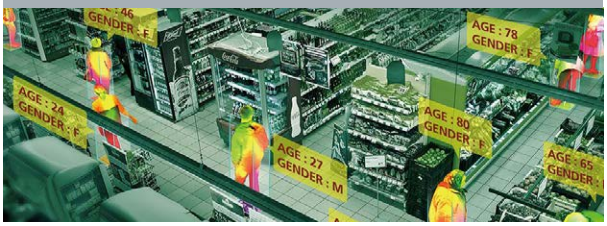
intel partner Gold IoT Solutions

Deep Learning

Autonomous Vehicles

Robotic Control

Public Surveillance



8K | SS 10 | Isolated DIO | M.2 | SIM | TPM | 24V~36V | 80V | -25° 45°

EN50155 | CE | FC | RoHS

PLUG-IN Electronic GmbH • Am Sonnenlicht 5 • 82239 Alling • Tel.: +49 (0) 8141 3697-0 • info@plug-in.de • www.plug-in.de

Specifications

System

Processor	8 cores Intel® Xeon®/Core™ i7/i5/i3 Processor (CFL-R S)
Chipset	Intel® C246
BIOS	AMI
SIO	IT8786E
Memory	4 DDR4 2666MHz SO-DIMM, up to 128GB (ECC/Non-ECC)
OS	Windows 10, Linux

I/O Interface

Serial	4 COM RS-232/422/485 (ESD 8KV)
USB	- 6 USB 3.1 Gen 2 (External) - 1 USB 2.0 (Internal)
Isolated DIO	32 Isolated DIO : 16 DI, 16 DO
LED	Power, HDD, Wireless
SIM Card	2 External SIM Card Socket

Expansion

Mini PCIe	2 Full-size for PCIe/USB/External SIM Card/mSATA
M.2	1 M.2 Key E Socket (2230, PCIe x2/USB)
PCIe	Up to 3 PCIe x16 slot (For the signal option, please refer to the order information table)
PCI	Up to 2 PCI Slot, by request

Graphics

Graphics Processor	Intel® UHD Graphics 630 **Independent Graphics :** By request
Interface	Up to 7 independent displays : - 1 DVI : Up to 1920 x 1200 @60Hz - 1 DisplayPort : Up to 4096 x 2304 @60Hz - 1 Digital Display (HDMI) : Up to 1920 ×1080 @60Hz - By requested Graphics Card

Storage

SATA	4 SATA III (6Gbps) support S/W RAID 0, 1, 5, 10
mSATA	2 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	- 4 Front-access 2.5"SSD/HDD Tray - 1 M.2 Key M Socket (2280, PCIe x4/SATA)

Audio

Audio Codec	Realtek ALC888S-VD, 7.1 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out

Ethernet

LAN 1	Intel® I219LM GigE LAN supports iAMT 12.0
LAN 2	Intel® I210 GigE LAN

Power

Power Input	- 24V to 36V, DC-in - 12V DC-in (Optional)
Power Interface	3-pin Terminal Block : V+, V-, Frame Ground
Ignition Control	16 Mode (Internal)
Remote Switch	3-pin Terminal Block
Surge Protection	Up to 80V/1ms Transient Power

Others

TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
Smart Mgmt.	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.

Mechanical

Dimensions	330.0mm x 210.0mm x 172.0mm (12.99" x 8.27" x 6.77")
Weight (w/o Graphics Card)	**RCX-1400FR PEG :** 5.6 kg (12.37lb) **RCX-1400F PEG :** 5.4 kg (11.87 lb)
Mounting	Wallmount by mounting bracket

Environment

Operating Temp.	-25°C to 45°C (-13°F to 113°F)
Storage Temp.	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, non-condensing
Relative Humidity	95% @ 45°C
Shock/Vibration	- IEC 61373 : 2010 - Railway Applications : Rolling Stock Equipment, Shock and Vibration Tests
EMC	CE, FCC, EN50155, EN50121-3-2

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Order Information

Model	SSD Tray	PCI	PCIe x16	PCIe x4	PCIe x1	10G USB 3.1	SIM	Isolated DIO
RCX-1430FR-PEG	4	-	1	1	1	6	2	32
RCX-1430F-PEG	-	-	1	1	1			
RCX-1421FR-PEG	4	1	1	1	-			
RCX-1421F-PEG	-	1	1	1	-			
RCX-1412FR-PEG	4	2	1	-	-			
RCX-1412F-PEG	-	2	1	-	-			

CPU List

Series	CPU	Cores	GHz	TDP (W)	CPU	Cores	GHz	TDP (W)	ECC RAM
Intel® Xeon®	E-2176G	6	4.6	80	E-2278GE	8	4.7	80	Yes
					E-2278GEL	8	3.9	35	
	E-2124G	4	4.5	71	E-2226GE	6	4.6	80	
Intel® Core™	i7-8700	6	4.6	65	i7-9700E	8	4.4	65	N/A
	i7-8700T	6	4	35	i7-9700TE		3.8	35	
	i5-8500	6	4.1	65	i5-9500E	6	4.2	65	
	i5-8500T	6	3.5	35	i5-9500TE		3.6	35	
	i3-8100	4	3.6	65	i3-9100E	4	3.7	65	Yes
	i3-8100T	4	3.1	35	i3-9100TE		3.2	35	

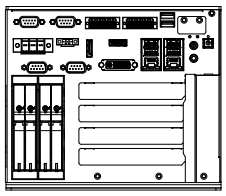
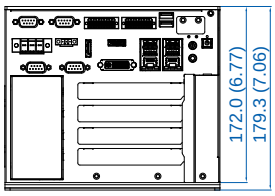
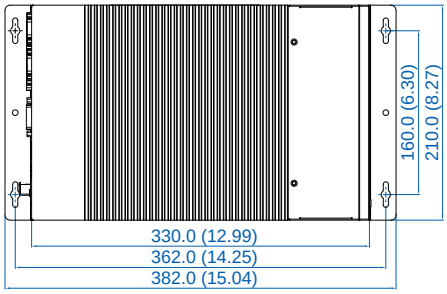
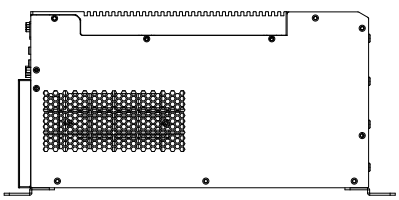
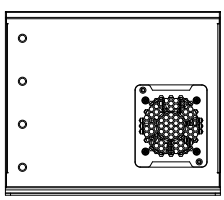
Accessories

DDR4 32G	Certified DDR4 32GB 2666MHz RAM
DDR4 16G	Certified DDR4 16GB 2666/2400/2133 MHz RAM
DDR4 8G	Certified DDR4 8GB 2666/2400/2133 MHz RAM
DDR4 4G	Certified DDR4 4GB 2666/2400/2133 MHz RAM
PWS-480W-WT	480W, 24V, 90V AC to 305V AC Power Supply, Wide-Temp, IP65
PWS-600W1	600W, 24V, 90V AC to 264V AC Power Supply
PWS-600W-WT	600W, 28.8V, 90V to 305V AC Power Supply, Wide Temperature -40°C to +70°C
FAN Sink	Fan Sink for RCX-1000 Series
TMK2-20P-100	Terminal Block 20-pin to Terminal Block 20-pin Cable, 100cm
TMK2-20P-500	Terminal Block 20-pin to Terminal Block 20-pin Cable, 500cm
TMB-TMBK-20P	Terminal Board with One 20-pin Terminal Block Connector and DIN-Rail Mounting
4G Module	Mini PCIe 4G/GPS Module with Antenna
WiFi & Bluetooth	WiFi & Bluetooth Module with Antenna

Dimensions & Drawing

Unit : mm (inch)

RCX-1400FR PEG



RCX-1400F PEG