EC500-CS

Q370
H310
C246

8th/9th Gen Intel® Core™
Modular-Designed Embedded System

KEY FEATURES

DDR4
DDR4 SODIMM up to 64GB

Wide-Temperature
Operating Temperature: -20 to 70°C

Three Independent Displays
1 VGA + 2 HDMI/DP++ (auto detection)

Multiple Expansion
1 Mini PCIe and 2 M.2 Slots support NVMe

Rich I/O
2 GbE, 6 COM, 4 USB 3.1, 2 USB 2.0 (Q370/C246 only)

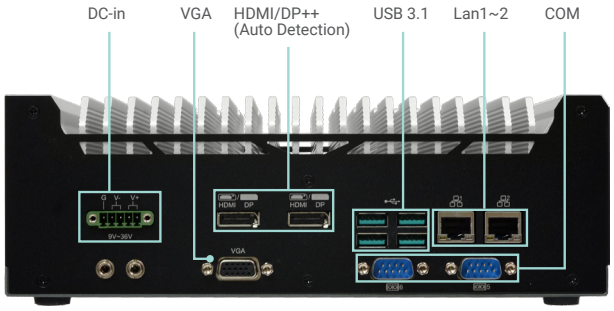
Support 5G Communication
Support 5G communication

5G

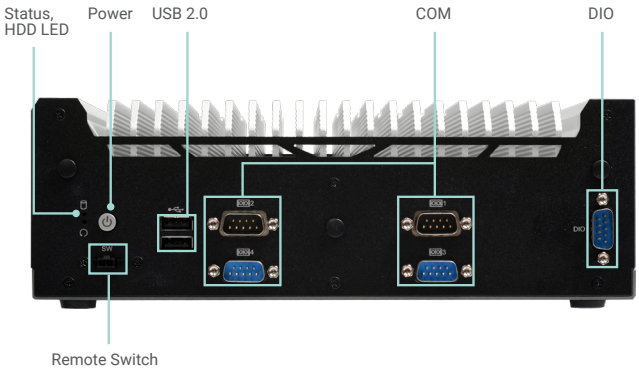
FC CE RoHS

intel IoT Solutions Alliance

PANEL

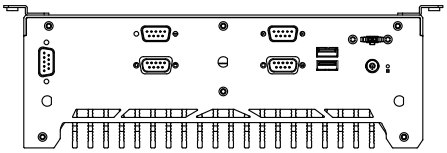


Front View

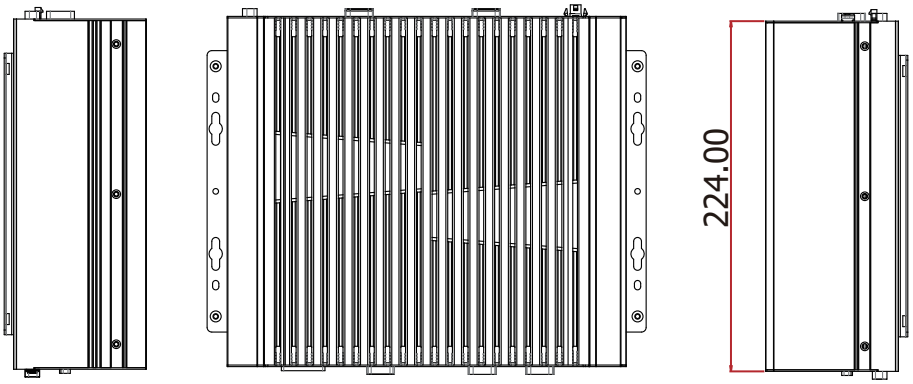


Rear View

DIMENSIONS

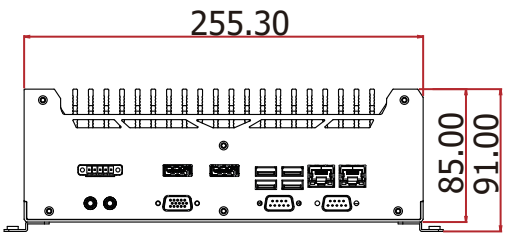


Front View



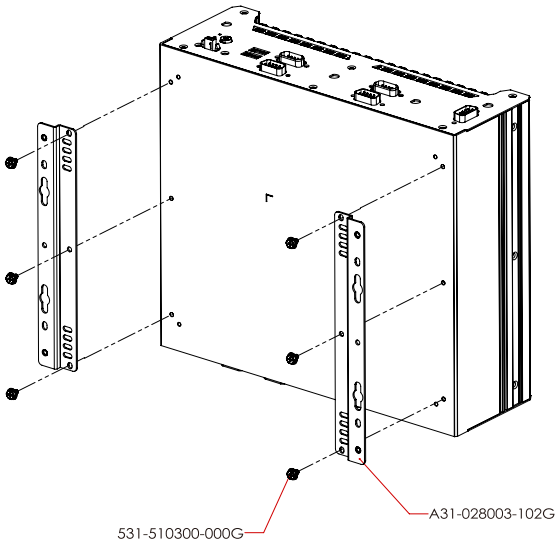
Left View

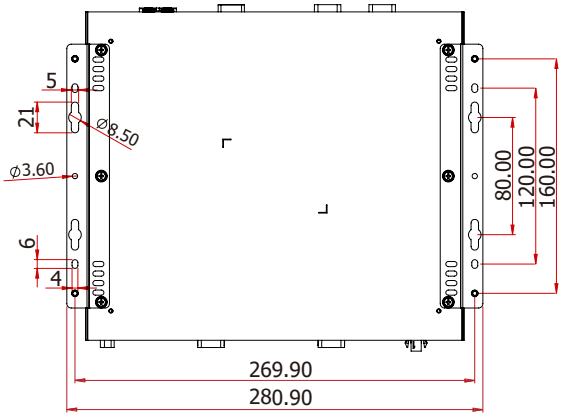
Right View



Rear View

WALL MOUNTING





SPECIFICATION

SYSTEM	**Processor**	8th/9th Generation Intel® CoreTM Processors, LGA 1151 Intel® Core™ i7-9700TE , Octa Cores, 12M Cache, up to 3.8 GHz, 35W Intel® Core™ i5-9500TE , Hexa Cores, 9M Cache, up to 3.6 GHz), 35W Intel® Core™ i3-9100TE, Quad Cores, 6M Cache, up to 3.2 GHz, 35W Intel® Core™ i7-8700T Processor, Hexa Core, 12M Cache, 2.4GHz (4GHz), 35W Intel® Core™ i5-8500T Processor, Hexa Core, 9M Cache, 2.1GHz (3.5GHz), 35W Intel® Core™ i3-8100T Processor, Quad Core, 6M Cache, 3.1GHz, 35W Intel® Pentium® Processor G5400T, Dual Core, 4M Cache, 3.1GHz, 35W Intel® Celeron® Processor G4900T, Dual Core, 2M Cache, 3.1GHz, 35W	
	Chipset	Intel® Q370/C246 Chipset	Intel® H310 Chipset
	Memory	Two 260-pin SODIMM up to 64GB	Dual Channel DDR4 2400/2666MHz
	BIOS	Insyde SPI 128Mbit	
GRAPHICS	**Controller**	Intel® HD Graphics	
	Feature	OpenGL up to 5.0, DirectX 11, OpenCL 2.1 HW Decode: HEVC/H.265, H.264, M/JPEG, MPEG2, VC1/WMV9, VP8 (8-bit), VP9 (10-bit) HW Encode: HEVC/H.265, M/JPEG, MPEG2, VP8	
	Display	Q370/C246: 1 x VGA 2 x HDMI/DP++ (auto detection) H310: 1 x VGA 1 x HDMI/DP++ (auto detection)	VGA: resolution up to 1920x1200 @ 60Hz HDMI: resolution up to 4096x2160 @ 30Hz DP++: resolution up to 4096x2304 @ 60Hz
	Dual/Triple Displays	Q370/C246: 1 x VGA + 2 x HDMI/DP++ (auto detection) H310: 1 x VGA + 1 x HDMI/DP++ (auto detection)	
STORAGE	**Internal**	2 x 2.5" SATA 3.0 Drive Bay support RAID 0/1/5/10	
EXPANSION	**Interface**	Q370/C246: 1 x M.2 2230 E key (PCIe/USB 2.0) 1 x M.2 2280 M key (PCIe x4 NVMe/SATA) 1 x M.2 3052 B key (PCIe) H310: 1 x M.2 2230 E key (PCIe/USB 2.0) 1 x M.2 2280 M key (SATA) 1 x M.2 3052 B key (PCIe)	
ETHERNET	**Controller**	Q370/C246: 1 x Intel® I211AT PCIe (10/100/1000Mbps) 1 x Intel® I219LM with iAMT11.0 PCIe (10/100/1000Mbps) (only Core i7/i5 supports iAMT) H310: 1 x Intel® I211AT PCIe (10/100/1000Mbps) 1 x Intel® I219V PCIe (10/100/1000Mbps)	
LED	**Indicators**	1 x Status LED 1 x HDD LED	
FRONT I/O	**Serial**	4 x RS-232/422/485 (DB-9)	
	USB	2 x USB 2.0 (type A)	
	DIO	8 bit (DB-9)	
	Buttons	1 x Power Button 1 x Reset Button	
	Wi-Fi Antenna	3 x Antenna Hole	
REAR I/O	**Ethernet**	2 x GbE (RJ-45)	
	Serial	2 x RS-232 (DB-9)	
	USB	4 x USB 3.1 (type A)	
	Display	Q370/C246: VGA + 2 x HDMI/DP++ (auto detection) H310: VGA + 1 x HDMI/DP++ (auto detection)	
	Audio	1 x Line-out 1 x Mic-in	
WATCHDOG TIMER	**Output & Interval**	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	**TPM**	TPM 1.2 or 2.0 (optional)	
POWER	**Type**	Wide Range 9~36V	
	Connector	3-pole Terminal Block	3-pin Power Extension Switch Connector
OS SUPPORT		Windows 10 IoT Enterprise 64 Bit	Linux (available upon request)
MECHANISM	**Construction**	Metal + Aluminum	
	Mounting	Wall Mount	
	Dimensions (W x H x D)	255.3 x 85 x 224mm	
	Weight	4.15 kg	
ENVIRONMENT	**Operating Temperature**	-20 to 70°C (SSD or mSATA)	
	Storage Temperature	-20 to 85°C	
	Relative Humidity	5 to 95% RH (non-condensing)	
STANDARDS AND CERTIFICATIONS	**Shock**	Half sine wave 3G, 11ms, 3 shock per axis	
	Vibration	IEC68-2-64	
	Certification	CE, FCC Class A	

ORDERING INFORMATION

Model Name	Part Number	Description
EC500-CS4061-Q	750-EC5003-000G	EC500-CS4061-Q:Fanless, CS263, Q370, 6 COM, 6 USB, 1 VGA, 2 HDMI/DP, 2 LAN, 1 Line-out, 1 Mic-in, DC9~36V, F/G SYSTEM RoHS
EC500-CS4061-H	750-EC5003-100G	EC500-CS4061-H:Fanless, CS263, H310, 6 COM, 4 USB, 1 VGA, 1 HDMI/DP, 2 LAN, 1 Line-out, 1 Mic-in, DC9~36V, F/G SYSTEM RoHS
EC500-CS4061-C	750-EC5003-200G	EC500-CS4061-C:Fanless, CS263, C246, 6 COM, 6 USB, 1 VGA, 2 HDMI/DP, 2 LAN, 1 Line-out, 1 Mic-in, DC9~36V, F/G SYSTEM RoHS

PACKING LIST

1 EC500-CS system unit
1 M.2 slot & mini-PCIe slot screws
1 terminal block 5 pole for DC input
1 cable with 2 wire stripped and tinned to DC jack

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