

WM120- CMS171/CMS173

Q470E

10th Gen Intel® Core™
Wallmount Desktop Box IPC



KEY FEATURES



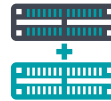
Industrial Grade Components

Supports long life cycle and rugged components



One-Side Rich I/O

2 Intel GbE, 8 USB 3.2 Gen2, 4 USB 3.2, 2 DP++



Multiple Expansions

1 PCIe x16, 1 M.2 M key, 1 M.2 E key, 1 M.2 B key



WiFi 6 Communication

Support WiFi 6 module

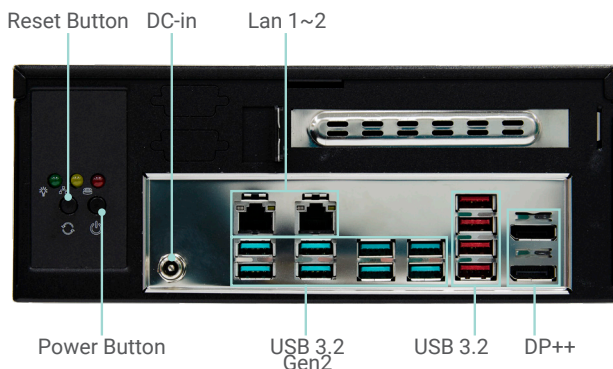


5G Communication

Support 5G-NR module



PANEL

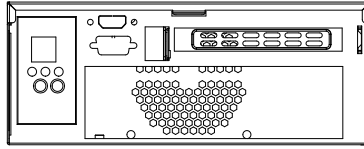


Front View

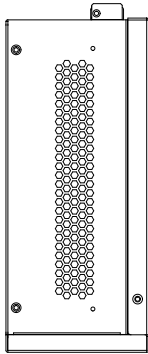


Rear View

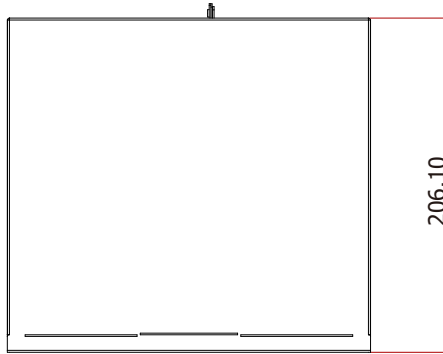
DIMENSIONS



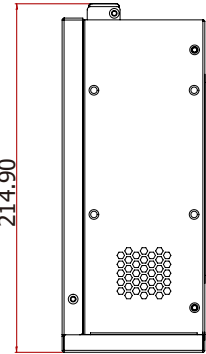
Front View



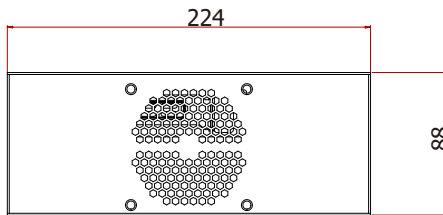
Left View



Top View



Right View



Rear View

SPECIFICATION

SYSTEM	Processor	10th Gen Intel® Xeon/Core™/Pentium/Celeron Processors, LGA 1200 Socket Intel® Core i7-10700E Processor (Core 8; Max speed 4.5GHz; TDP 65W) Intel® Core i7-10700TE Processor (Core 8; Max speed 4.4GHz; TDP 35W) Intel® Core i5-10500E Processor (Core 6; Max speed 4.2GHz; TDP 65W) Intel® Core i5-10500TE Processor (Core 6; Max speed 3.7GHz; TDP 35W) Intel® Core i3-10100E Processor (Core 4; Max speed 3.8GHz; TDP 65W) Intel® Core i3-10100TE Processor (Core 4; Max speed 3.6GHz; TDP 35W) Intel® Pentium G6400E Processor (Core 2; Max speed 3.8GHz; TDP 65W) Intel® Pentium G6400TE Processor (Core 2; Max speed 3.2GHz; TDP 35W) Intel® Celeron G5900E Processor (Core 2; Max speed 3.2GHz; TDP 65W) Intel® Celeron G5900TE Processor (Core 2; Max speed 3.0GHz; TDP 35W)	
	Chipset	Intel® Q470E Chipset	
	Memory	DDR4 32GB	
	BIOS	AMI SPI 128Mbit	
GRAPHICS	Controller	Intel® HD Gen 9 Graphics	
	Feature	OpenGL 4.5, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9 HW Encode: MPEG2, AVC/H264, JPEG, HEVC/H265, VP8, VP9	
	Display	2 x DP++	DP1.2: resolution up to 4096x2304@60Hz
	Dual Displays	2 x DP++	
STORAGE	Internal	1 x 2.5" SATA 3.0 1TB SSD 1 x M.2 2280 M Key (PCIe x4/SATA) (support NVMe and Intel® Optane memory)	
EXPANSION	Interface	1 x PCIe x16 (Gen3 x8signal, Option) 1 x M.2 2230 E key (PCIe/USB 2.0/Intel CNVi support) for WiFi6 1 x M.2 2280 M key (PCIe x4 Gen3 NVMe/SATA/Intel Optane Memory support) for SSD 1 x M.2 3042/3052 B key (PCIe/USB3.0) for 4G LTE/5G with SIM holder Note, 65W CPU config. does not support expansion card. 35W CPU config. supports one expansion card via riser card	
AUDIO	Audio Codec	Realtek ALC888	
ETHERNET	Controller	1 x Intel® I219LM PHY with iAMT12 and vPro (10/100/1000Mbps) (Core i7/i5 supports iAMT) 1 x Intel® I211AT PCIe (10/100/1000Mbps)	
LED	Indicators	1 x Power LED 1 x HDD LED	
I/O	Ethernet	2 x GbE (RJ-45)	
	Display	2 x DP++	
	USB	8 x USB 3.2 Gen2 4 x USB 3.2	
	Buttons	1 x Power button 1 x Reset button	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	TPM	Infineon TPM1.2/2.0 (optional)	
POWER	Type	Lockable DC jack, co-lay with 4pin connector WM120-CMS173 : 15V to 36VDC in WM120-CMS171 : 12VDC in	
	Connector	DC-in Jack	
	Consumption	Idle: i7-10700E 65W: 19V @ 0.98A (18.62W) Max: i7-10700E 65W: 19V @ 9.8A (186.2W)	
	Supply	CR2032 Coin Cell	
COOLING	Fan	1 x 8cm System Fan, with replaceable air filter	
OS SUPPORT	Microsofts	Windows 10 IoT Enterprise 2019	
ENVIRONMENT	Operating Temperature	-5° to 45° C	
	Storage Temperature	-30 to 60°C with RTC Battery; -40 to 85°C without RTC Battery	
	Relative Humidity	5 to 95% RH (non-condensing)	
MECHANICAL	Construction	Sheet Metal	
	Mounting	Wall mount	
	Dimensions(W x H x D)	224 x 88 x 206mm	
	Weight	2.47kg	
	Color	Black	
STANDARDS AND CERTIFICATIONS	Shock	Operating: 3G	Non-operating: 5G
	Vibration	Operating: 1G	Non-operating: 3G
	Package Drop	ISTA Project 1A	
	Certification	CE, FCC Class A, UL, RoHS (To be applied), UKCA	

ORDERING INFORMATION

Model Name	Part Number	Description
WM120-CMS171	750-WM1200-000G	WM120-CMS, CMS171-Q470, Mini-ITX Wallmount System, 12VDC in, F/G System RoHS
WM120-CMS173	750-WM1200-100G	WM120-CMS, CMS173-Q470, Mini-ITX Wallmount System, 15 to 36VDC in, F/G System RoHS

OPTIONAL ITEMS

1 COM port cable (Length: 250mm, 1 x COM port)	A81-015011-001G
USB 2.0 port cable (Length: 350/398mm)	A81-001066-016G
USB 3.1 Gen1 port cable (Length: 320mm)	A81-001052-023G
USB 3.2 Gen2 port cable (Length: 350mm)	A81-001075-017G
DP to HDMI Dongle	612-D2H13M-000G

PACKING LIST

1 WM120-CMS System Unit
1 CPU Cooler (65W)
1 SATA data with power cable (7 + 15P) (Length: 220mm)
4 HDD Screws
1 System Fan