

## E510A Series



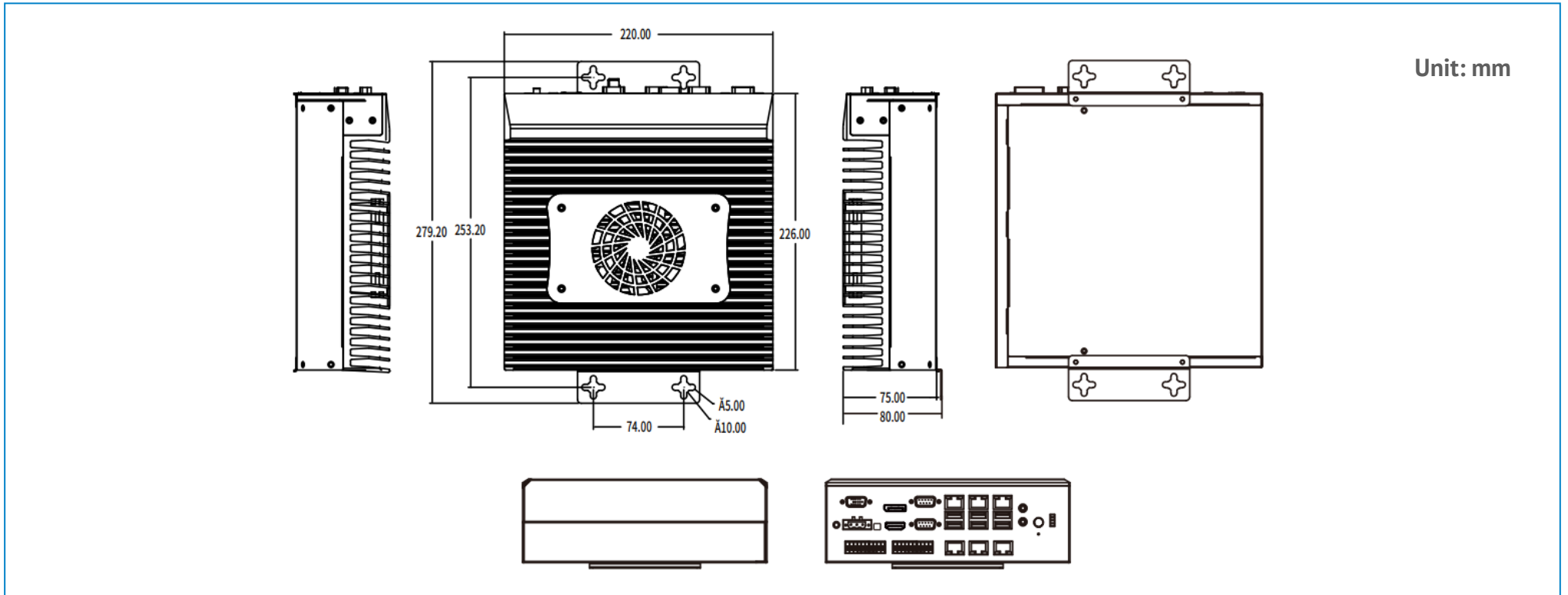
### Features

- Intel® 10th generation Core™ i3/ i5/ i7 Series CPU
- H420E/ Q470 Chipset
- Dual channel DDR4 up to 64GB
- 3 displays: DP, VGA and HDMI (Q470: 3 independent displays, H420E: 2 independent displays)
- 6 GbE LAN (5 x Intel i210, 1 x Intel i219)
- 1 RS-232/422/485, 1 RS-232
- 4 USB 3.0, 2 USB 2.0 (H420E) or 6 USB3.0 (Q470)
- 16 DI, 16 DO
- Support 4G/5G, Wi-Fi module expansion
- DC 24V
- 220 x 226 x 75 mm (L x W x H), support Wall-mounting
- Modular and cable-free design
- CE/FCC Class B, ESD 8KV/15KV
- Windows 10/11, centos 8, ubuntu 20.04/22.04

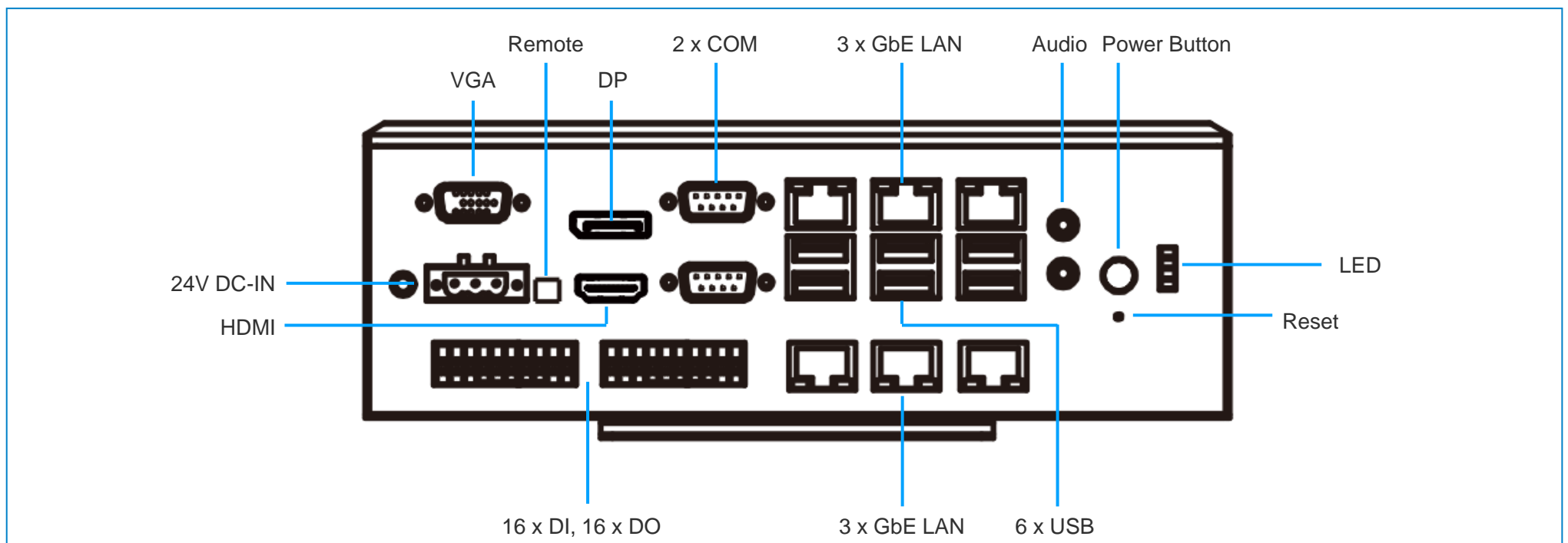
### Specifications

	Items	Descriptions
<b>Processor System</b>	CPU	Intel® 10th generation Core™ i3/ i5/ i7 Series CPU
	TDP	65W MAX
	Socket	LGA1200
	Chipset	H420E/Q470
	BIOS	AMI 128Mbit SPI Flash
<b>Memory</b>	Sockets	Dual channel 260-PIN DDR4 SO-DIMM
	Capacity	Max. 64GB
<b>Graphics</b>	Controller	Intel UHD Graphics supports DirectX12, OpenGL 4.5 and OpenCL 2.1
	Graphic Features	3D Acceleration: Direct3D 2015, OpenGL4.5, OpenCL2.1 HW Decode: HEVC/H.265 (8/10-bit), AVC/H.264, VP9(8/10-bit),VP8, MPEG2,MJPEG,VC-1 HW Encode: HEVC/H.265 (8/10-bit), AVC/H.264, VP9(8-bit),VP8, MPEG2,MJPEG
<b>External IO</b>	DP	1 x DP1.4 up to 4096x2304@60Hz
	HDMI	1 x HDMI2.0 up to 4096 x 2160@60 Hz
	VGA	1 x VGA up to 1920 x 1080@60Hz
	LAN	5 x Intel i210 GbE, 1 x Intel i219 GbE
	USB 3.0	4 (H420E)/ 6 (Q470)
	USB 2.0	2 (H420E)/ 0 (Q470)
	Serial Ports	1 x RS-232/422/485, 1 x RS-232
	DIO	16 x DI,16 x DO
	Audio	1 x Line out, 1 x Mic in
	Power Connector	1 x 3 PIN Phoenix terminal
<b>LED &amp; Switch</b>	Reset	1 x Reset Button
	Power Button	1 x Power Button
	LED	4 (SATA/DG/USER1/USER2)
<b>Expansion</b>	USB 2.0	1 x internal USB2.0 Type-A support dongle
	M.2 E-Key	1 x M.2 2230 support Wi-Fi (Q470: Support both CNVI & PCIe; H420E: Support only PCIe)
	M.2 B-Key	1 x M.2 3052 B-Key support 4G/5G
	M.2 B-Key	2 x M.2 2280 B-Key SATA3.0
	SIM	1 x Micro SIM
<b>Power Requirement</b>	Power Type	24V DC input
	Power management	AT/ATX
	Max. Consumption	150W
<b>Others</b>	Watchdog	65536 lever, 0~65535 sec
	TPM	TPM2.0 (Optional)
<b>Physical Characteristics</b>	Construction	Aluminium Alloy
	Mounting	Wall Mounting
	Dimensions	220 x 226 x 75mm (LxWxH)
	Weight	3.4 Kg
<b>Environment</b>	Operating Temperature	0~50°C (32~122°F)
	Storage Temperature	-40~85 °C (-40~185°F)
	Operating Humidity	95% @ 40 °C(Non-Condensing)
	Storage Humidity	95% @ 60 °C(Non-Condensing)
<b>Certification OS</b>	EMC	CE, FCC
	Operation system	Windows 10/11, centos 8, ubuntu 20.04/22.04

## Dimensions



## Interface



## Ordering Information

Part Number	CPU	TDP	Max. Frequency	Core	Thread	LAN	COM	USB3.0	USB2.0	DI	DO	DC-Input
E510A-01	i3-10100	65W	4.30 GHz	4	8	6	2	4 or 6	2 or 0	16	16	24V DC
E510A-02	i5-10400	65W	4.30 GHz	6	12	6	2	4 or 6	2 or 0	16	16	24V DC
E510A-03	i5-10500	65W	4.50 GHz	6	12	6	2	4 or 6	2 or 0	16	16	24V DC
E510A-04	i7-10700	65W	4.80 GHz	8	16	6	2	4 or 6	2 or 0	16	16	24V DC

## Optional Accessories

Part Number	Description
-	WiFi+BT module M.2 2230 WiFi6 2T2R AW-XB547NF
MF0A000000000016	5G module, M.2 RM500Q-GL Sub-6 GHz Worldwide (Excluding US)
MF0A000000000042	5G LTE module, M.2 RM520NGLAA-M20-SGASA, Worldwide
MF0A000000000036	4G LTE module, M.2 EM05CEFC-128-SGAS, China
MF0A000000000066	5G LTE module, M.2 RM500UCNVAA-D10-SNADA EMEA/Asia-Pacific

## OS Support

Part Number	Description
AA0A000000000002	Win10 IoT Ent 2019 LTSC Entry OEM
AA0A000000000003	Win10 IoT Ent 2019 LTSC MultiLang ESD OEI High End
AA0A000000000004	Win10 IoT Ent 2019 LTSC MultiLang ESD OEI Value
AA0A000000000005	Win10 IoT Ent 2021 LTSC Multilang ESD OEI Entry
A087	Win 11
A088	centos 8
A049	ubuntu 20.04
A053	ubuntu 22.04

## Packing List

Part Number	Description	Quantity
-	E510A Series Embedded PC	1
KE0A000000000004	Round head screws	4
ZM0A000000000020	Three-plug power cord	1
ZM0A000000000028	24V 5A power adaptor with 3 PIN Phoenix terminal (Below i7)	1
ZM0A000000000084	24V 7.5A Power adaptor with 3PIN terminal (i7)	1
MC0A000000000019	Wall-mounting kits (100*37*1mm)	1