



# OPS150-CS

H310

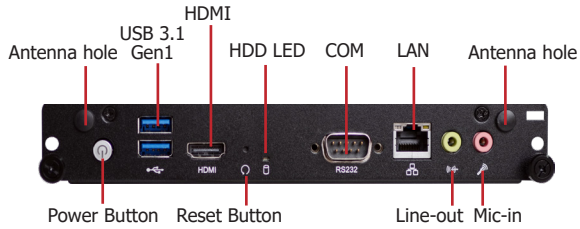


## ► Features

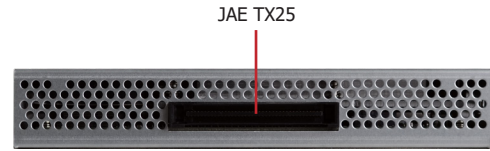
- Intel® Open Pluggable Specification (OPS compliance)
- 2 DDR4-2666 SO-DIMM max. up to 32 GB
- M.2 SSD, M.2 Wi-Fi/BT
- 1 HDMI supports 4K @ 60Hz resolution
- Easy installation and maintenance
- Rich I/O: 1 COM, 1GbE, 2 USB 3.1 Gen1, Audio



## ► Panel

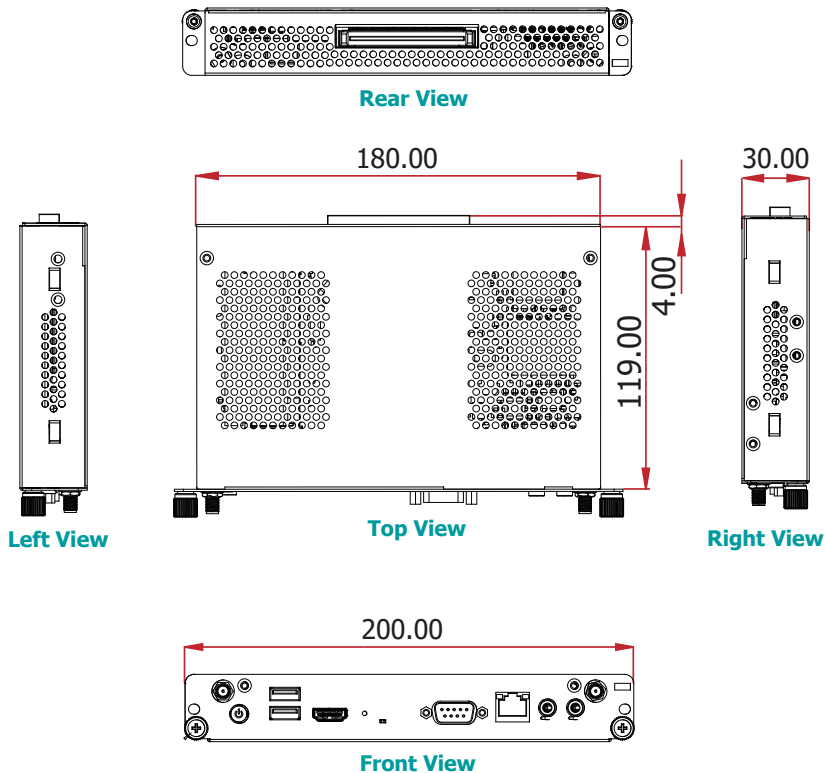


Front View



Rear View

## ► Dimensions



## ► Specifications

<b>SYSTEM</b>	<b>Processor</b>	8th/9th Generation Intel® Core™ Processors, LGA 1151 Socket Intel® Core™ i7-9700TE Processor, Octa Core, 12M Cache, 1.8GHz (3.8GHz), 35W Intel® Core™ i5-9500TE Processor, Hexa Core, 9M Cache, 2.2GHz (3.6GHz), 35W Intel® Core™ i3-9100TE Processor, Quad Core, 6M Cache, 2.2GHz (3.2GHz), 35W Intel® Core™ i7-8700T Processor, Hexa Core, 12M Cache, 2.4GHz (4.0GHz), 25W (35W) Intel® Core™ i5-8500T Processor, Hexa Core, 9M Cache, 2.1GHz (3.5GHz), 25W (35W) Intel® Core™ i3-8300T Processor, Quad Core, 8M Cache, 2.5GHz (3.2GHz), 25W (35W)
	<b>Chipset</b>	Intel® H310 Chipset
	<b>Memory</b>	Two 260-pin SODIMM up to 32GB Dual Channel DDR4 2666MHz
	<b>BIOS</b>	Insyde SPI 16Mbit
	<b>GRAPHICS</b>	<b>Controller</b>
	<b>Feature</b>	OpenGL 5.0, 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
	<b>Display</b>	1 x HDMI 1.4 via JAE connector interface support: 1 x HDMI 2.0 output + 1 x DP 1.2 output HDMI 1.4: resolution up to 3840x2160 @ 30Hz HDMI 2.0: resolution up to 3840x2160 @ 60Hz DP: resolution up to 4096x2160 @ 60Hz
	<b>Triple Displays</b>	2 x HDMI + 1 x DP
<b>EXPANSION</b>	<b>Interface</b>	1 x M.2 (2280 M Key) (PCIe NVMe x4/SATA 3.0) 1 x M.2 (2230 E Key) (PCIe/USB 2.0)
<b>ETHERNET</b>	<b>Controller</b>	Realtek RTL8111H
<b>LED</b>	<b>Indicators</b>	1 x Power LED 1 x HDD LED
<b>FRONT I/O</b>	<b>Ethernet</b>	1 x GbE (RJ-45)
	<b>Serial</b>	1 x RS-232 (DB-9)
	<b>USB</b>	2 x USB 3.1 Gen1
	<b>Display</b>	1 x HDMI 1.4 output
	<b>Audio</b>	1 x Line-out 1 x Mic-in
	<b>Buttons</b>	1 x Power Button 1 x Reset Button
	<b>Wi-Fi Antenna</b>	2 x Wi-Fi Module Antenna Hole
<b>REAR I/O</b>	<b>OPS Interface</b>	JAE TX25: 1 x HDMI 2.0 1 x DP 1.2 2 x USB 2.0 1 x USB 3.0 1 x UART 1 x Audio out 1 x 12~19V DC-in
<b>COOLING</b>	<b>Fan</b>	Active Cooling
<b>WATCHDOG TIMER</b>	<b>Output &amp; Interval</b>	System Reset, Programmable via Software from 1 to 255 Seconds
<b>OS SUPPORT</b>		Windows 10 Enterprise (64-bit) Linux
<b>MECHANISM</b>	<b>Construction</b>	Aluminum + SGCC
	<b>Dimensions</b>	200mm x 30mm x 119mm (W x H x D)
	<b>Weight</b>	2.64 kg
<b>ENVIRONMENT</b>	<b>Operating Temperature</b>	-5 to 45°C
	<b>Storage Temperature</b>	-40 to 85°C
	<b>Relative Humidity</b>	10 to 90% RH (non-condensing)
<b>STANDARDS AND CERTIFICATIONS</b>	<b>Certification</b>	CE/FCC/CCC

**► Ordering Information**

Model Name	Part Number	Description
<b>OPS150-CS</b>	750-OPS150-001G	OPS+ Computer, Intel H310, 2 USB 3.1 Gen1, 1 LAN, 1 COM, F/G System RoHS
<b>OPS150-CS</b>	750-OPS150-101G	OPS+ Computer, Intel i7-8700T, Intel H310, DDR4 8GB, SSD 128GB, F/G System, RoHS
<b>OPS150-CS</b>	TBD	OPS+ Computer, Intel i5-8500T, Intel H310, DDR4 8GB, SSD 128GB, F/G System, RoHS
<b>OPS150-CS</b>	750-OPS150-201G	OPS+ Computer, Intel i3-8100T, Intel H310, DDR4 4GB, SSD 128GB, F/G System RoHS

**► Optional Items**

Optional Items	Part Number	Description
<b>CPU</b>	143-101805-500G	Intel i7-9700TE, 1.8GHz ~ 3.8GHz, 8C8T, 12M cache, TDP 35W
	TBD	Intel i5-9500TE, 2.2GHz ~ 3.6GHz, 6C6T, 9M cache, TDP 35W
	143-10220E-500G	Intel i3-9100TE, 2.2GHz ~ 3.2GHz, 4C4T, 6M cache, TDP 35W
	143-10240A-500G	Intel i7-8700T, 2.4GHz ~ 4GHz, 6C12T, 12M cache, TDP 35W
	143-102104-501G	Intel i5-8500T, 2.1GHz ~ 3.5GHz, 6C6T, 9M cache, TDP 35W
	143-103105-500G	Intel i3-8100T, 3.1GHz, 4C4T, 6M cache, TDP 35W
	TBD	Intel i5-8400T, 1.7GHz ~ 3.3GHz, 6C6T, 9M cache, TDP 35W
<b>SSD</b>	638-712816-110G	M.2 2280, PCIe Gen3x4, M-Key, 128GB, 3D TLC, PE: 3K
	638-725608-100G	M.2 2280, PCIe Gen3x4, M-Key, 256GB, 3D TLC, PE: 3K
	TBD	M.2 2280, PCIe Gen3x8, M-Key, 512GB, 3D TLC, PE: 3K
	TBD	M.2 2280, PCIe Gen3x8, M-Key, 1TB, 3D TLC, PE: 3K
	638-712818-100G	M.2 2280 SSD, SATA3 B+M Key, 128GB, 3D TLC, PE: 3K
	638-725614-100G	M.2 2280 SSD, SATA3 B+M Key, 256GB, 3D TLC, PE: 3K
	TBD	M.2 2280 SSD, SATA3 B+M Key, 512GB, 3D TLC, PE: 3K
	638-701T01-100G	M.2 2280 SSD, SATA3 B+M Key, 1TB, 3D TLC, PE: 3K
<b>Wi-Fi + BT</b>	761-OPS150-001G	WiFi AC 3168.NG.WG 802.11abgn/ac & BT4.2, with 2 dipole antenna
<b>OS</b>	921-151310-000G	Win10 IoT Ent 2019 LTSC MultiLang High End EPKEA MUT-00013
	921-151320-000G	Win10 IoT Ent 2019 LTSC MultiLang High End PKEA MUT-00010
	921-151330-000G	Win10 IoT Ent 2019 LTSC MultiLang Value PKEA MUU-00004
	921-151340-000G	Win10 IoT Ent 2019 LTSC MultiLang Value EPKEA MUU-00005
<b>DIMM</b>	138-540002-106G	4GB DDR4 2666Mhz SO-DIMM 1Rx8 512Mx8 CL19 1.2V
	138-580004-102G	8GB DDR4 2666Mhz SO-DIMM 1Rx8 1Gx8 CL19 1.2V
	138-5G0163-102G	16GB DDR4 2666Mhz SO-DIMM 2Rx8 1Gx8 CL19 1.2V

**► Packing List**

• 1 OPS150-CS system unit
• 1 Quick Installation Guide
• 1 CD disk includes:
- Drivers / Manual