

4525

60,000

21,000,000

4,654,520	8,078,511
8,901,705	4,346,501
6,805,210	6,688,570



IV320-GH

Full IP65 Rugged MXM AI Edge Computer



- Full IP65 sealed enclosure for harsh, wet and dusty environments.
- Design to meet MIL-STD 810 Thermal, Vibration, Shock, Humidity
- Intel® 9th Gen Core™ i7-9850HE/HL 45W/25W (COM Express /Type6)
- 2 x SO-DIMM up to 64GB DDR4 (32GB per DIMM)
- Supports NVIDIA® RTX GeForce™ GTX 1050Ti
- Supports NVIDIA® Quadro MXM RTX A4500 (16GB GDDR6, 5888 CUDA)
- Rugged waterproof M12 connectors
- IP65 2 x 2.5" SATA SSD Easy Swap Tray
- Extended Operating Temperature -20 to +60°C
- Wide range DC-Input 12-36V DC-IN
- MIL-TSD 461 18V~36V (28VDC) by Options
- Dimensions : 246(L) x 313.5 (W) x 100 (H) mm

Specifications

System

CPU	Intel® 9th Coffee-Lake i7-9850HE 45W (2.7 GHz, up to 4.4 GHz, 6-cores) Intel® 9th Coffee-Lake i7-9850HL 25W (1.9 GHz, up to 4.1 GHz, 6-cores)
Memory type	Dual Channel DDR4 2666 MHz, 64GB (32GB per DIMM)
CHIPSET	Intel® QM370 Chipset
GPU	NVIDIA® GeForce™ GTX 1050Ti – (Pascal, 768 CUDA Cores, 60W) NVIDIA® Quadro RTX MXM A4500/A2000 (5888/2560 CUDA)
GRAPHICS	Intel® UHD Graphics 630/P630
Expansion Slot	2 x Full-size mini PCIe (1 with mSATA supported) -1 with mSATA/USB2.0/PCIeX1 support -1 with SIM/USB2.0/PCIeX1 support 1 x 2280 M key (SATA only)

Display

Display	2x DP outputs from COM Express®, 1x VGA from COM Express®
---------	--

Storage

SATA	2x 2.5" SSD, Hot Swappable SSD/HDD slot
M.2	1x 2280 M key (SATA only)

Ethernet

Ethernet	2x 10/100/1000 Ethernet Ports
----------	-------------------------------

Front I/O

X1	1x VGA , with M12 waterproof connector
X2,X3	(Each) 1x Giga LAN , M12 waterproof connector
X4	1x USB , with M12 waterproof connector
X5	1x USB , with M12 waterproof connector
X6	1x COM1/RS-232/422/485(Default RS-232), with M12 waterproof connector
X7	(reserved)
switch	1x IP65 power button
SSD	2x 2.5" Easy swap SSD Tray

Rear I/O

DC-in	DC-in (12~36V)
others	Antenna

Power

Power input 12 ~36V

Operating System

OS Windows® 10 64-bit / Linux (support by request)

Physical

Dimension 250(W) x 325 (L) x 100 (H)mm

Weight (TBD)

Chassis Aluminum Ally

Heatsink Heatsink Aluminum Alloy, Corrosion Resistant

Environmental

Green Product RoHS, WEEE compliance

Operating Temp. -20 to 55°C

Storage Temp. -40 to 85°C

Relative Humidity 5% to 95%, non-condensing

MIL-STD-810 Specifications (Operating)

Method 502.5 Procedure 2 Low Temperature -20°C, 4 hours, ±3°C

Method 501.5 Procedure 2 High Temperature +55°C, 4 hours, ±3°C

Method 507.5 Humidity 85%-95% RH without condensation, 24 hours/ cycle, conduct 10 cycles.

Method 514.6 Vibration 5-500Hz, Vertical 2.20Grms, 40mins x 3axis.

Method 516.6 Shock 20 Grms, 11ms, 3 axes.

MIL-STD-810 Specifications (None-Operating)

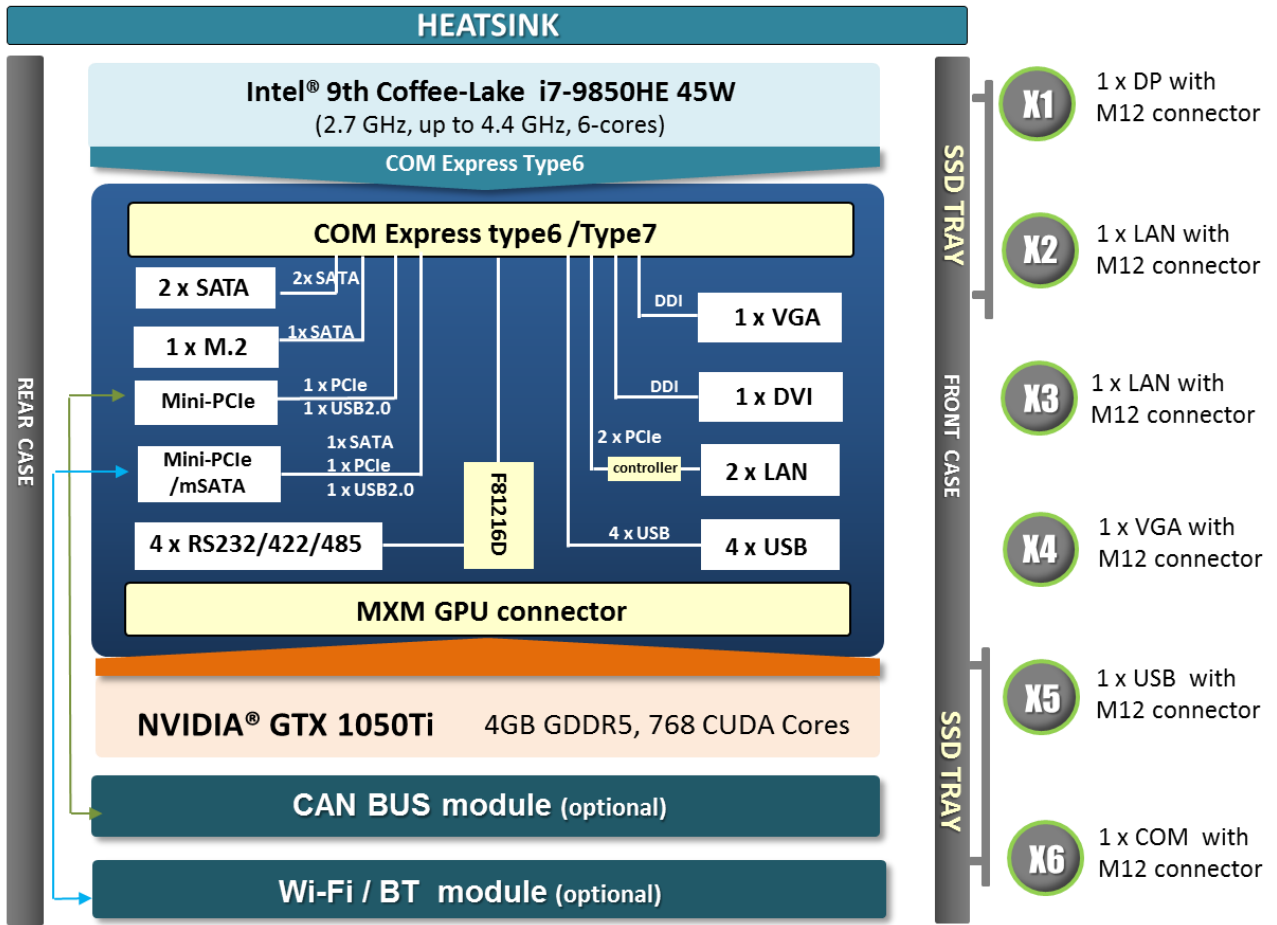
Method 502.5 Procedure 1 Low Temp. Storage 33°C, 4 hours, change rate: ≤ 20°C/ Hour
-15°C, 72hours (By request)

Method 501.5 Procedure 1 High Temp. Storage +71°C, 4 hours, change rate: ≤ 20°C/ Hour
+63°C, 240 hours (By request)

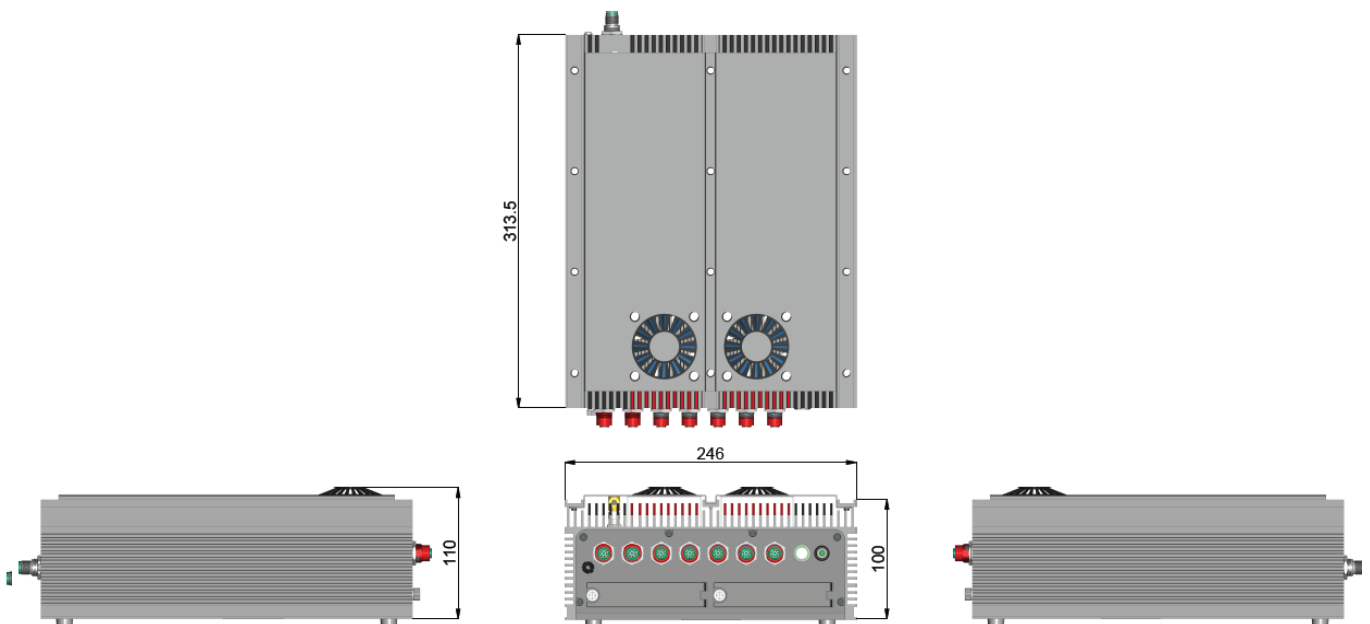
Method 514.6 Vibration 5-500Hz, Vertical 2.20Grms, 40mins x 3axis.

Method 516.6 Shock 20 Grms, 11ms, 3 axes.

BLOCK DIAGRAM



Dimensions



Ordering Information

Model	IV320-CHE-A45	IV320-CHE-M10	IV320-CHL-A20	IV320-CHL-M10
CPU	i7-9850HE	I7-9850HE	i7-9850HL	I7-9850HL
GPU	MXM A4500	MXM G1050Ti	MXM A2000	MXM G1050Ti
Memory	DDR4 Up to 64GB			
Storage	2x 2.5" SATA III SSD			
I/O				
USB	2x USB3.0			
LAN	2x GbE LAN			
COM	1x RS232/422/485			
DP	1x VGA/DP			
Power	9V~36V DC-IN			