



# IV320-R3-n10G

IP66 TACTICAL MARITIME EDGE COMPUTER

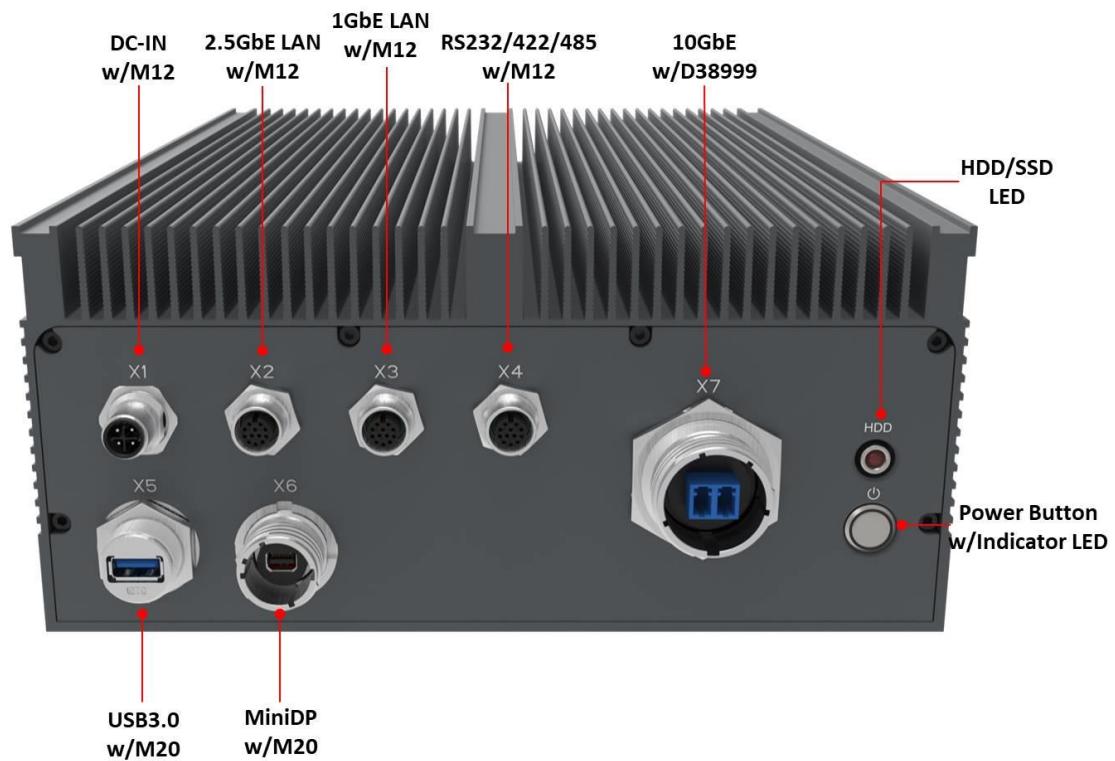


13<sup>th</sup>  
Raptor lake

14<sup>th</sup>  
Raptor Lake Refresh

- AI Optimized IP66 Rugged Computer
- Tactical Autonomy Node
- Enabling Persistent Maritime ISR with Autonomous, Coordinated USVs
- MIL-STD 810, Thermal, Vibration, Shock
- Support Intel® 14/13th Gen Raptor Lake-R/S, Core i9/i7
- Up to 64GB DDR4 3200 MHz SO-DIMM, non-ECC
- Rugged waterproof D38999/M20/M12 connectors
- 3 x LAN(10GbE/2.5GbE/1GbE), 1 x COM, 1 x miniDP, 1 x USB3.0
- Extended Operating Temperature -20°C to +60°C

## Appearance



# Specifications

## SYSTEM

CPU	Intel® 14th Raptor Lake-R Core i9-14900T, 24C(8P+16E), 32T, 1.1/5.5GHz, 36M Cache, TDP 35W(Turob mode 106W) Intel® 13th Raptor Lake Core i9-13900TE, 24C(8P+16E), 32T, 1.0/5.0GHz, 36M Cache, TDP 35W
Memory type	Up to 64GB DDR4 3200 MHz SO-DIMM, non-ECC
Chipset	Intel® Q670E/R680E Chipset
Expansion Slot	1 x PCIe 4.0 x 16 1 x M.2 2242/2280 M-Key PCIe 3.0 x 4

## STORAGE

SATA	2 x 2.5" SSD SATAIII Internal
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## TPM

TPM	Onboard TPM2.0
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## FRONT I/O

X1	1 x DC-IN w/M12 waterproof connector
X2	1 x 2.5Giga LAN w/M12 waterproof connector
X3	1 x 2.5Giga LAN w/M12 waterproof connector
X4	1 x RS232/422/485 w/M12 waterproof connector
X5	1 x USB3.0, with M20 waterproof connector
X6	1 x miniDP w/M20 waterproof connector
X7	1 x 10Giga LAN w/D38999 waterproof connector
SSD LED	1 x SSD LED
Switch	1 x IP66 power button

## REAR I/O

Others	Antenna(Option)
GND	1 x GND

## POWER REQUIREMENT

Power Input	18V~36V DC-IN
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## OPERATING SYSTEM

Operating System	Windows® 10 IoT Enterprise 2021 LTSC (64-bit, 21H2) Windows® 11 IoT Enterprise 24H2 LTSC (64-bit) Linux (Support by request)
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### PHYSICAL & ENVIRONMENT

Dimension	250 x 325 x 100 mm (W x L x H)
Chassis	Aluminum Alloy
Heatsink	Heatsink Aluminum Alloy, Corrosion Resistant
Fan Kit	W/GPU SKU
Green Product	RoHS, WEEE design to meet
EMC	EMC design to meet
Operating Temp.	-20°C to +60°C
Storage Temp.	-40°C to +85°C
Relative Humidity	5% to 95%, non-condensing
MIL-STD-810 (Design To Meet)	<p>MILS-STD-810 Design to meet :</p> <p>Method 501, Operational Temperature, high / Procedure II: +50°C, two-hour dwell, four cycles</p> <p>Method 501, Storage Temperature, high / Procedure I: +70°C, two-hour dwell, four cycles</p> <p>Method 502, Operational Temperature, low / Procedure II: -20°C, two-hour dwell, four cycles</p> <p>Method 502, Storage Temperature, low / Procedure I: -40°C, two-hour dwell, four cycles</p> <p>Method 514, Vibration / Category 24/Non-Operating (Category 20 &amp; 24, Vibration)</p> <p>Method 514, Vibration / Category 20/Operating (Category 20 &amp; 24, Vibration)</p> <p>Method 516, Shock / Procedure V Non-Operating (Mechanical Shock)</p> <p>Method 516, Shock / Procedure I Operating (Mechanical Shock)</p>

## Ordering Information

<b>Model</b>	<b>IV320-RS-X</b>	<b>IV320-RS-X10G</b>	<b>IV320-RS-F</b>	<b>IV320-RS-F10G</b>
<b>CPU</b>		i9-14900T i9-13900TE		
<b>GPU</b>	N/A	N/A	RTX4000 SFF Ada RTX A2000	
<b>Memory</b>	DDR5 Up to 64GB	DDR4 Up to 64GB	DDR5 Up to 64GB	DDR4 Up to 64GB
<b>LAN</b>	2 x 2.5GbE	1 x 10GbE 1 x 2.5GbE 1 x 1GbE	2 x 2.5GbE	1 x 10GbE 1 x 2.5GbE 1 x 1GbE
<b>Display</b>		1 x MiniDP		
<b>USB</b>		1 x USB		
<b>COM</b>		1 x RS232/422/485		
<b>Power</b>		18~36V		

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