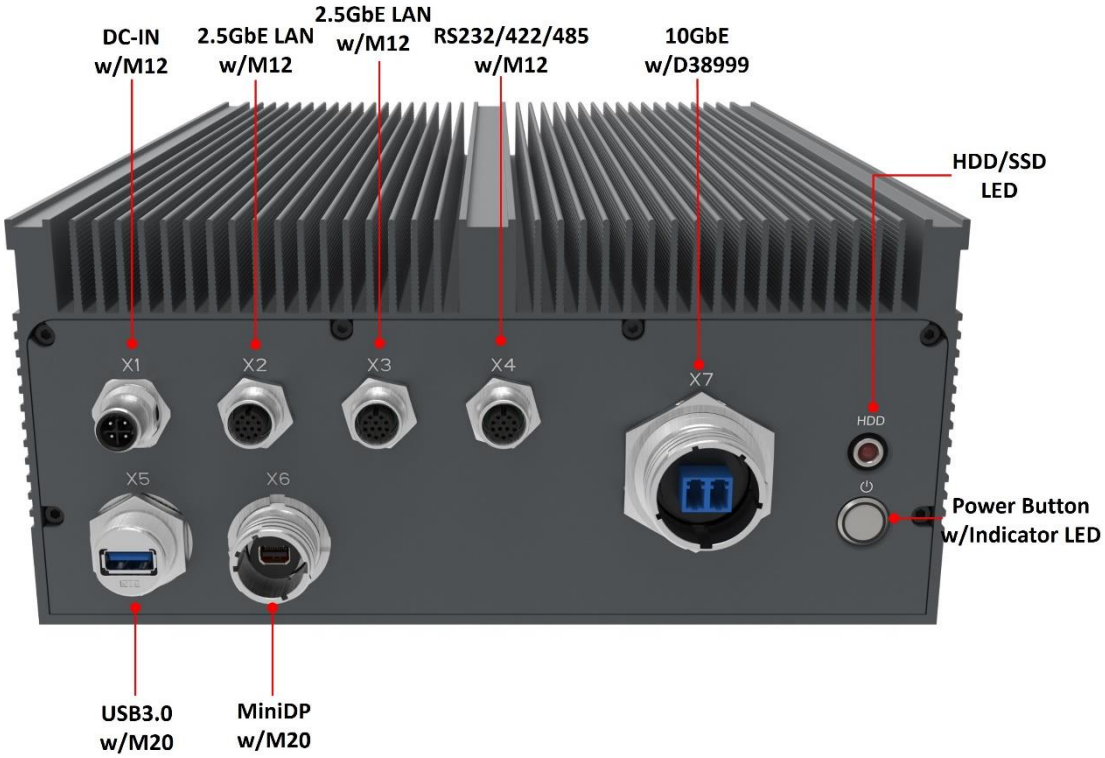
IV320-R5-X10G

IP66 Tactical Maritime Edge Computer

13th Raptor lake 14th 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 5200 MHz SO-DIMM, non-ECC
- Rugged waterproof D38999/M20/M12 connectors
- 3 x LAN(10GbE/2 x 2.5GbE), 1 x COM, 1 x miniDP, 1 x USB3.0
- Extended Operating Temperature -20°C to +60°C

Appearance


DC-IN
w/M12
2.5GbE LAN
w/M12
2.5GbE LAN
w/M12
RS232/422/485
w/M12
10GbE
w/D38999
HDD/SSD
LED
X1
X2
X3
X4
X7
HDD
X5
X6
Power Button
w/Indicator LED
USB3.0
w/M20
MiniDP
w/M20

Specifications

System	
CPU	Intel® 14th Raptor Lake-R Core i9-14900T, 24C (8P+16E), 32T, 1.1/5.5GHz, 36M Cache, TDP 35W (Turbo mode 106W) Intel® 13th Raptor Lake Core i9-13900TE, 24C (8P+16E), 32T, 1.0/5.0GHz, 36M Cache, TDP 35W Intel® 13th Raptor Lake Core i9-13900TE, 24C (8P+16E), 24T, 1.0/4.8GHz, 30M Cache, TDP 35W
Memory type	Up to 64GB DDR4 5200 MHz SO-DIMM, non-ECC
Chipset	Intel® Q670E 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
TPM	
TPM	Onboard TPM2.0
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	9V~48V DC-IN

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)

Physical & Environment

Dimension	250 x 325 x 100 mm (W x L x H)
Chassis	Aluminum Ally
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)	MILS-STD-810 Design to meet : Method 501, Operational Temperature, high / Procedure II: +50°C, two-hour dwell, four cycles Method 501, Storage Temperature, high / Procedure I: +70°C, two-hour dwell, four cycles Method 502, Operational Temperature, low / Procedure II: -20°C, two-hour dwell, four cycles Method 502, Storage Temperature, low / Procedure I: -40°C, two-hour dwell, four cycles Method 514, Vibration / Category 24/Non-Operating (Category 20 & 24, Vibration) Method 514, Vibration / Category 20/Operating (Category 20 & 24, Vibration) Method 516, Shock / Procedure V Non-Operating (Mechanical Shock) Method 516, Shock / Procedure I Operating (Mechanical Shock)

Ordering Information

Model	IV320-RS-X	IV320-RS-X10G	IV320-RS-F	IV320-RS-F10G
CPU	i9-14900T i9-13900TE i7-13700TE			
GPU	N/A	N/A	RTX4000 SFF Ada NVIDIA L4	
Memory	DDR5 Up to 64GB			
LAN	2 x 2.5GbE			
Display	1 x MiniDP			
USB	1 x USB			
COM	1 x RS232/422/485			
Power	18~36V			

This datasheet is for marketing purposes only and does not constitute a warranty. All specifications, dimensions, and data are subject to change without notice. For the latest specifications and updates, please contact your 7STARLAKE representatives.