



LAND



SEA



AIR

IV320-RS-F100

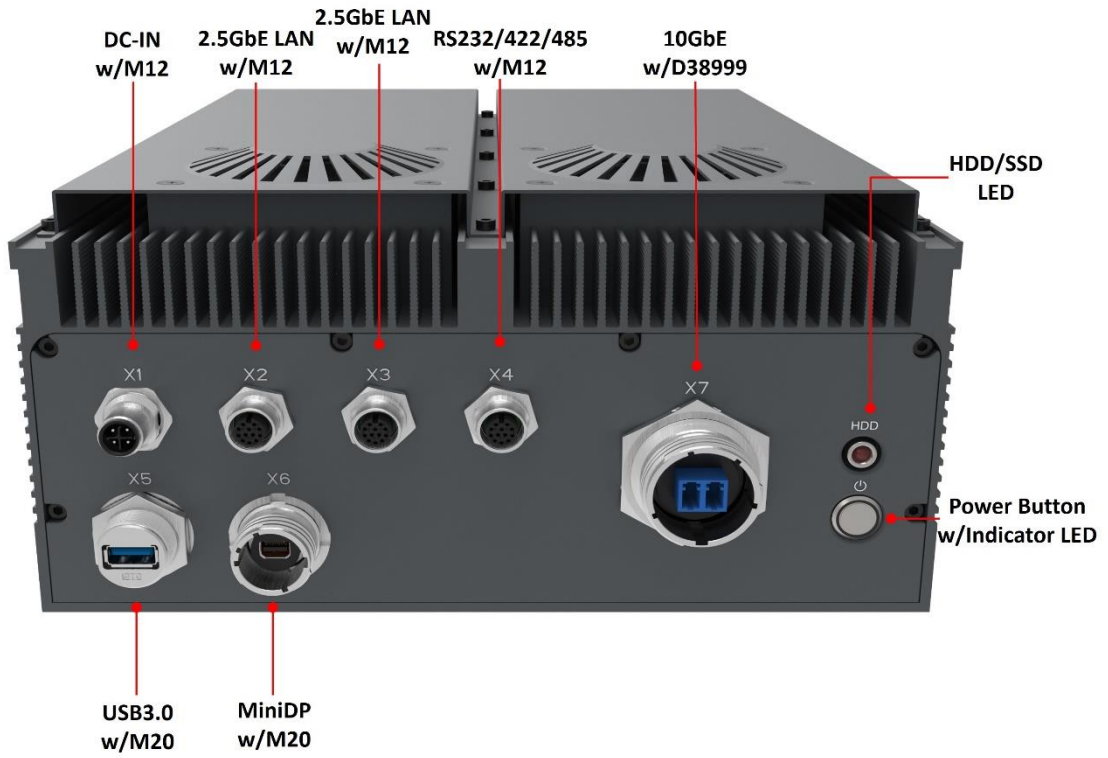
IP66 TACTICAL MARITIME EDGE GPU
COMPUTER



- AI Optimized IP66 Rugged GPU Computer
- Enabling Persistent Maritime ISR with Autonomous, Coordinated USVs
- Support Intel® 14/13th Gen. Raptor Lake-R/S, Core i9/i7
- Up to 64GB DDR4 5200 MHz SO-DIMM, non-ECC
- Support NVIDIA® RTX 4000 SFF Ada (20GB GDDR6, 6,144 CUDA); NVIDIA L4 (24GB GDDR6, 7,424 CUDA) w/Fan Kit
- 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
- MIL-STD-810 Anti Vibration, Shock



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 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/R680E Chipset
GPU Option	NVIDIA® RTX 4000 SFF Ada NVIDIA® L4
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(Optional)
GND	1 x GND

POWER REQUIREMENT

Power Input 18V~36V 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 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)

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	DDR4 Up to 64GB	DDR5 Up to 64GB	DDR4 Up to 64GB
LAN	2 x 2.5GbE	1 x 10GbE 2 x 2.5GbE	2 x 2.5GbE	1 x 10GbE 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.