STAR LAKE

LAND

SEA

AIR

IV320-RS-F

Full IP65 AI Edge Computer

MIL-STD 810 | 13th Raptor lake | 14th Raptor Lake Refresh
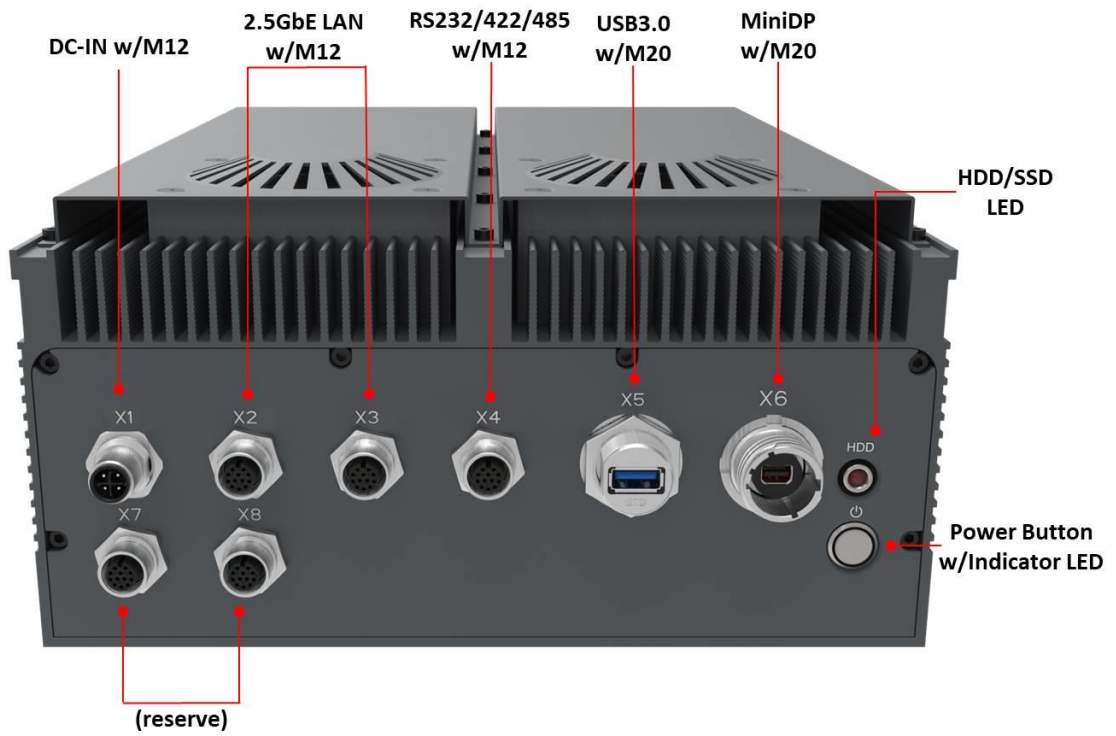
- AI Optimized IP65 Rugged GPU Computer

- Full IP65 sealed enclosure for harsh, wet and dusty environments.

- Support Intel® 14/13th Gen. Raptor Lake-R/S, Core i9/i7

- Up to 64GB DDR5 5200 MHz SO-DIMM, non-ECC and ECC

- Support NVIDIA® RTX 4000 SFF Ada (20GB GDDR6, 6,144 CUDA); RTX A2000 (12GB GDDR6, 3,328 CUDA) w/Fan Kit

- Rugged waterproof M20/M12 connectors

- 2 x LAN(2.5GbE) ; 1 x COM ; 1 x miniDP ; 1 x USB3.0

- Extended Operating Temperature -20℃ to +60℃

- MIL-STD-810 Anti Vibration, Shock design to meet

Appearance

DC-IN w/M12

2.5GbE LAN w/M12

RS232/422/485 w/M12

USB3.0 w/M20

MiniDP w/M20

HDD/SSD LED

X1 X2 X3 X4 X5 X6

HDD

X7 X8

Power Button w/Indicator LED

(reserve)

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 DDR5 5200 MHz SO-DIMM, non-ECC and ECC
Chipset	Intel® Q670E/R680E Chipset
GPU Option	NVIDIA® RTX 4000 SFF Ada NVIDIA® RTX A1000
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	(reserve)
X8	(reserve)
SSD LED	1 x SSD LED
Switch	1 x IP65 power button

Rear I/O

Others	Antenna(Option)
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 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-FR40	IV320-RS-FR20
CPU	i9-14900T i9-13900TE	
GPU	RTX 4000 SFF Ada	RTX A2000
Memory	SO-DIMM DDR5 Up to 64GB	
Display	1 x miniDP w/M20 waterproof connector	
USB	1 x USB3.0 w/M20 waterproof connector	
LAN	2 x 2.5GbE w/M12 waterproof connector	
COM	1 x RS232/422/485 w/M12 waterproof connector	
Power	18~36V DC-IN w/M12 waterproof connector	

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.