

NRU-150-FT series

NVIDIA® Jetson Orin™ NX Edge AI platform for harsh environments

Features

- NVIDIA® Jetson Orin™ NX SoM
- 4x 2.5 GbE PoE+ or 6x USB 3.2 ports
- Full bandwidth interfaces for camera connectivity
- Up to 100 TOPS AI inference performance
- Flattop heat sink design for conduction-cooled use in the con cabinet.



NRU-150-FT series – Compact and fanless edge AI computer

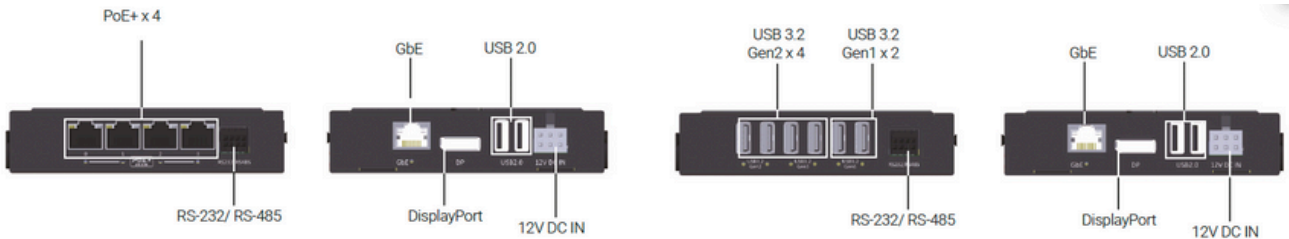
The NRU-150-FT series is a compact, fanless edge AI computer that utilizes the NVIDIA® Jetson Orin™ NX and provides an independent 2.5GbE PoE+ or USB 3 camera connection. With a performance of up to 100 TOPS inference power at 25W power consumption, the series is suitable for a wide range of video inputs at the edge.

Special flattop heatsink design and versatile camera connections

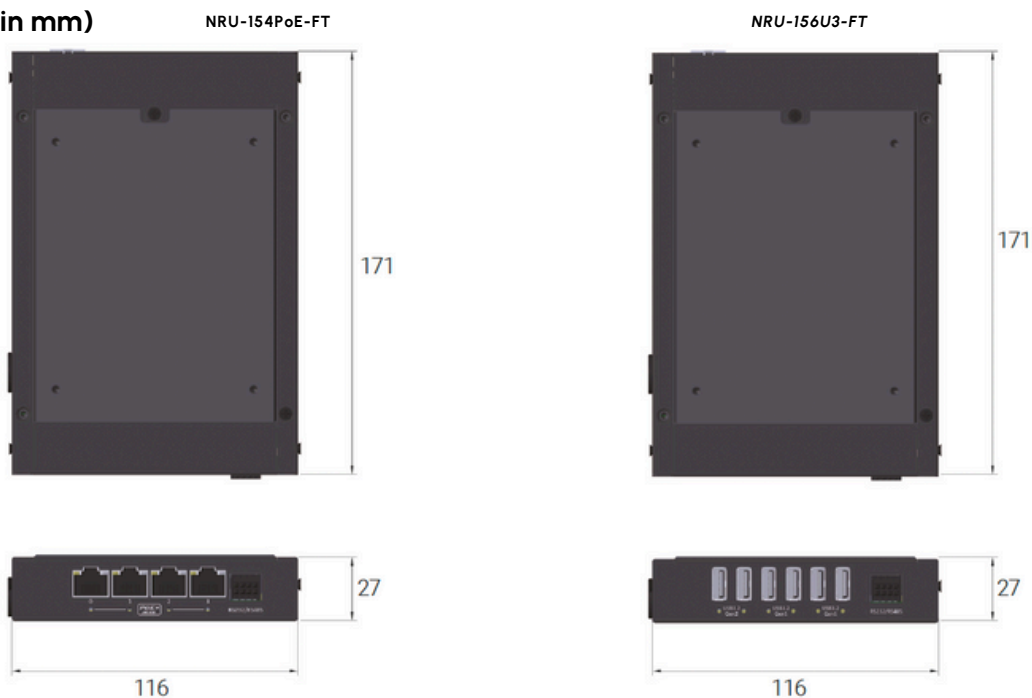
The special flattop heat sink design allows the NRU-150-FT series to be mounted in a closed housing, dissipating heat to the outside. This makes it ideal for applications in dusty, humid or other harsh environments.

The NRU-154PoE-FT offers 4x 2.5GbE PoE+ ports for IP cameras and industrial GigE cameras, while the NRU-156U3-FT offers 6x USB 3.2 ports for industrial USB3 cameras. Each port provides full bandwidth for versatile video inputs for edge inspection.

Appearance



Dimension (in mm)



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	NRU-154PoE-FT	NRU-156U3-FT
SYSTEM		
CPU	NVIDIA® Jetson Orin™ NX system-on-module (SoM), comprising NVIDIA® Ampere GPU and ARM Cortex CPU	
RAM	8GB/16GB LPDDR5 @ 3200 MHz on SoM	
Expansion	1x M.2 2242 M key socket (PCIe Gen4 x2) for NVMe SSD	
INTERFACE		
Ethernet	Port 1: Gigabit Ethernet Port 2 to Port 5: 2.5 Gigabit Ethernet ports by Intel® I225 with screw-lock[1] IEEE 802.3at PoE+ PSE for Port 2 to Port 5, 50W total power budget	1x Gigabit-Ethernet
USB	2x USB 2.0 ports 1x Micro USB (OTG)	2x USB 3.2 Gen2 (10 Gbps) ports with screw-lock 4x USB 3.2 Gen1 (5 Gbps) ports with screw-lock 2x USB 2.0 ports 1x Micro USB (OTG)
COM	1x RS-232 port 1x isolierter RS-485 port	
Video	1x DisplayPort, supporting 3840x2160 at 60Hz	
ENVIRONMENTAL		
Cooling	Fanless	
Power Supply	12V DC power input	
Operating Temperature	-20°C to 60°C (20W TDP mode) fanless operating temperature while mounted on 50 x 50 x 0.2 cm metallic plate [2]/ [3]	
Storage Temperature	-40° ~ 85°C	
Vibration / Shock Resistance	Vibration: Operating, MIL-STD-810H, Method 514.8, Category 4 Stoß: Operating, MIL-STD-810H, Method 516.8, Procedure I	
Humidity	10 ~ 90% , non-condensing	
Dimensions	116 mm (W) x 171 mm (D) x 27 mm (H) (without wall-mount bracket)	
Weight	1 kg	
Mounting	Wall-mount (standard)	
Certifications	CE/FCC Class A, according to EN 55032 & EN 55035	

[1] Due to I225-IT specification limitation, for systems running 2.5G Ethernet link speeds, please limit the operating temperature to 60°C.

[2] For sub-zero and over 60°C operating temperature, a wide temperature NVMe is required.

[3] Without heat conduction from the flattop heatsink, the fanless operating temperature is -20°C to 45°C (20W TDP mode)

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Ordering Information	NRU-150FT series
MODEL NO.	
NRU-154-JON8	NVIDIA® Jetson Orin™ NX Edge AI Computer with 4x PoE+ GbE, flattop heatsink, Jetson Orin NX (8GB), and 128GB NVMe with pre-installed system image
NRU-154-JONI6	NVIDIA® Jetson Orin™ NX Edge AI Computer with 4x PoE+ GbE, flattop heatsink, Jetson Orin NX (16GB), and 128GB NVMe with pre-installed system image
NRU-156-JON8	NVIDIA® Jetson Orin™ NX Edge AI Computer with 6x USB 3.2, flattop heatsink, Jetson Orin NX (8GB), and 128GB NVMe with pre-installed system image
NRU-156-JONI6	NVIDIA® Jetson Orin™ NX Edge AI Computer with 6x USB 3.2, flattop heatsink, Jetson Orin NX (16GB), and 128GB NVMe with pre-installed system image
OPTIONAL ACCESSORIES	
PA-60W-OW	60W AC/ DC power adapter 12V/ 5A; cord end terminals for terminal block, operating temperature: -30°C to 60°C