



LAND



SEA



AIR

TV200

1.5U Half Nvidia Orin Military Computer



- Ultra Short Depth 1.5U Half Rugged Computer
- NVIDIA Jetson Orin NX 8G/16G LPDDR5 DRAM
- 2x GLAN+1x CAN+1x RS232/422/485+4x DIO
- 4x GMSL2 (Options)
- 4x 3G-SDI (Options)
- IP65 Classified
- MIL-STD-461 EMI Filter DC 18V~36V (Options)
- Size : 220x230x65mm (W)x(D)x(H)



Specifications

System

High performance Processor	Jetson Orin NX 16GB : 8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU Jetson Orin NX 8GB : 6-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU
GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores (Max. Frequency: 915MHz)
AI Performance	16GB type: Up to 100 (Sparse) INT8 TOPs and 50 (Dense) INT8 TOPs 8GB type: Up to 70 (Sparse) INT8 TOPs and 35 (Dense) INT8 TOPs
Memory Type	Jetson Orin NX 16GB: 2x 8GB 128-bit LPDDR5 DRAM Jetson Orin NX 8GB: 2x 4GB 128-bit LPDDR5 DRAM

Expansion Slot

Expansion Slot	1x WiFi Module (M.2 2230 E-KEY) 2x M.2 M key (2230 / 2280) Optional GMSL2 module with 4x FAKRA connector
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Display

Graphics Interfaces	1x HDMI 2.0 (max resolution 3840x2160)
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Storage

M.2	1x M.2 Key-M 2280(NVMe) slot (PCIex4) up to 8TB 1x M.2 Key-M 2230 slot (PCIex1) up to 1TB
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Ethernet

Controller	2x GLAN
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Front I/O

DC-IN	9V~28V
X1	2x LAN+1x CAN+1x RS232/422/485+4x DIO
X2	1x HDMI
X3	1x USB3.0
Button	1x Water Resistive Power Button with dual-color LED Backlight

Rear I/O (Options)

Antenna	2x Antenna holes for Wi-Fi 5/6 modules (PR-SMA ant.) 2x Antenna holes for LTE/5G module (SMA ant.) 1x Antenna hole for GNSS (RP-SMA ant.)
GMSL2	4x FAKRA SMB Plug Z-code, GMSL2 cameras

Video	4x 3G-SDI BNC
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Rear I/O

Ground Screw	1
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Power Requirement

Power Input	DC-9V to DC-28V
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Operating System

Operating System	Ubuntu 20.04 with JetPack5.1
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Physical

Dimension (W x D x H)	220 x 230 x 65 mm
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Weight	2Kg
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Chassis	Aluminum AL6061
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Heatsink	Aluminum Alloy, Corrosion Resistant.
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Finish	Anodic aluminum oxide (Color).
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Cooling	Natural Passive Convection/Conduction. No Moving Parts
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Ingress Protection	IP65
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Environmental

MIL-STD-461 (Options)	
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EMC	CE102 basic curve, 10kHz - 30 MHz RE102-4, (1.5 MHz) -30 MHz - 5 GHz RS103, 1.5 MHz - 5 GHz, 50 V/m equal for all frequencies
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Reliability	No Moving Parts; Passive Cooling. Designed & Manufactured using ISO 9001/2000 Certified Quality Program.
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Operating Temp.	-20 to 50°C (ambient with air flow)
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Storage Temp.	-40 to 85°C
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Relative Humidity	5% to 95%, non-condensing.
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Ordering Information

NV200-2L8

Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 8GB , 9V to 28V DC-IN, Extended Temp. -20 to 50°C

NV200-2L16

Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 16GB , 9V to 28V DC-IN, Extended Temp. -20 to 50°C

NV200-2LG16

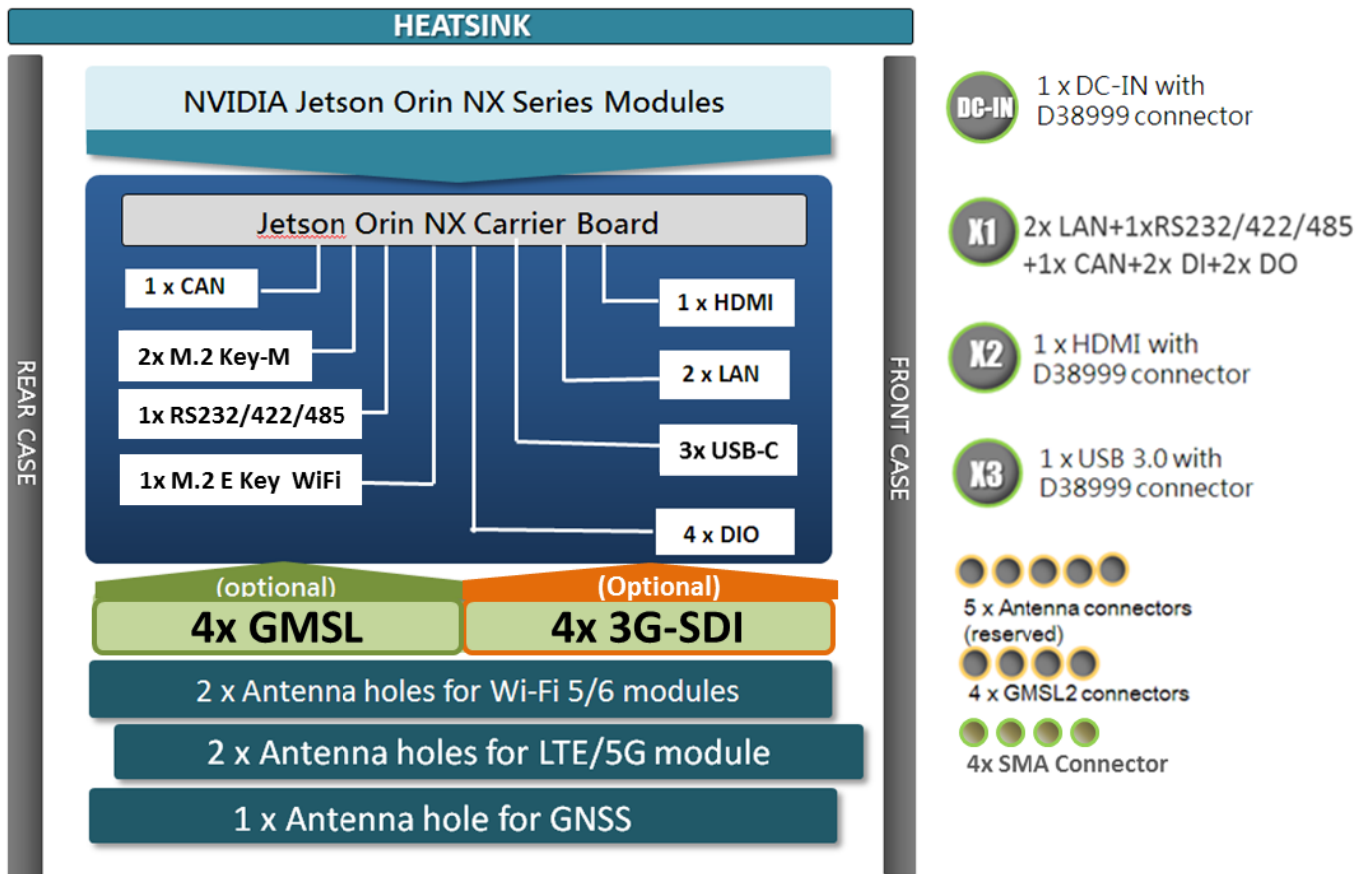
Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 16GB , 9V to 28V DC-IN, Extended Temp. -20 to 50°C

NV200-2LGS16

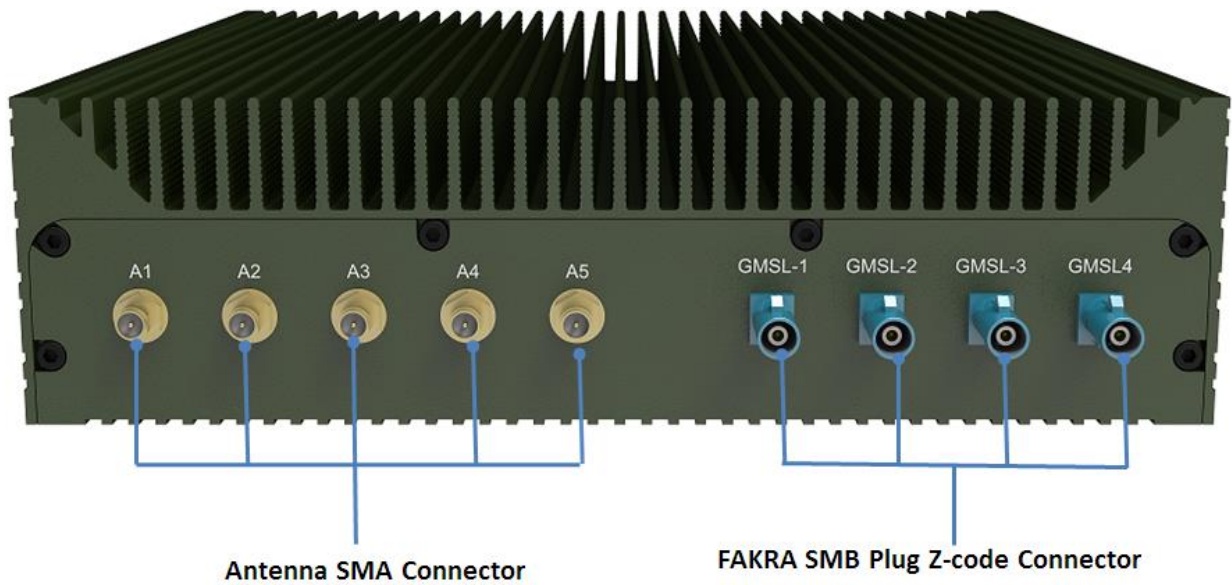
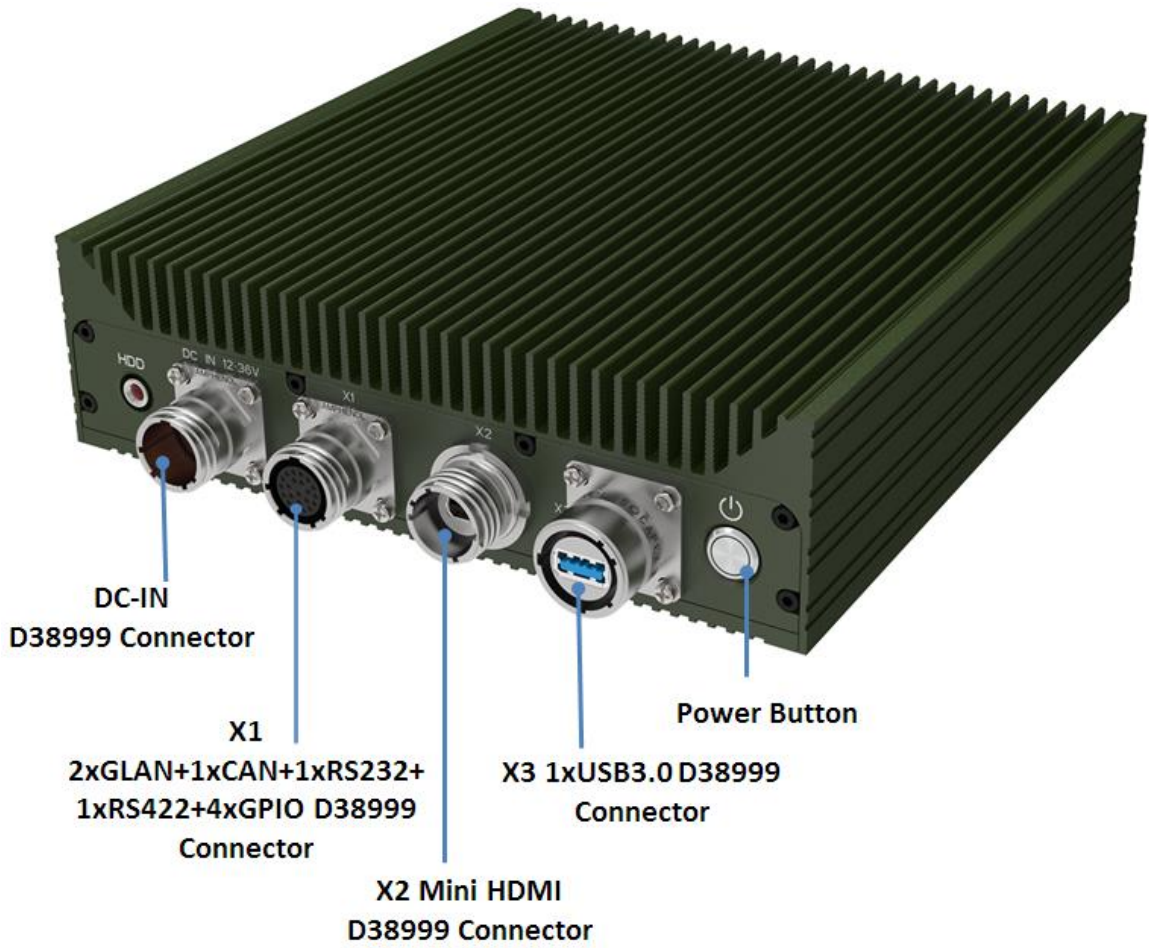
Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 16GB , 9V to 28V DC-IN, Extended Temp. -20 to 50°C

Model	NV200-2L8	NV200-2L16	NV200-2LG16	NV200-2LGS16
GPU	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 765 MHz	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 915 MHz	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 915 MHz	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 915 MHz
Memory	8GB	16GB	16GB	16GB
AI Performance	70 TOPs	100TOPs	100TOPs	100TOPs
CPU	six-core Arm® Cortex® A78AE v8.2 (64-bit) (4x 256KB L2 +2MB L3) + 4MB LLC	Eight-core Arm® Cortex® A78AE v8.2 (64-bit) (4x 256KB L2 +2MB L3) + 4MB LLC	Eight-core Arm® Cortex® A78AE v8.2 (64-bit) (4x 256KB L2 +2MB L3) + 4MB LLC	Eight-core Arm® Cortex® A78AE v8.2 (64-bit) (4x 256KB L2 +2MB L3) + 4MB LLC
Module total module power	10W 15W 20W	10W 15W 25W	10W 15W 25W	10W 15W 25W
Storage	1x M.2 2280 (up to 8TB)	1x M.2 2280 (up to 8TB)	1x M.2 2280 (up to 8TB)	N/A
	1x M.2 2230 (up to 2TB)	1x M.2 2230 (up to 2TB)	1x M.2 2230 (up to 2TB)	1x M.2 2230 (up to 2TB)
Front I/O				
LED	1x HDD/SSD Indicator light	1x HDD/SSD Indicator light	1x HDD/SSD Indicator light	1x HDD/SSD Indicator light
Power In	9-28VDC with D38999	9-28VDC with D38999	9-28VDC with D38999	9-28VDC with D38999
X1	2x GbE+1x RS232/422/485 +1x CAN+2x DI+2x DO	2x GbE+1x RS232/422/485 +1x CAN+2x DI+2x DO	2x GbE+1x RS232/422/485 +1x CAN+2x DI+2x DO	2x GbE+1x RS232/422/485 +1x CAN+2x DI+2x DO
X2	1x HDMI	1x HDMI	1x HDMI	1x HDMI
X3	1x USB3.0 Type-A or 1x USB3.1 Type-C (Option)	1x USB3.0 Type-A or 1x USB3.1 Type-C (Option)	1x USB3.0 Type-A or 1x USB3.1 Type-C (Option)	1x USB3.0 Type-A or 1x USB3.1 Type-C (Option)
Power Button	1x	1x	1x	1x
Rear I/O				
GMSL	N/A	N/A	4x	4x
3G-SDI	N/A	N/A	N/A	4x
Dimensions	220 x 230 x 65mm(WxDxH)	220 x 230 x 65mm(WxDxH)	220 x 230 x 65mm(WxDxH)	220 x 230 x 65mm(WxDxH)

Block Diagram



Appearance



Dimension

