NV200-

2U Half Nvidia Orin Military Computer

- Ultra Short Depth 2U Half Rugged Computer
- NVIDIA Jetson Orin NX 8G/16G LPDDR5 DRAM
- 2x GLAN+1x CAN+1x RS232/422/485+4x DIO
- 4x GMSL2 (Option)
- 4x 3G-SDI (Option)
- 2x USB3.1 Type-C(under Access Panel)
- IP65 Classified
- MIL-STD-461 EMI Filter DC 18V~32V (Option)
- Size : 220x300x88mm (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
GPU	NVIDIA Ampere GPU 1024 CUDA cores with 32 Tensor Cores (Max. Frequency: 915MHz
AI Performance	16GB type: Up to 100 (Sparse) INT8 TOPs and 50 (Dense) INT8 TOPs
Memory Type	Jetson Orin NX 16GB: 2x 8GB 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
Display	
Graphics Interfaces	1x HDMI 2.0 (max resolution 3840x2160)
Storage	
M.2	1x M.2 Key-M 2230 1TB SSD (PCIex1) (up to 2TB)
Ethernet	
Controller	2x GLAN
Front I/O	
Ground Screw	1
DC-IN	18V~32V
X1	2x GLAN
X2	1x CAN+1x RS232/422/485+4x DIO
X3	1x HDMI
Rear I/O	
Video	4x 3G-SDI BNC
GMSL2	2x2 Mini FAKRA SMB Plug Z-code, 4x GMSL(2) connectors
Access panel	
	1x Boot LED
	1x USB3.1 Type-C for Recovery
	2x USB3.1 Type-C

	1x Recovery Button
	1x Reset Button
Power Requirement	
Power Input	DC-18V to 32V
Operating System	
Operating System	Ubuntu 20.04 with JetPack5.1
Physical	
Dimension (W x D x H)	220 x 300 x 88 mm
Weight	3Kg
Chassis	Aluminum AL6061
Heatsink	Aluminum Alloy, Corrosion Resistant.
Finish	Anodic aluminum oxide (Color).
Cooling	Natural Passive Convection/Conduction. No Moving Parts
Ingress Protection	IP65
Environmental	
MIL-STD-461 (Option)	
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
Reliability	No Moving Parts; Passive Cooling. Designed & Manufactured using ISO 9001/2000 Certified Quality Program.
Operating Temp.	-20 to 50°C (ambient with air flow)
Storage Temp.	-40 to 85°C
Relative Humidity	5% to 95%, non-condensing.
Cable Kit	
Power cable	D38999 plug with 1.5M Power cable
X1 cable	D38999 plug with 1.5M 2x RJ45 Jack cable
X2 cable	D38999 plug with 1.5M 1x CAN+1x RS232/422/485+4x DIO wire cable
FAKRA cable	Mini Fakra A 2X2 Jack (IP)to fakra jack 1x1 1.5M cable

*All specifications and photos are subject to change without notice.

Ordering Information

NV200-2L8

Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 8GB , 9V to 36V 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 36V DC-IN, Extended Temp. -20 to 50°C

NV200-2LG16

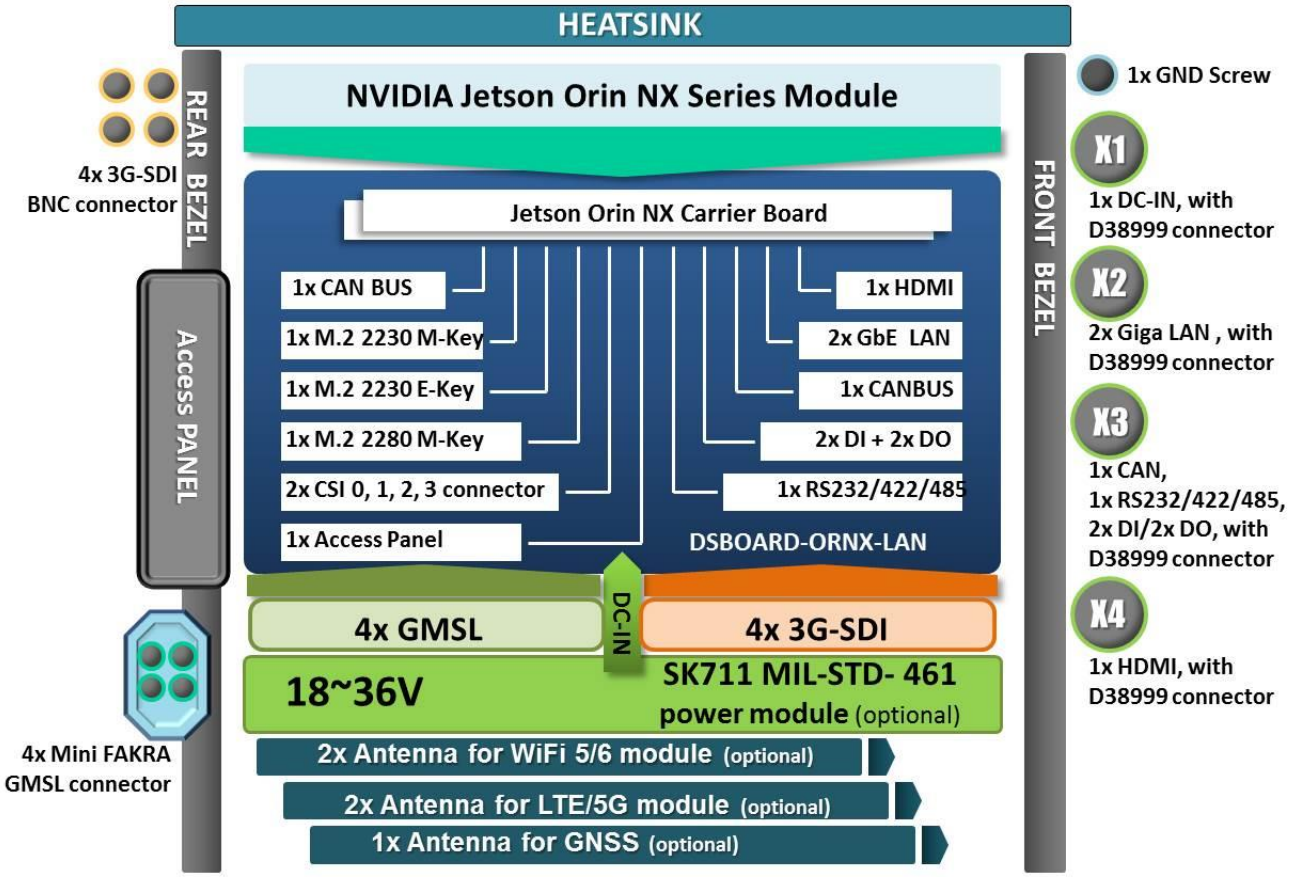
Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 16GB , 9V to 36V DC-IN, Extended Temp. -20 to 50°C

NV200-2LGS16

Ultra-Slim Rugged SFF 1U/2 Military Computer with Jetson Orin NX 16GB , 9V to 36V DC-IN, Extended Temp. -20 to 50°C

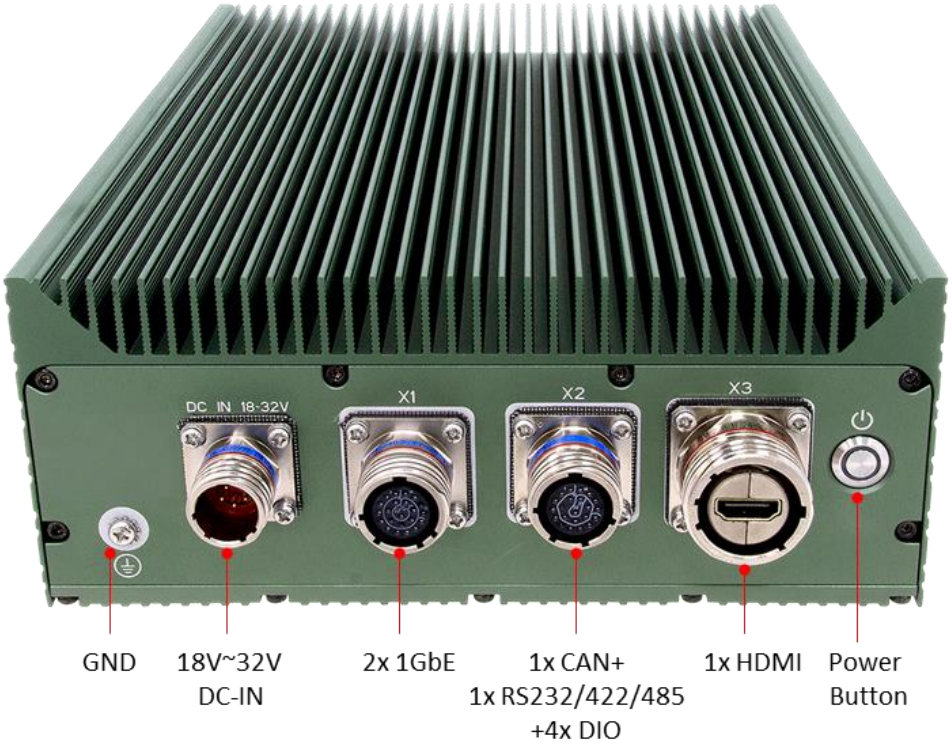
Model	NV200-2L8	NV200-2L16	NV200-2LG16	NV200-2LGS16
GPU	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 765 MHz	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 915 MHz	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 915 MHz	1024 NVIDIA® CUDA® cores with 32 Tensor cores, 915 MHz
Memory	8GB	16GB	16GB	16GB
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				
Power In	18V-32VDC with D38999	18V-32VDC with D38999	18V-32VDC with D38999	18V-32VDC with D38999
X1	2x GbE LAN	2x GbE LAN	2x GbE LAN	2x GbE LAN
X2	1x RS232/422/485 +1x CAN+ 2x DI+2x DO	1x RS232/422/485 +1x CAN+ 2x DI+2x DO	1x RS232/422/485 +1x CAN+ 2x DI+2x DO	1x RS232/422/485 +1x CAN+ 2x DI+2x DO
X3	1x HDMI	1x HDMI	1x HDMI	1x HDMI
Rear I/O				
GMSL	N/A	N/A	4x	4x
3G-SDI	N/A	N/A	N/A	4x
Access Panel	1x Boot LED	1x Boot LED	1x Boot LED	1x Boot LED
	1x Reset Button	1x Reset Button	1x Reset Button	1x Reset Button
	1x Recovery Button	1x Recovery Button	1x Recovery Button	1x Recovery Button
	2x USB3.1 Type-C	2x USB3.1 Type-C	2x USB3.1 Type-C	2x USB3.1 Type-C
	1x USB3.1 Type-C for Recovery	1x USB3.1 Type-C for Recovery	1x USB3.1 Type-C for Recovery	1x USB3.1 Type-C for Recovery
Dimensions	220 x 300 x 88mm(WxDxH)	220 x 300 x 88mm(WxDxH)	220 x 300 x 88mm(WxDxH)	220 x 300 x 88mm(WxDxH)

Block Diagram

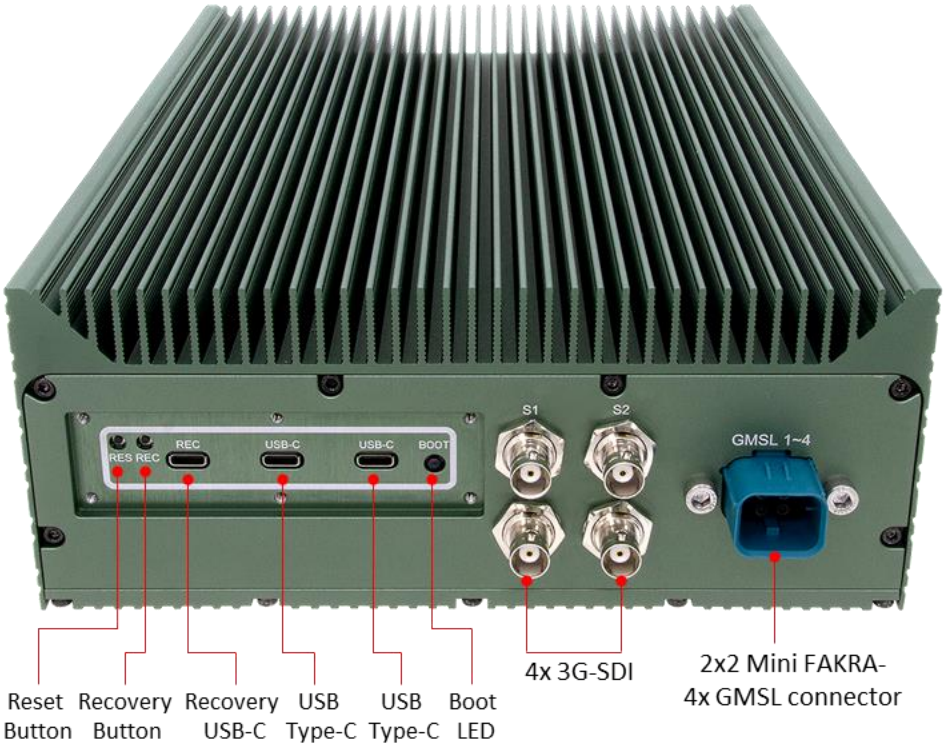
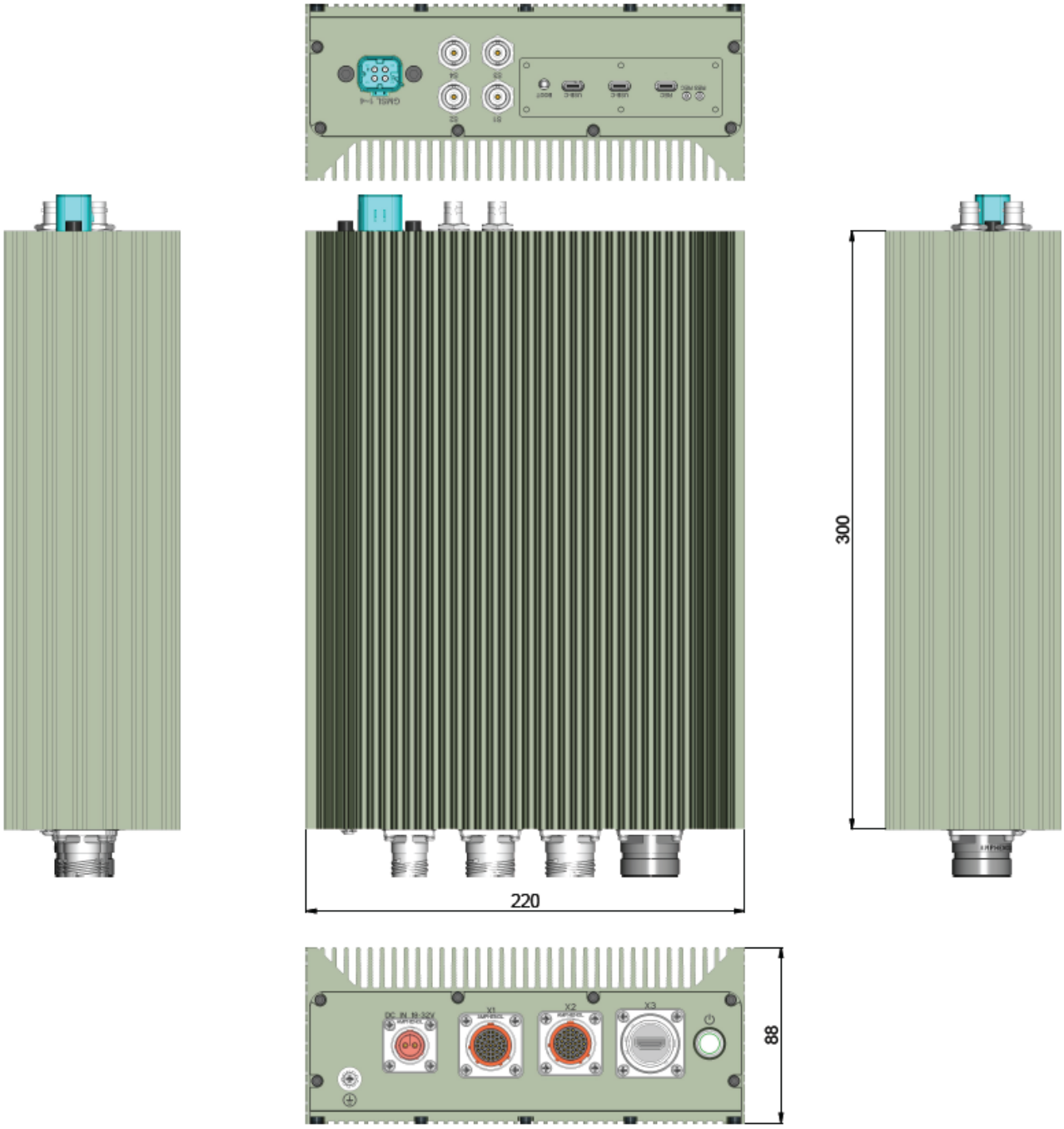


Appearance

Front View



Rear View



Dimension