



LAND



SEA



AIR

NV300-1LS64

2U HALF NVIDIA AGX ORIN MILITARY COMPUTER



- Ultra Short Depth 2U Half Rugged Computer
- NVIDIA Jetson AGX Orin 64G LPDDR5 DRAM
- 1x LAN+2x USB2.0+2x RS422+1x HDMI
- 2x 3G-SDI in
- IP65 Classified
- DC 12V~32V(Options)
- Operating Temperature: -20°C ~ 50°C
- Size : 250x325x100mm

Specifications

SYSTEM

High performance Processor	Ampere GPU + Arm Cortex-A78AE CPU + 64GB LPDDR5 + 64GB eMMC 5.1
GPU	64GB: Two graphics processing cluster (GPC) eight texture processing clusters (TPC) 2048 NVIDIA® CUDA® cores 64 Tensor cores Ray-Tracing cores 170 Sparse TOPS Maximum Operating Frequency: 1.3 GHz
AI Performance	64GB: Up to 275 Sparse TOPS (INT8)
Memory Type	Jetson AGX Orin 64GB: 64GB 128-bit LPDDR5 DRAM

EXPANSION SLOT

Expansion Slot	1x M.2 Key-B, 1x SIM, 1x MicroSD, 1x 5V Fan 1x I2C, 2x UART, 1x I2S, 2x SPI, 1x CAN 1x Camera Connector (6 CSI camera support)
----------------	--

DISPLAY

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

STORAGE

M.2	1x M.2 M-Key 256GB SSD Slot 64 GB eMMC 5.1 Flash
-----	---

ETHERNET

Controller	2x GLAN 1x 10G (SFP+ Based)
------------	--------------------------------

FRONT I/O

X1	DC 12-32 VDC
X2	1x HDMI with D38999
X3	1x USB2.0 with D38999
X4	1x GbE LAN with D38999
X5	1x USB2.0 + RS422 with D38999

REAR I/O

Ground Screw	1
X6	2x 3G-SDI in with D38999

Debug Access Panel	1x Reset Button
--------------------	-----------------

	1x Recover Button
	1x USB Type-C for Debug
	1x USB Type-C for Recovery
	1x Reboot LED
X7	1x RS422 with D38999

POWER REQUIREMENT

Power Input	12V~32V
-------------	---------

OPERATING SYSTEM

Operating System	Ubuntu 20.04 with JetPack 6.0
------------------	-------------------------------

PHYSICAL

Dimension	250 x 325 x 100 mm(W x D x H)
Weight	TBD
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 (Options)	
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.

Ordering Information

NV300-2L64

Rugged SFF Military Computer, Jetson AGX Orin 64GB, 12V to 32V DC-IN, Extended Temp. -20 to 50°C

NV300-1LS64

Rugged 2U Military Computer, Jetson AGX Orin 64GB, 12V to 32V DC-IN, Extended Temp. -20 to 50°C

NV300-2LG64

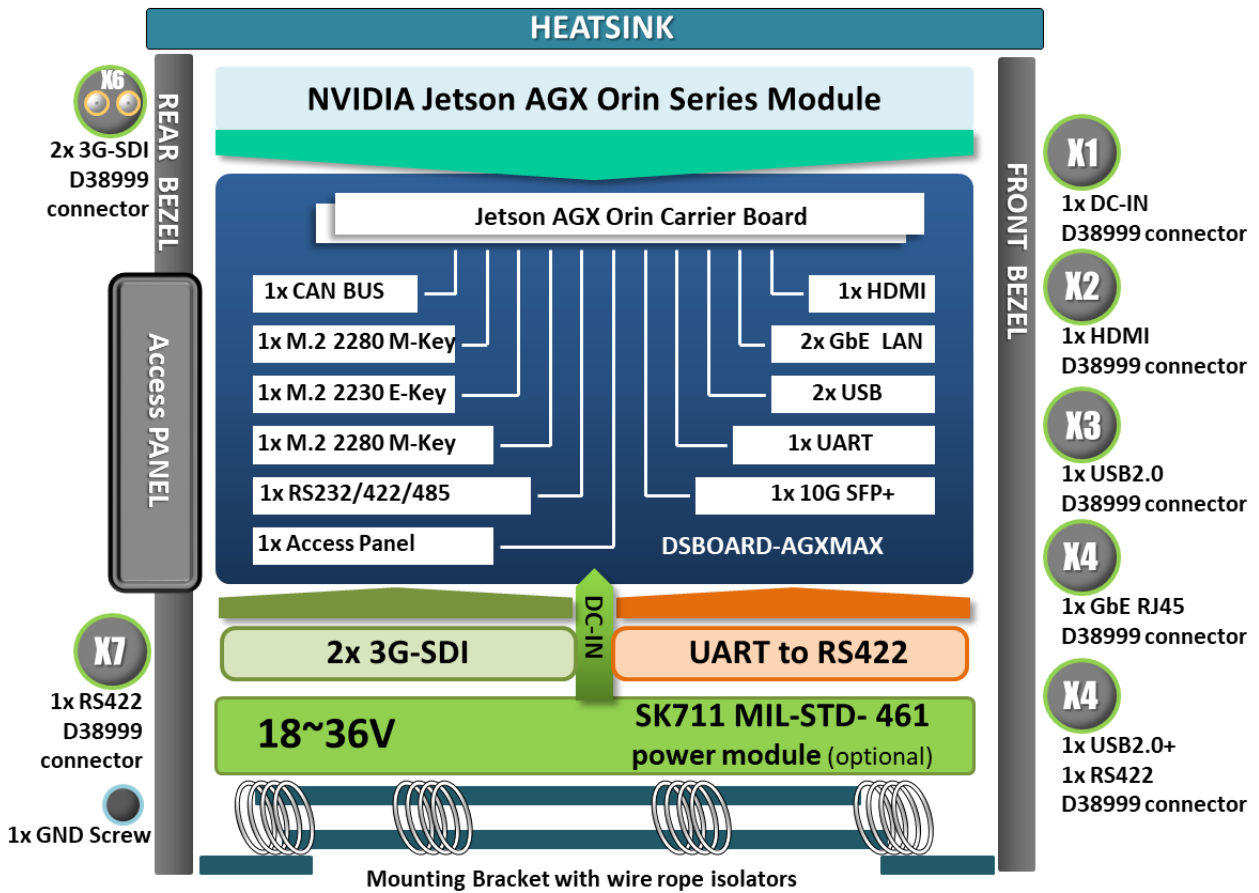
Rugged 2U Military Computer, Jetson AGX Orin 64GB, 12V to 32V DC-IN, Extended Temp. -20 to 50°C

NV300-2LGS64

Rugged 2U Military Computer, Jetson AGX Orin 64GB, 12V to 32V DC-IN, Extended Temp. -20 to 50°C

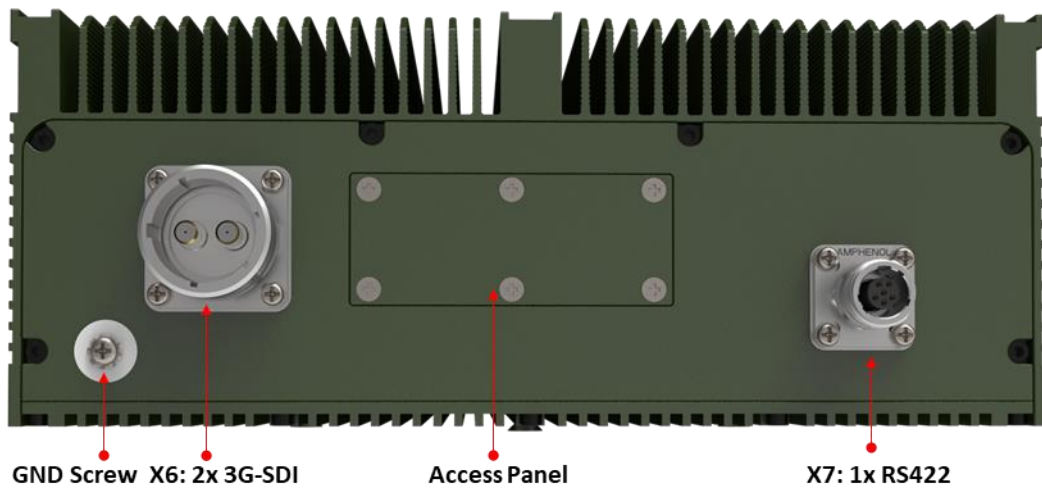
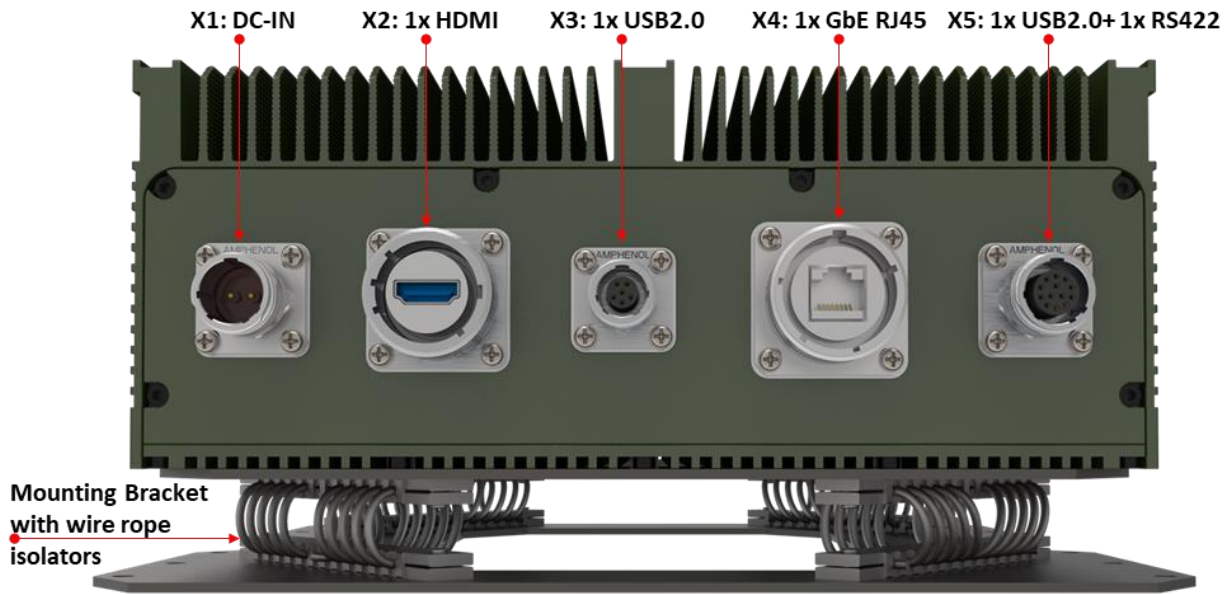
Model	NV300-2L64	NV300-1LS64	NV300-2LG64	NV300-2LGS64
GPU	2048-core NVIDIA Ampere with 64 Tensor Cores (AGX Orin 64GB)			
Memory	64GB			
AI Performance	275 TOPs			
CPU	12-core Arm® Cortex®-A78AE v8.2 64-bit CPU 3MB L2 + 6MB L3			
Module total module power	15W 35W 60W, and up to 75W			
Storage	2x M.2 NVMe	1x M.2 NVMe 256GB	2x M.2 NVMe	1x M.2 NVMe
	64GB eMMC 5.1 Flash	64GB eMMC 5.1 Flash	64GB eMMC 5.1 Flash	64GB eMMC 5.1 Flash
Front I/O				
X1	12-32 VDC with D38999			
X2	1x HDMI with D38999			
X3	1x USB3.0	1x USB2.0 in D38999	1x USB3.0	1x USB3.0
X4	1x 10GB MPO	1x GbE RJ45 in D38999	1x 10GB MPO	1x 10GB MPO
X5	2x GbE+1x RS232/422/485 +1x CAN+2x DI+3x DO	1x USB2.0+ 1x RS422 in D38999	2x GbE+1x RS232/422/485 +1x CAN+2x DI+3x DO	2x GbE+1x RS232/422/485 +1x CAN+2x DI+3x DO
Rear I/O				
GMSL	N/A	N/A	4x (up to 8x)	4x (up to 8x)
3G-SDI	N/A	2x 3G-SDI in D38999	N/A	4x
X7	TBD	1x RS422	TBD	TBD
Access panel				
	1x Reset Button			
	1x Recover Button			
	1x Debug Type-C			
	1x Recovery Type-C			
	1x Boot LED			
Dimensions	250 x 325 x 100mm(WxDxH)			

Block Diagram



Appearance





Dimension

