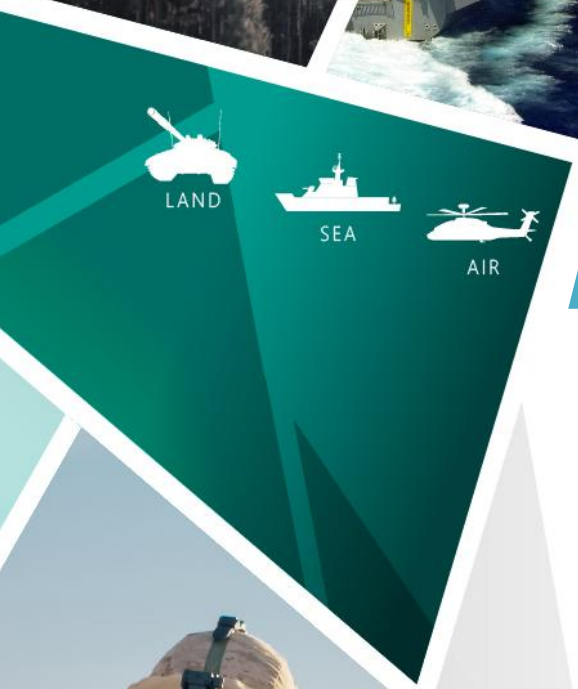


NV300-AMB

2U Half Nvidia AGX Orin Military Computer

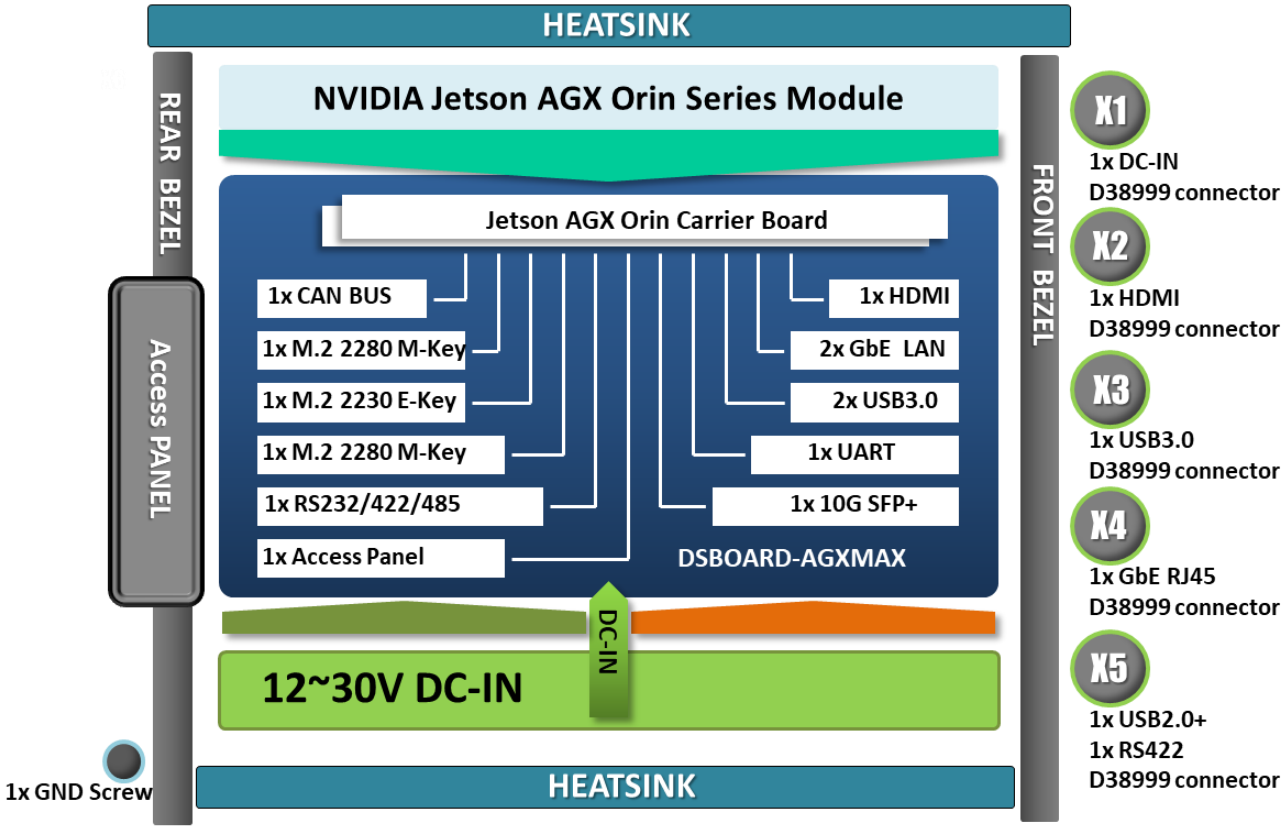
- Ultra Short Depth 2U Half Rugged Computer
- NVIDIA Jetson AGX Orin 64G LPDDR5 DRAM
- 1 x LAN, 1x USB 2.0, 1 x RS422, 1 x HDMI, 1 x USB3.1
- IP65 Classified
- DC 12V~30V (Options)
- Operating Temperature: -20℃ to 50℃
- Size: 250 x 325 x100 mm
- MIL-STD-810 Vibration Method 514.6: ◎Acceleration: 5.0 Grms
- MIL-STD-810 Vibration Method 514.6: ◎PSD : 0.01257 g2/Hz
- MIL-STD-810 Shock Method 516.6: ◎Wave Form: Half Shine Wave
- MIL-STD-810 Shock Method 516.6: ◎Acceleration: 75G

Specifications

System	
High Performance Processor	Ampere GPU + Arm Cortex-A78AE CPU + 64GB LPDDR5 + 64GB eMMC 5.1
GPU	64GB: Two graphics processing cluster (GC) | 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 256-bit LPDDR5 DRAM
Expansion Slot	
Expansion Slot	1 x M.2 Key-B, 1 x SIM, 1 x MicroSD, 1 x 5V Fan 1 x I2C, 2x UART, 1 x I2S, 2 x SPI, 1 x CAN 1 x Camera Connector (6 CSI camera support)
Display	
Graphics Interfaces	1 x HDMI 2.0 (max resolution 3840 x 2160)
Storage	
M.2	1 x M.2 M-Key 256GB SSD Slot
	64 GB eMMC 5.1 Flash
Ethernet	
Controller	2 x GLAN
Front I/O	
X1	DC 12-30 VDC
X2	1 x HDMI with D38999
X3	1 x USB3.1 with D38999
X4	1 x GbE LAN with D38999
X5	1 x USB2.0 + RS422 with D38999
Rear I/O	
Ground Screw	1
Debug Access Panel	1 x Reset Button
	1 x Recover Button
	1 x USB Type-C for Debug
	1 x USB Type-C for Recovery

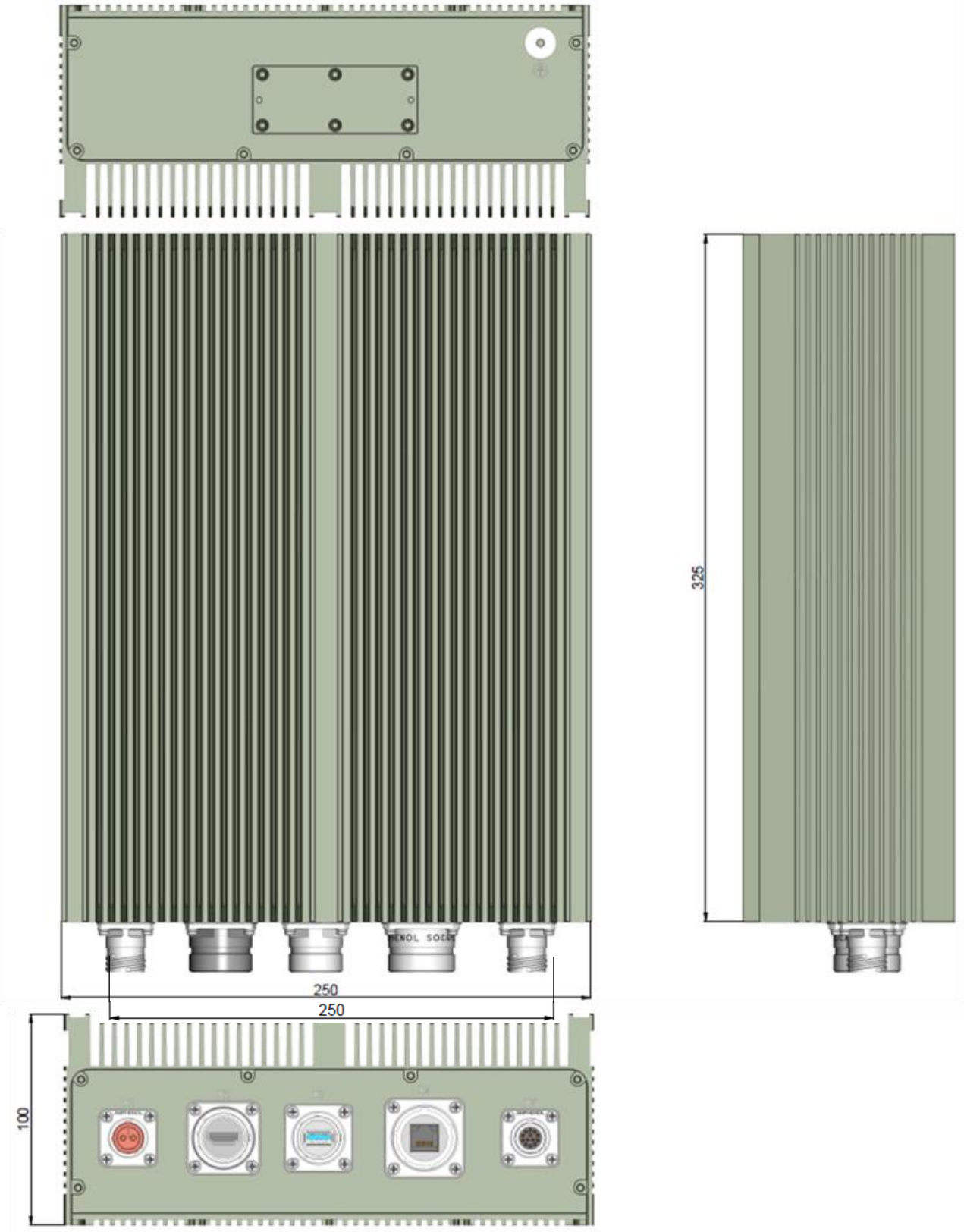
	1 x Boot LED
Power Requirement	
Power Input	12V~30V
Operating System	
Operating System	Ubuntu 20.04 with JetPack 6.X
Physical	
Dimensions	250 x 325 x 100 mm (W x D x H)
Weight	TBD
Chassis	Aluminum AL6061
Heatsink	Aluminum Alloy, Corrosion Resistant.
Finish	Anodic aluminum oxide (Color).
Cooling	Natural 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.

Block Diagram



Appearance

MODEL: NV300-AMB
S/N : SR202507100101
INPUT RATING: 12V~30V DC IN
MADE IN TAIWAN
GND Screw
Access Panel

RBT RST REC
REC
DBG
MODEL: NV300-AMB
S/N : SR202507100101
INPUT RATING: 12V~30V DC IN
MADE IN TAIWAN
Reboot LED
Reset Button
Recovery Button
Recovery USB
Debug USB

Dimension