

Specifications

NRU-220S		NRU-222S	
System Core			
Processor	Supporting NVIDIA [®] Jetson AGX Orin™ System-on-Module (SOM), comprising NVIDIA [®] Ampere GPU and Arm Cortex-A78AE CPU		
Memory	32GB/ 64GB LPDDR5 (AGX Orin 32GB/ 64GB) @ 3200 MHz on SOM		
eMMC	64GB eMMC 5.1 on SOM		
Panel I/O Interface			
	6x RJ45 with screw-lock	6x M12 X-coded 8-pin	
Ethernet Port	Port 1, Port 2: 2.5 Gigabit Ethernet ports by Intel [®] I225 Port 3 ~ Port 6: Gigabit ports, share 1 Gbps total bandwidth		
PoE Capability	IEEE 802.3at PoE+ PSE for Port 3 ~ Port 6, 100W total power budget		
USB	1x USB 3.1 Gen1 port 2x USB 2.0 ports 1x USB Type C (Debug Only)		
Video Port	1x DisplayPort, supporting 3840x2160 at 60Hz		
Serial Port	1x Isolated RS-485 port and 2x RS-232 ports		
CAN bus	2x CAN 2.0 port		
Isolated DIO	4-CH isolated DI and 4-CH isolated DO		
Internal I/O Interface			
Mini PCI Express	1x full-size mini PCI Express socket (PCIe + USB 2.0) for WiFi 6 or CAN 1x full-size mini PCI Express socket (USB 2.0) for GNSS or 4G LTE		
M.2	1x M.2 3042/3052 B key (USB 3.1 Gen 1 + USB 2.0) for LTE/5G module with dual micro SIM support		

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Storage			
SATA HDD	2x front-accessible 2.5" 7mm SSD		
M.2 NVMe	1x M.2 2280 M-key NVMe socket (PCIe Gen4x2) for NVMe SSD		
Power Supply			
DC Input	1x 3-pin pluggable terminal block for 8V to 48V DC input and ignition power control (IGN/ GND/ V+)	1x M12 A-coded 5-pin for 8V to 48V DC input and ignition power control (IGN/ GND/ V+)	
Mechanical			
System LED	PWR: System carrier board power status OS: Jetson OS boot status IGN: Ignition power signal		
Dimension	230 mm (W) x 173 mm (D) x 66 mm (H)		
Weight	TBD		
Mounting	Wall-mount with damping brackets		
Environmental			
Operating Temperature	-25°C ~ 70°C with passive cooling (30W TDP mode) *		
Storage Temperature	-40°C ~ 85°C		
Humidity	10% ~ 90%, non-condensing		
Vibration	Operating, MIL-STD-810H, Method 514.8, Category 4		
Shock	Operating, MIL-STD-810H, Method 516.8, Procedure I		
EMC	CE/ FCC Class A, according to EN 55032 & EN 55035 EN 50121-3 (EN 50155:2017, Clause 13.4.8)		