

# NRU-110V Series

## NVIDIA® Jetson AGX Xavier™-Edge-KI-Plattform mit Unterstützung für 8 GMSL-Fahrzeugkameras und 10G Ethernet

### Key Features

- Powered by NVIDIA® Jetson AGX Xavier™ SOM bundled with JetPack 4.4
- Support 8x GMSL automotive cameras via FAKRA Z connectors
- 1x 10GBASE-T 10G Ethernet port
- 1x M.2 2280 M key socket for NVMe SSD
- 1x mini PCIe socket for WiFi/4G module
- 1x isolated CAN bus port and 1x RS232 port with flow control
- 1x GPS PPS input, 3-CH isolated DI and 4-CH isolated DO
- 8V to 35V wide-range DC input with built-in ignition power control

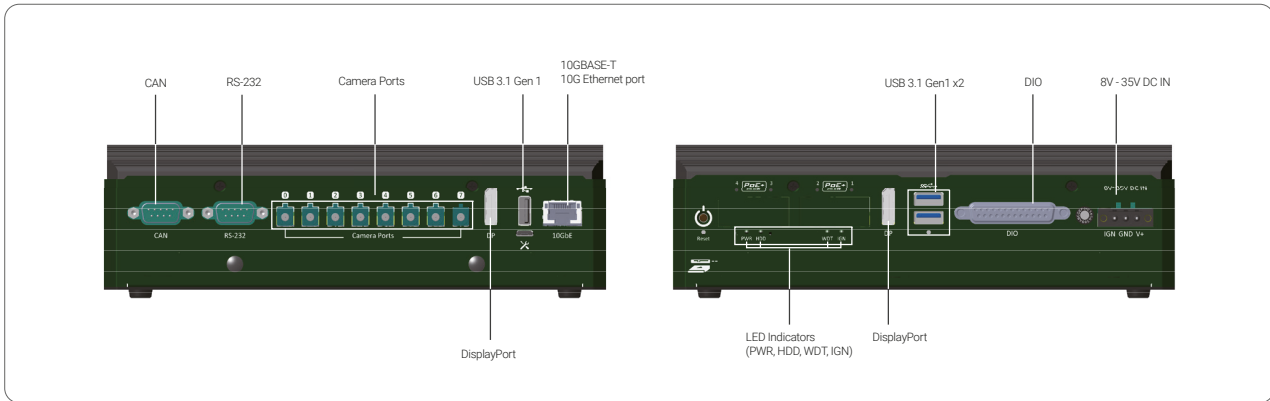


### Specifications

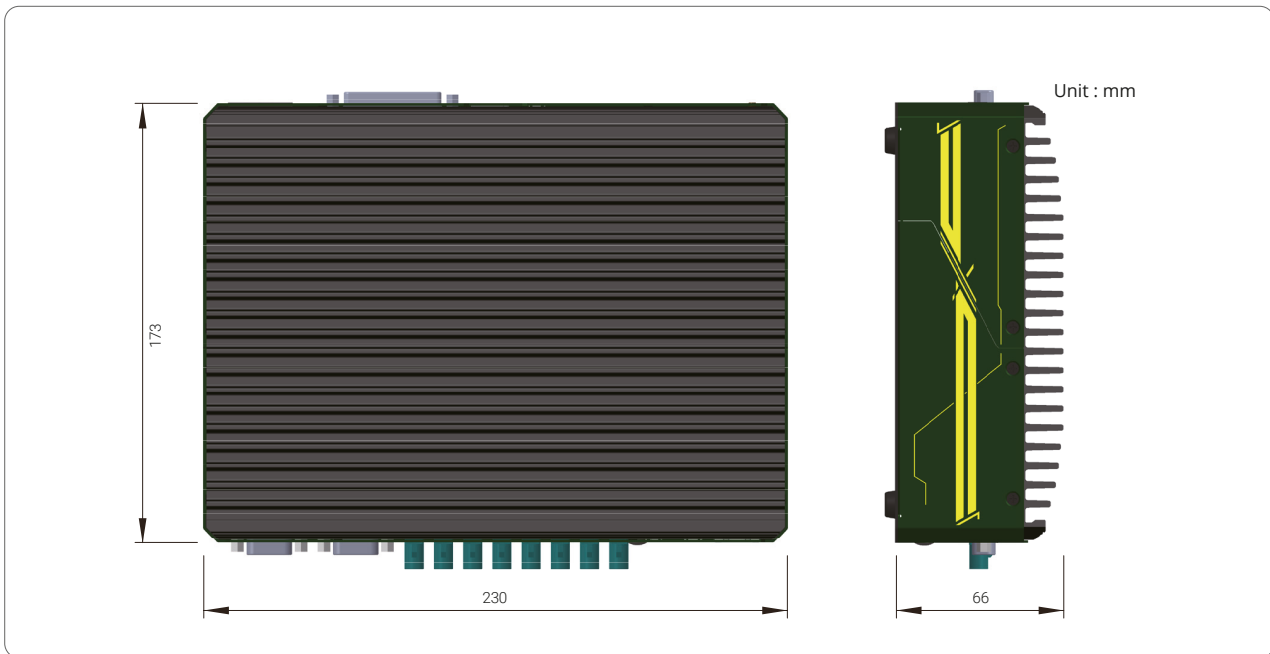
<b>System Core</b>		<b>Power Supply</b>	
Processor	Supporting NVIDIA® Jetson AGX Xavier™ system-on-module, comprising of NVIDIA® Volta GPU and Carmel CPU	DC Input	1x 3-pin pluggable terminal block for 8V to 35V DC input (IGN/ GND/ V+)
Memory	32GB LPDDR4x @ 2133 MHz on SOM	<b>Mechanical</b>	
eMMC	32GB eMMC 5.1 on SOM	Dimension	230 mm (W) x 173 mm (D) x 66 mm (H)
<b>I/O Interface</b>		Weight	2.7 kg (excluding damping bracket)
GMSL Camera	8x GMSL FAKRA Z connector, supporting 8x 1280x720 @ 30 FPS camera input	Mounting	Neosys' patented damping bracket (standard)
Ethernet port	1x 10GBASE-T 10G Ethernet port by Intel® X550-AT controller	<b>Environmental</b>	
CAN bus	1x isolated CAN bus 2.0 port	Operating Temperature	-25°C ~ 50°C with passive cooling (MAX TDP mode) * -25°C ~ 70°C with passive cooling (30W TDP mode) * -25°C ~ 70°C with optional fan kit (all modes) *
Isolated DIO	1x GPS PPS input. 3-CH isolated DI and 4-CH isolated DO	Storage Temperature	-40°C ~ 85°C
USB	3x USB 3.1 Gen1 (5 Gbps) ports	Humidity	10% ~ 90%, non-condensing
Video Port	2x DisplayPort, supporting 3840x2160 at 60Hz	Vibration	Operating, MIL-STD-810G, Method 514.7, Category 4
Serial Port	1x RS-232 port with flow control	Shock	Operating, MIL-STD-810G, Method 516.7, Procedure I
<b>Storage Interface</b>		EMC	CE/ FCC Class A, according to EN 55032 & EN 55035
M.2 NVMe	1x M.2 2280 M key socket (PCIe Gen3 x2) for NVMe SSD	<small>Note: * For sub-zero and over 60°C operating temperature, a wide temperature Solid State Disk (SSD) is required. NRU-110V is shipped with 30W TDP mode</small>	
<b>Internal Expansion Bus</b>			
Mini PCI Express	1x full-size mini PCI Express socket with internal SIM socket		

# NRU-110V Series

## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
NRU-110V	NVIDIA® Jetson AGX Xavier™ edge AI platform supporting 8x GMSL automotive cameras and 10G Ethernet
NRU-110V-F	NVIDIA® Jetson AGX Xavier™ edge AI platform supporting 8x GMSL automotive cameras and 10G Ethernet with fan kit

## Optional Accessories

PA-120W-OW	120W AC/DC power adapter, 20V/6A; 18AWG/120cm; cord end terminals for terminal block, operating temperature : -30 to 70°C.
Fan kit	Fan kit with 92mm x 92mm fan for NRU-110V series
AC-AR0147-H40	On Semi AR0147 CMOS sensor camera; 1280x720 @30fps; LFM; HFOV 41, IP67; male FAKRA connector
AC-AR0147-H60	On Semi AR0147 CMOS sensor camera; 1280x720 @30fps; LFM; HFOV 59, IP67; male FAKRA connector
AC-AR0147-H120	On Semi AR0147 CMOS sensor camera; 1280x720 @30fps; LFM; HFOV 125, IP67; male FAKRA connector
AC-AR0147-H190	On Semi AR0147 CMOS sensor camera; 1280x720 @30fps; LFM; HFOV 197, IP67; male FAKRA connector
FK-FF-CABLE-7M	7M FAKRA cable for cameras with male FAKRA connector

Note: \* Combined use of different FOV with the same CMOS sensor is verified on NRU series. Combined use of different FOV with varying CMOS sensors is not guaranteed. Please consult Neosys for feasibility.