

reServer Industrial

seed studio



Fanless compact AI-enabled NVR server

Wider temperature support -20 ~ 60°C with 0.7m/s airflow



Multi-stream processing

5* GbE RJ45(4 for 802.3af PSE); support multiple 4K streams with real-time processing complex tasks



Expandable Storage

2 Drive Bays to support 2.5" SATA HDD/SSD; 1* M.2 2280 M key socket for NVMe SSD



Design for industrial interfaces

1* COM(RS232/422/485); 4* DI/DO; 1* CAN; 4* USB3.1; 1* TPM2.0 (Module optional)



Hybrid connectivity

Support 5G/4G/LTE/LoRaWAN® (Module optional) with 1* Nano SIM card slot



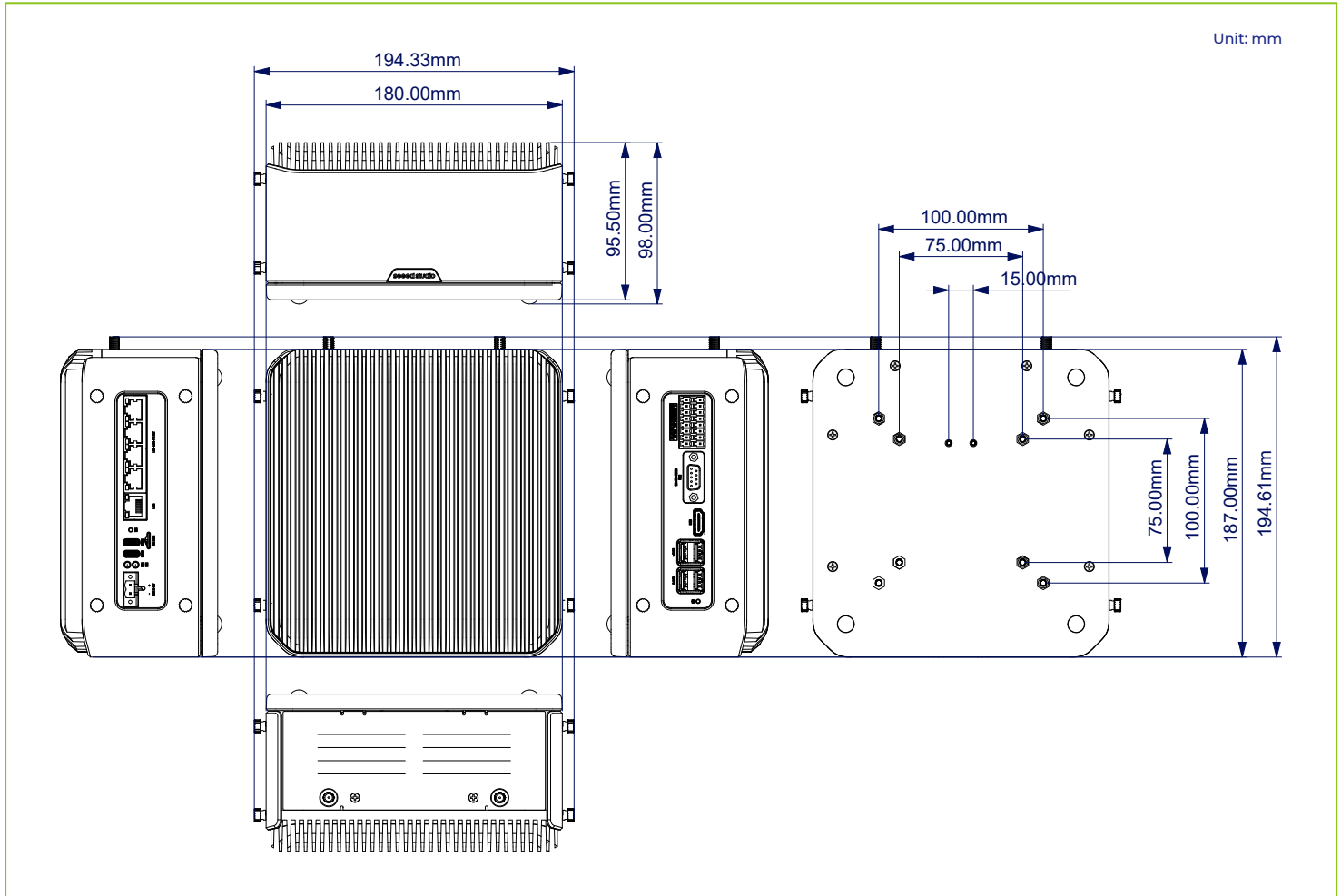
Certifications



Specifications

Product Name		reServer Industrial J4012	reServer Industrial J4011	reServer Industrial J3011	reServer Industrial J3010
NVIDIA Jetson Module		Orin NX 16GB	Orin NX 8GB	Orin Nano 8GB	Orin Nano 4GB
SKU		114110247	114110248	114110249	114110250
Processor System	AI Performance	100 TOPS	70 TOPS	40 TOPS	20 TOPS
	GPU	1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores			512-core NVIDIA Ampere architecture GPU with 16 Tensor Cores
	CPU	8-core Arm® Cortex®-A78AE v8.2 64-bit CPU; 2MB L2 + 4MB L3 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3			
	Memory	16GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 102.4GB/s	8GB 128-bit LPDDR5 68 GB/s	4GB 64-bit LPDDR5 34 GB/s
	Video Encode	Standards supported: H.265 (HEVC), H.264, AV1 1*4K60 (H.265) 3*4K30 (H.265) 6*1080p60 (H.265) 12*1080p30 (H.265)			1080p30 supported by 1-2 CPU cores
	Video Decode	Standards supported: H.265 (HEVC), H.264, VP9, AV1 1*8K30 (H.265) 2*4K60 (H.265) 4*4K30 (H.265) 9*1080p60 (H.265) 18*1080p30 (H.265)			Standards supported: H.265 (HEVC), H.264, VP9, AV1 1*4K60 (H.265) 2*4K30 (H.265) 5*1080p60 (H.265) 11*1080p30 (H.265)
Storage	eMMC	-			
	Expansion	M.2 Key M (2280) PCIe Gen4.0 SSD (M.2 NVMe SSD 128G included)			
I/O	Ethernet	1* LAN0 RJ45 GbE (10/100/1000Mbps) 4* LAN RJ45 GbE PoE(PSE 802.3 af15 W, 10/100/1000Mbps)			
	USB	4* USB3.1, 1* USB2.0 Type C(Device mode), 1* USB2.0 Type C For Debug UART & RP2040			
	DI/DO	4*DI,4*DO,3*GND_DI,2*GND_DO,1*GND_ISO,1*CAN			
	COM	1* DB9 (RS232/RS422/RS485)			
	Display	1*HDMI 2.1 Type A 7680x4320 at 30 Hz		1*HDMI 1.4 Type A 3840x2160 at 30 Hz	
	SATA	2 Drive Bays to support 2.5" SATA HDD/SSD(SATA III 6.0Gbps)			
	SIM	1* Nano SIM card slot			
	Button	Reset Button, Recovery Button			
Expansion	Mini PCIe	Mini PCIe for LoRaWAN®/4G/5G Series Wireless (Module optional)			
	M.2 Key B	M.2 Key B (3042/3052) support 4G/5G (Module optional)			
	Fan	Fanless, passive heatsink; 1*Fan connectors(5V PWM)			
	TPM	1* TPM 2.0 connector (Module optional)			
	RTC	1* RTC socket (CR1220 included), 1* RTC 2-pin			
Power	Power Supply	DC 12V-36V Terminal block 2 pin			
	Power Adapter	24V/5A Power Adapter(Without power cord)			
Mechanical	Dimensions (W x D x H)	194.33mm*187mm*95.5mm			
	Weight	2.8kg			
	Installation	Desk, DIN rail, VESA			
Environment	Operating Temperature	-20 ~ 60°C with 0.7m/s			
	Operating Humidity	95% @ 40 °C (Non-condensing)			
	Storage temperature	-40 ~ 85°C			
	Storage humidity	60°C@ 95% RH(Non-condensing)			
	Vibration	3 Grms @ 5 ~ 500 Hz, random, 1 hr/axis			
	Shock	50G peak acceleration (11 msec. duration,eMMC,microSD,or mSATA)			
OS		Pre-installed Jetpack 5.1.1 (above) (provide Linux OS with board support package)			
Certification		FCC, CE, RoHS, UKCA, KC			
Warranty		2 Years			

Dimensions



Packing List

- 1* reServer Industrial
- 1* DIN Rail Bracket
- 10* Bracket Screw
- 1* 16-Pin Terminal Block for DIO
- 1* 24V/5A Power Adapter(without power cord)
- 1* 2-Pin Terminal Block Power Connector

Hardware Overview

