

RXW-WSI953



Key Features

- **Jetson™ Orin NX:** Up to 157/117 TOPS, available with 16GB/8GB LPDDR5 memory
- **Jetson™ Orin Nano:** Up to 67/34 TOPS, available with 8GB/4GB LPDDR5 memory
- **Display Support:** 1x HDMI output
- **Connectivity Options:** 2x RJ45 LAN, 4x USB 3.0 Type-A, 1x Nano SIM, 1x CAN, 4x Optocoupler-isolated GPIO, 2x RS232, 2x RS485
- **Expansion Slots:** 1x miniPCIe, 2x M.2 M Key (2242), 1x M.2 B Key (3050)
- **Camera Compatibility:** Optional support for dual-channel or quad-channel GMSL camera modules
- **Operating Range:** Works efficiently between -25°C to +65°C Power Requirement: DC 12V~24V input
- **Operating System:** Supplied with Ubuntu pre-installed

Product Overview

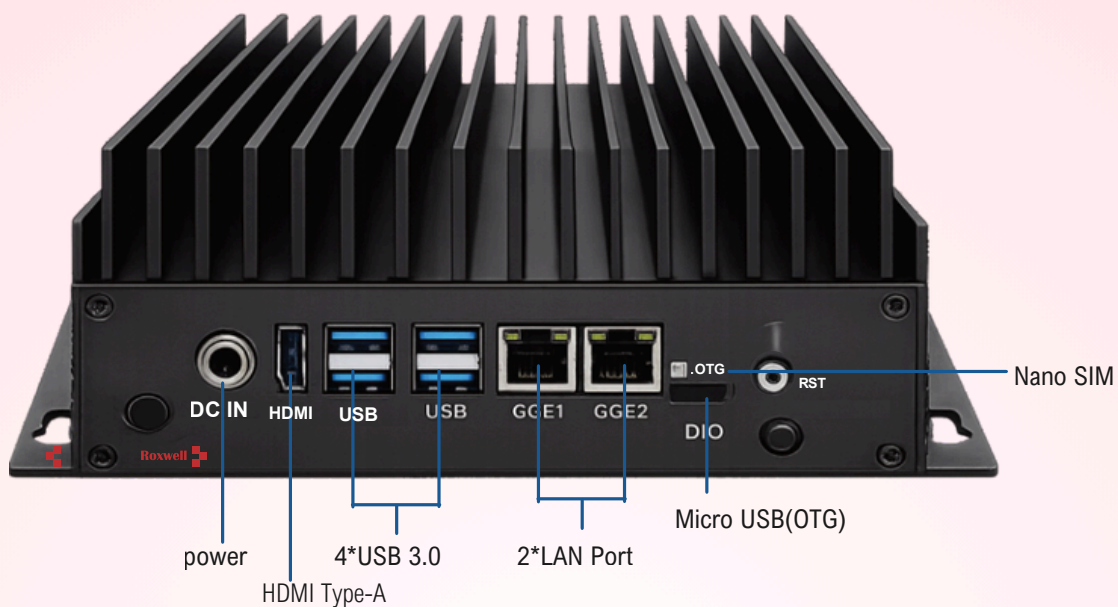
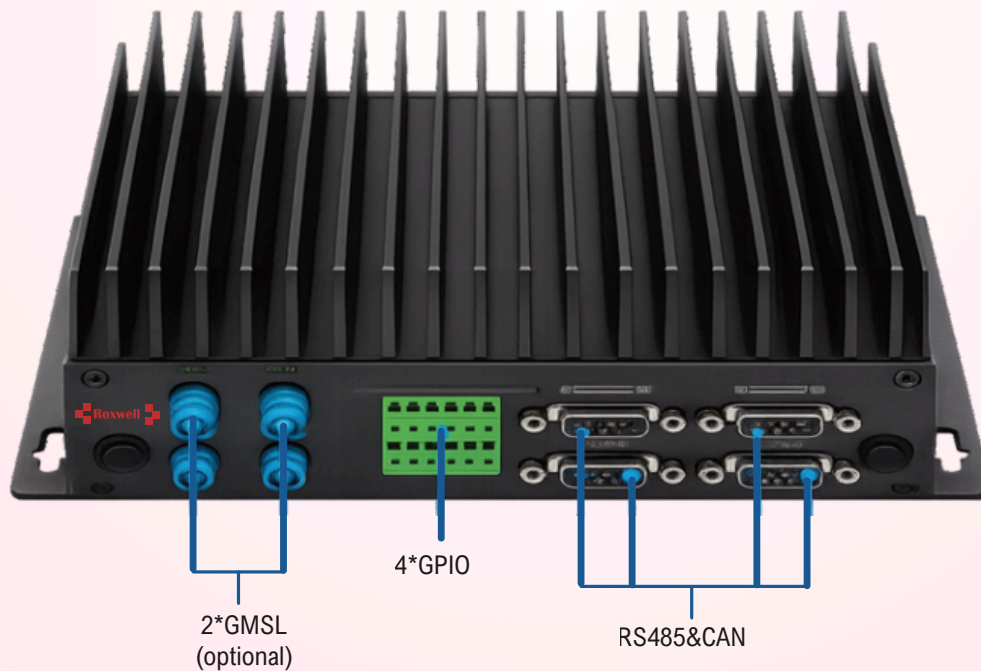
The RXW-WSI953 is an advanced edge AI computing system powered by NVIDIA Jetson Orin NX/Orin Nano series core modules. It is designed with an industrial-grade cooling structure and delivers up to 157 TOPS computing performance, making it suitable for demanding edge AI inference applications. It offers stable and efficient hardware support for use cases such as industrial automation, surveillance systems, autonomous equipment, smart logistics, and intelligent transportation.

The RXW-WSI953 comes with integrated M.2 and miniPCIe expansion slots, allowing flexible upgrades for high-capacity storage, 4G/5G/WiFi communication modules, and multiple I/O expansion cards. It also includes industrial interfaces such as RS232, RS485, and CAN, ensuring compatibility with a wide range of sensors and controllers. Optional dual-channel or quad-channel GMSL camera module support is available for advanced vision and perception requirements.

MODEL	Jetson Orin NX 16 GB	Jetson Orin NX 8GB	Jetson Orin Nano 8GB	Jetson Orin Nano 4GB
AI POWER	157TOPS	117TOPS	67TOPS	34TOPS
GPU	A 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores		A 1024-core NVIDIA Ampere architecture GPU with 32 Tensor Cores	1024-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 R Cortex [®] - A78AE v8.2 64 bit CPU 1.5MB L2+ 4MB L3	6 core Arm R Cortex R - A78AE v8.2 64 bit CPU 1.5MB L2+ 4MB L3	
RAM	16GB 128 bit LPDDR5 102.4GB/s	8GB 128 bit LPDDR5 102GB/s	8GB 128 bit LPDDR5 102GB/s	4GB 64 bit LPDDR5 51GB/s
STORAGE	Support external NVMe			
VIDEO CODING	1x 4K60 (H.265), 3x 4K30 (H.265) 6x 1080p60 (H.265), 12x 1080p30 (H.265)		1080p30, supported by 1-2 CPU cores	
VIDEO DECODING	1x 8K30 (H.265), 2x 4K60 (H.265) 4x 4K30 (H.265), 9x 1080p60 (H.265) 18x 1080p30 (H.265)		1x 4K60 (H.265), 2x 4K30 (H.265) 5x 1080p60 (H.265), 11x 1080p30 (H.265)	
DISPLAY	1x HDMI			
USB	4x USB 3.0 Type-A, 1x Micro USB(OTG)			
ETHERNET	2x Rj45			
BUTTON	1 x Recovery, 1x Reset			
EXPANSION	1x miniPCle, 2x M.2 M Key(2242), 1x M.2 B Key(3050)			
I/O PORT	1× CAN, 4* Optocoupler-isolated GPIO, 1x Nano SIM			
COM PORT	2x Rs232, 2x Rs485			
OPERATING TEMPERATURE	-25°C~ +65 °C			
COMPLIANCE	CE, FCC, RoHS			
SIZE	190.3 x 163 x 75.3mm			
POWER IN	DC 12V~24V			
COOLING	Fanless			

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Technical Parameters



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