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Rugged Computer RS A4NX

Computer Vision Edge Unit with NVIDIA Jetson Orin NX (16GB)



Product Highlights

24/7 continuous operation IP67 protection, extended temperature range Power ignition controller High shock and vibration resistance Resistance to chemicals







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Rugged Computer RS A4NX

Order Code RPC/RSA4NX16-A102S-02^{1,5} RPC/RSA4NX16-B102S-02^{1,5}

NVIDIA Jetson Orin NX (16GB RAM) 1024-core NVIDIA Ampere GPU with 32 Tensor Cores 88-core NVIDIA Arm* Cortex A78AE 64-bit CPU NVIDIA Jetson Orin NX (8GB RAM) 1024-core NVIDIA Ampere GPU with 32 Tensor Cores 65-core NVIDIA Arm* Cortex A78AE 64-bit CPU Al Performance Memory / Storage 128-Bit LPDR5 (102,4 GB/s) RAM soldered on board 128-Bit LPDR5 (102,4 GB/s) RAM soldered on board 129-Bit LPDR5 (102,4 GB/s) RAM soldered on Board 139-Bit LPDR5 (102,4 GB/s) RAM soldered on Board 149-Bit LPDR5 (102,4 GB/s) RAM soldered o	on request¹ 100 TOPs 16GB 240GB √ √ 1 1 2 1 2 1 4in / 2out on request on re	on request ¹ 100 TOPs 16GB 240GB √ √ 1 1 2 1 2 1 4in / 2out on request on request on request 1
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ASB version 2.0 1. instead of Digital I/Os (M12 female, a-coded) Inertial measurement unit (IMU) STMicro ISM330DHCXTR Wireless Connectivity Cellular 4G Module (LTE/UMTS/GSM) with GNSS Sierra Wireless EM7590 (Dual nano SIM support) Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel Ax210 Cellular 5G module (4G/3G fallback) with GNSS High precision multiband GNSS module with optional heading support¹ u-blox ZED-F9P/F9R Fechnical Data Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	on request I none none on request	on request 1 3 × SMA
Mireless Connectivity Cellular 4G Module (LTE/UMTS/GSM) with GNSS Sierra Wireless EM7590 (Dual nano SIM support) Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel Ax210 Cellular 5G module (4G/3G fallback) with GNSS digh precision multiband GNSS module with optional heading support¹ u-blox ZED-F9P/F9R Fechnical Data Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	none none on request	1 3 × SMA
Wireless Connectivity Cellular 4G Module (LTE/UMTS/GSM) with GNSS Sierra Wireless EM7590 (Dual nano SIM support) Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel Ax210 Cellular 5G module (4G/3G fallback) with GNSS High precision multiband GNSS module with optional heading support¹ u-blox ZED-F9P/F9R Fechnical Data Dimensions excl. mounting holes [mm] Het weight [gram] Hon-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Prower consumption 3 Software / OS	none none on request	3 × SMA
Cellular 4G Module (LTE/UMTS/GSM) with GNSS sierra Wireless EM7590 (Dual nano SIM support) Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel Ax210 Cellular 5G module (4G/3G fallback) with GNSS High precision multiband GNSS module with optional heading support¹ u-blox ZED-F9P/F9R Technical Data Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	none on request	
Cellular 4G Module (LTE/UMTS/GSM) with GNSS sierra Wireless EM7590 (Dual nano SIM support) Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel Ax210 Cellular 5G module (4G/3G fallback) with GNSS High precision multiband GNSS module with optional heading support¹ u-blox ZED-F9P/F9R Technical Data Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	none on request	
Wireless LAN (Wi-Fi 6/6E) 802.11ax/ac/a/b/g/n dual-band 2x2 MIMO & Bluetooth 5.2 Intel AX210 Cellular 5G module (4G/3G fallback) with GNSS High precision multiband GNSS module with optional heading support¹ u-blox ZED-F9P/F9R Technical Data Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	on request	
Fechnical Data Dimensions excl. mounting holes [mm] Not weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	· · · · · · · · · · · · · · · · · · ·	2 × RP-SMA
Technical Data Dimensions excl. mounting holes [mm] Not weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption 3 Software / OS	· · · · · · · · · · · · · · · · · · ·	on request
Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption ³ Software / OS	on request	on request
Dimensions excl. mounting holes [mm] Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption ³ Software / OS		
Net weight [gram] Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption ³ Software / OS	w196 × h66 × d165	w196 × h66 × d165
Non-isolated input voltage with ignition controller and RP protection (M12 male, a-coded) Power consumption ³ Software / OS	~2300	~2350
Power consumption ³ Software / OS	9 45VDC	9 45VDC
<u> </u>	~tbd	~tbd
<u> </u>		
NVIDIA JetPack SDK – <u>Jetson Linux</u> (Ubuntu based)	√	√
Environmental Conditions		
Operating temperature 3, *Cold startup max25°C	-40°C* +70°C	−40°C* +70°C
Storage temperature	-40°C +85°C	−40°C +85°C
ngress protection standard according to EN60529	IP67	IP67
Conformal coating ⁴	on request	on request
shock according to ISO 15003 (designed to meet)	50g peak acc. (11ms)	50g peak acc. (11ms
/ibration according to ISO 15003 (designed to meet)	2g (10 – 350Hz)	2g (10 – 350Hz)
MC-Conformity	EN55032 / EN55035	EN55032 / EN55035
Safety (designed to meet)	2.100002 / 2.100000	
Radio and Telecommunication (designed to meet)	EN62368-1	EN62368-1
estimated MTBF @ 25°C ambient according to Telcordia SR-332, Environment GB, excluding battery and SSD lease contact factory for minimum order augnities	•	EN62368-1 RED

Please contact factory for minimum order quantities

Internal connector

Internal conn



Product specifications subject to change without notice. All data is for information purposes only and not guaranteed for legal purposes. Information in this data sheet has been carefully checked and is believed to be accurate. However, no responsibility is assumed for inaccuracies. Please refer to the user documentation for additional product specification.

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Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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