



- NVIDIA® Jetson Orin™ NX, Up to 100 TOPS
- Best in Class Cybersecurity
- PoE Camera Support
- Connectivity Options
- Compact and Fanless
- Easy to Program
- Cloud Certified



Features

GPU ACCELERATED : Powered by NVIDIA® Jetson Orin™ NX with up to 100 TOPS of GPU accelerated computing

BEST IN CLASS CYBERSECURITY : Designed to ISA/IEC 62443-4-2 SL2 (Hardware and Software), antitampering monitor and logger (always on and power independent), and TPM 2.0

CAMERA SUPPORT : 4x PoE cameras and 4x USB 3.1 cameras

CONNECTIVITY OPTIONS : Breadth of connectivity: LTE Cat 4 Global cellular (RED Certified), optional Wi-Fi 6E and Bluetooth 5.3; Dedicated GNSS

EVERYWARE GREENEDGE : The industry's first fully integrated system with Zero-Touch Provisioning (ZTP), AWS IoT Greengrass V2, Eurotech's Everyware Software Framework for IIoT equipment configuration and edge computing, and Everyware Cloud for full edge (and asset) lifecycle management.

COMPACT AND FANLESS : Offering great reliability thanks to no moving parts; no ventilation grids to prevent dust accumulation inside the unit

EASY TO PROGRAM : Build your first pilot IIoT project in a snap: from when you get the Everyware GreenEdge gateway on your desk, you need 30 minutes to get onboard on Everyware Cloud and easily provision your gateway on your AWS IoT environment. Starting building your first edge applications like a store-and-forward datalogger in 10 minutes

CLOUD CERTIFIED : Seamless integration with Eurotech Everyware Cloud, AWS IoT Core and other Cloud services

Description

The ReliaCOR 31-11 is a compact fanless and ventless embedded Edge AI system based on NVIDIA® Jetson Orin™ NX platform, delivering up to 100 TOPS of AI performance.

Designed for industrial use cases, it offers reliable operation thanks to industrial grade ruggedization and a robust power supply. Very compact and power efficient, the ReliaCOR 31-11 can be deployed even in space constrained use cases.

The ReliaCOR 31-11 is powered by the NVIDIA® Jetson Orin™ NX platform featuring a 1024-core NVIDIA Ampere™ architecture GPU with 32 Tensor cores and an 8-core Arm® Cortex®-A78AE CPU, delivering up to 100 TOPS of AI performance. It supports rich I/O interfaces: 4x 1GbE with PoE, 4x USB 3.1 Gen 1 (5Gbps), two serial ports, 1x CAN interface and isolated Digital I/O. The ReliaCOR 31-11 features a wide range of wireless connectivity capabilities: it is available with an LTE Cat 4 Global cellular modem and discrete GNSS; other radio technologies such as Wi-Fi 6E and Bluetooth 5.3 are also available as a factory options.

The ReliaCOR 31-11 offers best in class Cybersecurity: it leads the market with the ISASecure/IEC 62443-4-2 SL2 (Factory Option) and a full trusted chain from manufacturing to deployment. Protection starts at the hardware level, with full support for TPM 2.0, Secure Boot and an always-on physical

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antitampering monitor/logger that is active even when the system is removed from power. For most demanding customers, special production-only images can be configured with full hardware hardening (interface disabling) to further reduce the attack surface.

The ReliaCOR 31-11 comes with [Everyware Software Framework \(ESF\)](#), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT Edge Gateways. Distributed and supported by Eurotech, ESF offers ready-to-use field protocols, MQTT connectivity, web-based visual data flow programming and deep configuration. ESF is also integrated with [Everyware Cloud \(EC\)](#), Eurotech IoT Integration Platform (separately available), enabling advanced diagnostics, provisioning, and full remote device access and management.

Ordering Code: RECOR-31-11-xx-yy			
Hardware Configuration (-xx)		-12	-15-21
NVIDIA MODULE	Core	NVIDIA® Jetson Orin™ NX 16GB	
	CPU	8-core NVIDIA Arm® Cortex A78AE v8.2 64-bit CPU (2MB L2 + 4MB L3)	
	GPU	1024-core NVIDIA Ampere GPU with 32 Tensor Cores	
	Memory	16GB LPDDR5	
	AI Performance	100 TOPS	
STORAGE	NVME	256GB, M.2 Key M, PCIe x4, TLC	512GB, M.2 Key M, PCIe x4, TLC
I/O INTERFACES	Ethernet	4x 1GbE (RJ-45)	
	PoE	Yes, PoE+ (1)	
	USB	4x USB 3.1 Gen 1 (Type A, 5Gbps); 1x USB OTG (Micro-B)	
	Serial	2x RS-232/485; DB9	
	CANBus	1x CANBus 2.0 (DB9)	
	Digital IN	8x Isolated; Terminal Block	
	Digital OUT	8x Isolated; Terminal Block	
	Video	1x HDMI 2K (2560 x 1440) 60Hz	
RADIO INTERFACES	Cellular	-	1x LTE Cat 4 Global
	SIM	-	Dual Nano SIM Card Holder (User Accessible)
	GNSS	-	GPS, Glonass, Beidou, Galileo, QZSS
	Wi-Fi/BT	Factory Option	
CYBER (HW)	TPM	TPM 2.0	
	Antitampering	Antitampering Switches	
COOLING	Technology	Fanless and Ventless	
POWER	Power Input	9 to 36V (12VDC Nominal); 3-pin Terminal Block (2)	
INTERNAL EXPANSIONS	M.2 Key B	1x M.2 Key B (3042/3052, USB 3.2 Gen1)	
	M.2 Key E	1x M.2 Key E (2230, PCIe x1, USB 2.0)	
	M.2 Key M	1x M.2 Key M (2242/2280, PCIe x4)	
ENVIRONMENTAL	Operating Temperature	-20°C to +55 °C (2)	
	Storage Temperature	-30° to 85°C	
	Relative Humidity (Non-condensing)	10 to 95% non Condensing	
CERTIFICATIONS	Regulatory	CE, FCC, ISED	
	Safety	IEC 62368-1, UL62368-1 (UL Listed)	
	Radios	-	RED (EU)
	Environmental	ROHS3, REACH	
	Cybersecurity	ISA/IEC 62443-4-1/-4-2 SL2 (§)	EN 18031-1 (RED-DA) - Off-the-shelf Compliance, ISA/IEC 62443-4-1/-4-2 SL2 (§)
	Vibration	IEC60068-2-64:2008; Designed to comply with MIL-STD-810G Method 514.7 Procedure I	
	Shock	IEC60068-2-27:2008; Designed to comply with MIL-STD-810G Method 514.7 Procedure I	
	Ingress	IP40	
	IoT Platform	GreenEdge (§), AWS IoT GreenGrass qualified (§), AWS IoT Core qualified (§)	
MECHANICAL	Enclosure	Extruded Aluminum with Heavy Duty Metal	
	Weights	2.8 ~ 3.6 kg	
	Dimensions	192x140x58mm (WxDxH)	
	Mounting Options	Wall Mounting/DIN rail (Optional)	

* Planned or Ongoing

§ Factory Option (Required MOQ), Contact Eurotech for more information

(1) With input voltage 9 to 12 V DC, do not use PoE; max system power consumption = 55 W; With input voltage 12 to 24 V DC, you can use PoE only in half power budget (60 W); max system power consumption = 120 W; With input voltage 24 to 36 V DC, you can use POE in full power budget (120 W); max system power consumption = 220 W

(2) The maximum allowed current at the input power connector is 15 A. Make sure to verify compliance with this requirement based on your input voltage. The system's sustained thermal load (heat released inside the system) must not exceed 35 W when approaching the upper operating temperature limit of 55°C.

FANLESS AI PC - NVIDIA Orin NX - LTE - GNSS

Ordering Code: RECOR-31-11-xx-yy					
Software Configuration (-yy)		-02	-03	-04	-09
OS	JetPack	Yes			
IOT FRAMEWORK	Everyware Software Framework (Java/OSGi)	-	Yes		
SUITE AND SERVICES	Everyware GreenEdge (EGE)	-		Yes (\$)	-
SOFTWARE HARDENING	Hardening	-			Yes (\$)
CERTIFICATIONS	Cybersecurity	-			ISASecure/IEC 62443-4-1/-4-2 SL2 Host (\$)
	IoT Platform	-		AWS IoT Core (\$), AWS IoT GreenGrass (\$)	-

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