

DATASHEET

Factbird® powered by OMRON NX1



Data-driven operational excellence powered by OMRON

The Factbird® powered by OMRON NX1 is designed to collect numerous inputs and various types of data from sensors, machine controllers (PLCs) and other peripherals, and securely transmit to the Factbird cloud software.

You gain immediate access to real-time manufacturing data in the Factbird cloud software to make data-driven decisions.

How it works

Factbird powered by OMRON NX1 gathers various manufacturing process data and securely transmit the data directly to the Factbird cloud server. The data is analyzed and visualized in real time on a secure web-based user interface accessible from your smartphone, tablet, and PC.

Factbird powered by OMRON NX1 comes in three setup options.

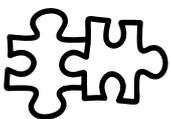
Factbird edge device

1. Don't touch option: It is a pre-configured edge device with multiple inputs using OMRON I/O-Link master units. The data is sent to the cloud via Wi-Fi, mobile network, or Ethernet.



Integrated data collection - OMRON NX1

2. Read out option: An OMRON NX1 is added to an existing machine controller as a gateway to send the existing controller data to the cloud via an existing network.
3. Total control option: OMRON NX1 serves as the main machine controller, and the PLC data is sent to the cloud via an existing network simultaneously.



Scalable OMRON technology

Unlimited number of inputs with the capability of accommodating various types of sensors.



Real-time PLC data

PLC data is analyzed and visualized in real time for data-driven decision making.



Fast Installation

Data stream directly from machines to the cloud. No integration to various automation layers required.

Checklist for installation (Factbird edge device)

- Factbird® powered by OMRON NX1 edge device and power supply unit
- OMRON I/O-Link master unit and power supply unit
- Sensor (digital or analog)
- Sensor cable
- Industrial Ethernet cable (D coded)

For Integrated data collection, please check with a local integrator or Factbird representative.

Product Specifications - Factbird edge device



Factbird edge device	
Preassembled components	OMRON NX1 CPU module Teltonika RUT240 router
Dimensions	250 × 125 × 160 mm 9.8 × 4.9 × 6.3 in
Port	Configured for EtherCAT or Ethernet/IP
Power input	24VDC / 2.4 A / M8 (4 pin)

OMRON NX1 - preassembled	
Port	EtherCAT and Ethernet/IP
Communication	OPC UA Server, TCP/IP, Modbus TCP. Ethernet/IP explicit messaging for Rockwell communication. See manufacturer's website for other protocols.
Cloud connection	Secure MQTT
Operating temperature	0 to 55°C / 32 to 131°F

Power Supply Unit - Mean Well GST60A24 packaged	
Input voltage	92-264 VAC
Input current	1.4 A
Frequency	47-63 Hz
Operating temperature	-30 to 70°C / -22 to 158°F
Plug type	M8(4 pin) for edge device, M12(4 pin) for I/O-Link master unit

Connectivity - Teltonika RUT240 router preassembled	
Connection types	LTE, Wi-Fi, Ethernet
LTE bands	1, 2, 3, 4, 5, 7, 8, 12, 20
UMTS bands	850, 900, 1900, 2100
Wi-Fi frequencies	2.4 GHz
IEEE 802.11 standards	b/g/n
LAN speed	10/100 Mbps
Ethernet standards	IEEE 802.3, IEEE 802.3u
Operating temperature	-40 to 75°C / -40 to 167°F

Sensor Input - OMRON I/O-Link master unit GX-ILM08C packaged	
Sensor input	8 per unit, expandable with more I/O-Link master unit
Sensor type	PNP
Connector plug	M12 (4 pin)
Sensor input levels	IEC 61131-2 Type 3
Input frequency max	100 Hz
Pulse width minimum	5 ms
Sensor max current draw	200 mA
Power input	24 VDC
Operating temperature	-10 to 55°C / 14 to 131°F

Please refer to each components manufacturer's website for more information.

Factbird powered by OMRON NX1 edge device can be powered by connecting directly to a 24VDC supply as an alternative to using the packaged power supply unit, provided adequate circuit protection is installed. Please refer to the power limits in the datasheet or contact us if you have any further questions.

[Teltonika RUT240](#)
[OMRON NX1](#)
[OMRON I/O-Link master unit GX-ILM08C](#)
[Mean Well GST60A24](#)

Product Specifications

Integrated data collection by OMRON NX1



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Please refer to manufacturer's website for more information.
Click link: [OMRON NX1](#)

OMRON NX1 will be installed and configured by a local integrator.

End of life

When you wish to dispose the sensor cable, please return it to Factbird ApS for recycling or recycle local according to local laws where the end-of-life takes place.

Limitations of liability

Factbird ApS shall not be responsible for any direct or indirect damages, commercial losses, loss of profit in any way connected with the Factbird devices.

Warranty

Factbird ApS's warranty is that the product is free from defects in materials and workmanship for a period of one year from the date of sale by Factbird ApS.