ECO 501 PRO
INDUSTRIAL SENSOR GATEWAY

Art. Nr. 11607-24

APPLICATION

- Highly advanced universal sensor interface for all modern machinery, equipment, and consumer appliances. Energy optimization for all through multiple sensors.
- Industrial equipment, mechanical engineering, building management, IoT and M2M
- Manufacturer independent applicable
- Up to 30 sensors can be connected via plug and play

ADVANTAGE

- Cost and time savings through fast installation and commissioning
- Connect, switch on and you get measured values already
- Intuitive operation via web server

The ECO 501 Gateway represents a powerful, state-of-the-art sensor interface for plant and system monitoring. The gateway features an access point and web server.

Up to 30 sensors can be connected to the ECO 501 automatically via the Industrial 1-Wire bus using the Auto-E-Connect plug-and-play system. A wide range of sensors is available, including temperature, humidity, dew point, air quality (CO2, VOC, or particulate matter), digital alarm contacts, glass break, and smoke detectors.

Configuration, software updates, and sensor and production data from connected sensors are conveniently provided via the web server. The web server can be accessed via LAN and through the access point (activated by a button press).

This system represents a low-maintenance industrial device. The gateway has been natively programmed over many years and does not rely on Linux or unknown libraries. Extensive software support is available free of charge.

Communication can be established through the WLAN and LAN interfaces using up to 3 data connections via Modbus/TCP, MQTT, and ASCII text protocol.
Comprehensive free software support is available.

Fully automatic PLUG and PLAY system for up to 30 sensors

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Web server and access point for configuration, debugging, and firmware updates

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Data interface for Modbus/TCP, MQTT, and ASCII

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Auto-E-Connect plug and play, levels I to III

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Quick reading of all devices in a 5-second cycle

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Low-maintenance industrial device without Linux. Natively programmed without unknown libraries

LAN interface for data, configuration, debugging, and firmware updates

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Extended temperature range of -5°C to 50°C

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Robust industrial design

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Comprehensive protection circuits and good device protection

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Easy installation

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USER OPTIONS

- Ultrafast iButton or RFID Read function for access or security authentication
- TPM (Trusted Platform Module) hardware for secure boot and SSL certificatescoated electronics (Conformal Coating) for high operational reliability under continuous high or fluctuating humidity conditions.
- Customization and branding options available for specific customer requirements.

TECHNICAL DATA

Special feature	• Webserver for configuring data connections. • Internal access point available for 30 minutes via a button press. • High-performance Ethernet interface. • Internal WLAN antenna.
Data interface	Ethernet, 10/100Mbit, autonegotiation, DHCP or fixed IP address
Number of data connections	Max. 4 in parallel (1xASCII, 2xModbus and 1xMQTT)
Protocol	ESERA ASCII text, Modbus TCP and MQTT protocol
Operating modes	TCP Socket, TCP Client, UDP
Auto-E-Connect Support	Pre Configuration: Desired OWD storage Automatic Positioning: OWD enhanced Plug And Play Sensorfinder Function: LED display for sensor detection Classes Assignment: OWD class via ECO Gateway The sensor supports Auto-E-Connect Level I, II, III
Industrial 1-Wire Bus Support	DS2401 (electronic keys (iButton or RFID)), DS1820, DS18S20, DS18B20, DS2405, DS2406, DS2413, DS2408, DS2423, DS2438, DS2450 and all ESERA sensors, actuators and memories
Bus interface	Industrial 1-Wire bus, bus voltage 5V, max. 500mA
Power supply	9-30VDC
Power consumption	Max. 2 Watt at 24VDC (without sensors at the bus interface)
Connection	Screw terminals for stranded wire and wire
Dimensions	35 x 90 x 70mm (WxHxD)
Housing (color)	gray
Housing material	ABS plastic
Protection class	IP20 / II
Temperature, humidity, operation	-5°C to 50°C, 10-92%, non-condensing
System clock (RTC)	Min. 24 hours RTC operation without mains voltage

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