ECO 608
Safety Sensor Gateway
System Monitoring

Art. No. 11605-230

The ECO 608 Gateway is a secure high performance sensor interface of the latest generation for system and infrastructure monitoring of critical and important assets/systems. Data transfer to e.g. Microsoft Azure IoT Hub or SAP via MQTT SSL directly possible*.

Up to 30 sensors can be connected to the ECO 608 fully automatically via Industrial 1-Wire Bus with Auto-E-Connect Plug and Play System.
The ESERA Auto-E-Connect system, which is an extension of the 1-Wire Bus standard, has been registered by ESERA GmbH as a European Patent.

A wide range of sensors are available, such as temperature, humidity, dew point, air quality (CO2, VOC or fine dust), digital alarm signalling contacts, glass breakage and smoke detectors. Each of the maximum 30 sensors can provide up to 5 data values. Thererfore the ECO 608 Gateway can supply up to 150 sensor data to your control system.
In addition to the sensor bus interface, the ECO 608 has digital inputs for monitoring both closing contacts, e.g. alarm signaling and one digital output (relay) for switching electrical loads or alarm signaling devices.

A comfortable web interface is available for configuring and software updates of the ECO 608, live and production data of all connected sensors, accessible via LAN and the access point (activated by pressing a button).

The ECO 608 by default is equipped with monitoring of the equipment safety. It continuously checks the system for operating temperature, humidity, dew point and the supply voltage. This monitoring enables an assessment of the operating equipment safety. System failures due to condensation or other leaks in the housing are therefore avoided and early planning of maintenance work is made possible.

This system represents a low-maintenance IoT device, since it does not use Linux. The controller is natively programmed and no unknown libraries are used.
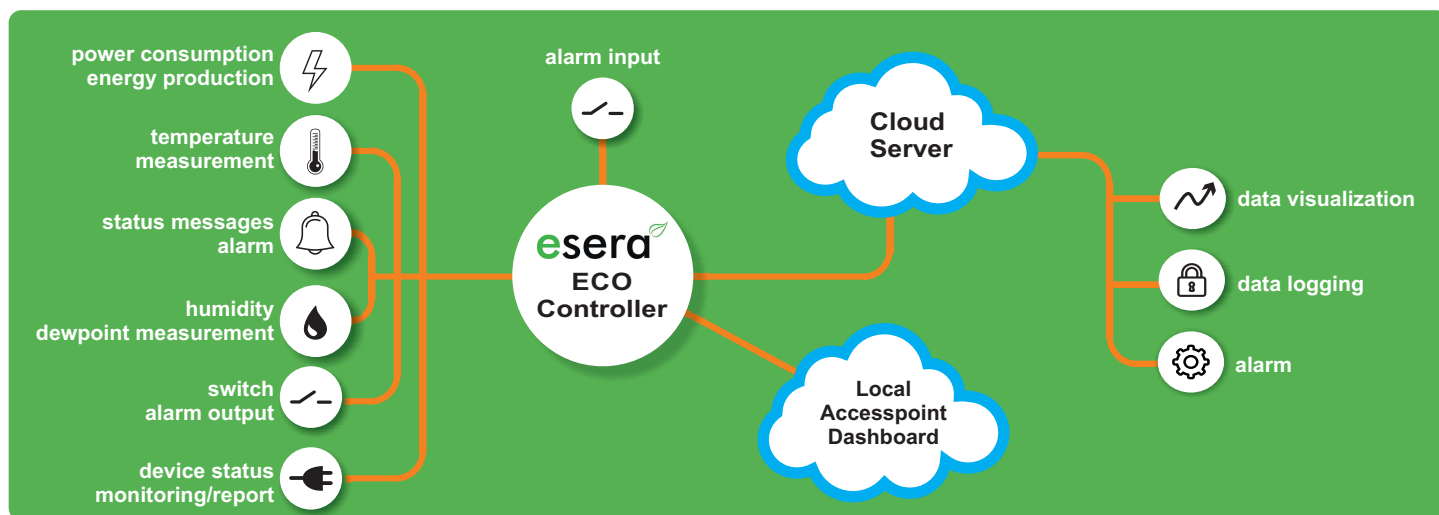
The Controller has an integrated power supply. There is also an ECO608 with 24V voltage supply available.
The WiFi radio interfaces have protected antennas inside the housing.
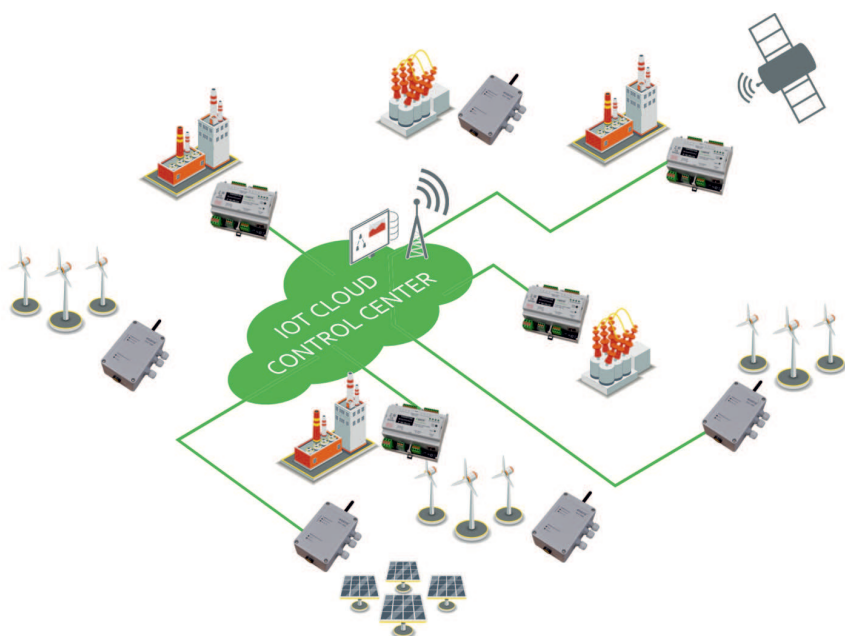
Highlights

Powerful Ethernet data interface for
Modbus/TCP, MQTT(s)
and ASCII protocol
•
OLED Display
•
8 x Digital alarm Inputs (closing contact)
1 x Relais output (NO/NC) 10A
•
webserver and access point
for configuration, software updates and
sensor data

• low-maintenance IoT device,
since without Linux
•
PLUG and PLAY interface
for up to 30 sensors with up to 5 data
values, up to 150 sensor values in total
•
Powerful Ethernet interface for up to 7
parallel data connections
•
Self-monitoring system for housing climate
and power supply
•
robust industrial design
•
DIN rail housing with 100mm width
•
easy mounting
•
supply voltage 90-260VAC

Conception, controller, up to 30 sensors

power consumption
energy production

temperature
measurement

status messages
alarm

humidity
dewpoint measurement

switch
alarm output

device status
monitoring/report

alarm input

esera
ECO
Controller

Cloud
Server

Local
Accesspoint
Dashboard

data visualization

data logging

alarm

PLUG and PLAY . USER FRIENDLY . SECURE . DURABLE . ECO FRIENDLY

IOT CLOUD
CONTROL CENTER

IoT (Internet of Things)
Monitoring and status reporting
of plants, machines, buildings
and systems.

IoT projects
For municipalities, utilities and
corporate internet. Data center,
municipal energy supply,
cooling- and heat-chain
management and many more...

Realize your project with us!

Range of application IoT and Industry 4.0

**Military / Defense
Environmental measurement (MIL)**

**Monitoring energy production/
power distribution**

Data Center

**Cooling chain monitoring/
food logistics**

Monitoring warehouse logistics

**environmental parameters
in plant cultivation**

Technical data

Data (IoT) interface	• Ethernet LAN 10/100MBit/s with parallel up to 16 dynamic and 5 static TCP connections + webserver • MQTT(s), Modbus/TCP and ASCII text protocol • Accesspoint with WiFi 802.11 b/g
Special features	• OLED Dot Matrix Display • Alarm inputs (closing contact) and relay output • PLUG and PLAY sensor interface for up to 30 sensors • Gateway without Linux, native programmed • WiFi access point and web server for configuration, data and updates
Sensors, 1-wire bus Auto-E-Connect support	• Up to 30 sensors via 1-Wire bus, each sensor can deliver up to 5 sensor • data, in total up to 150 sensor data • 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 Controller • The sensor supports Auto-E-Connect Level I, II, III
Digital input	8 x digital inputs for Alarm signaling contacts (normally open contacts, 5V working voltage)
Digital output	1 digital output (relais with no/nc) max. 10A/230VAC for alarming or universal switching
Protocol	MQTT(s), Modbus/TCP and ASCII text interface (CLI, ESERA protocol)
Self-monitoring, Internal sensors	Temperature sensor (+/- 0,3°C), humidity (+/-3%), dew point, supply voltage
Power supply, Power consumtion	90 - 260VAC, 5W at 230VAC
Connection	PLUG and PLAY concept with screwless clamps (push-in) for quick connection
Dimensions	90,5 x 106,3 x 62 mm (H x W x D), WLAN antenna inside
Housing material, color	ABS plastic, light grey
Protection type, protection class	IP 20 / protection class II with functional earth contact
Temperature / humidity operation	-25°C up to 70°C, humidity 10 - 92%, non condensing

Cloud services, software and logic

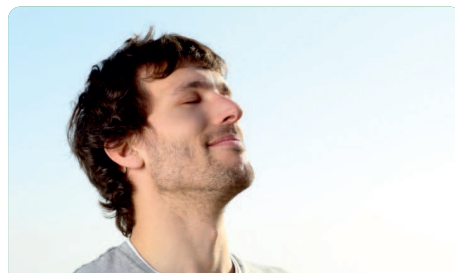|		
ttn **The Things Network** **IoT Network**	**ms azure** **Secure IoT Cloud**	**akenza** **IoT Cloud**
sap **Secure IoT Cloud**	**mindsphere** **Siemens IoT Cloud**	**wago** **Energy Management**

Environmental measurement system, sensors and actuators

Temperature

Humidity, rel.

VOC, air quality

Co2, carbon dioxide

Smoke, fire

Fine dust

Barometric air pressure, hPa

Differential pressure sensor

Ozone, O3

Nitrogen dioxide, NO2

Your Sensor ?

Water, humidity

Project in planning? Let us help you to get best results!

IoT projects for energy supply, data center, energy network, municipal energy supply, cooling- and heat chains and much more. For maximum safety: developed with ESERA.
Our 80/20 concept: We develop your device based on existing devices.
PLUG and PLAY . USER FRIENDLY . SECURE . DURABLE . ECO FRIENDLY

Contact us

ESERA GmbH, Adelindastrasse 20, 87600 Kaufbeuren / GERMANY
www.esera.de, info@esera.de, Tel: +49 8341 999 80-0

www.esera.de   info@esera.de   +49 8341 999 80-0