



ECO 1206 LoRaWAN IoT Node - Controller

Art. No. 11613-230

The ECO 1206 Node - Controller is a high performance sensor interface of the latest generation for system and infrastructure monitoring with display and webserver.

Up to 30 sensors can be connected to the ECO 1206 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. Therefore the ECO 1206 controller can supply up to 150 sensor data to your control system.

In addition to the sensor bus interface, the ECO 1206 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 1206, live and production data of all connected sensors, accessible via WLAN and the access point (activated by pressing a button).

The ECO1206 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.

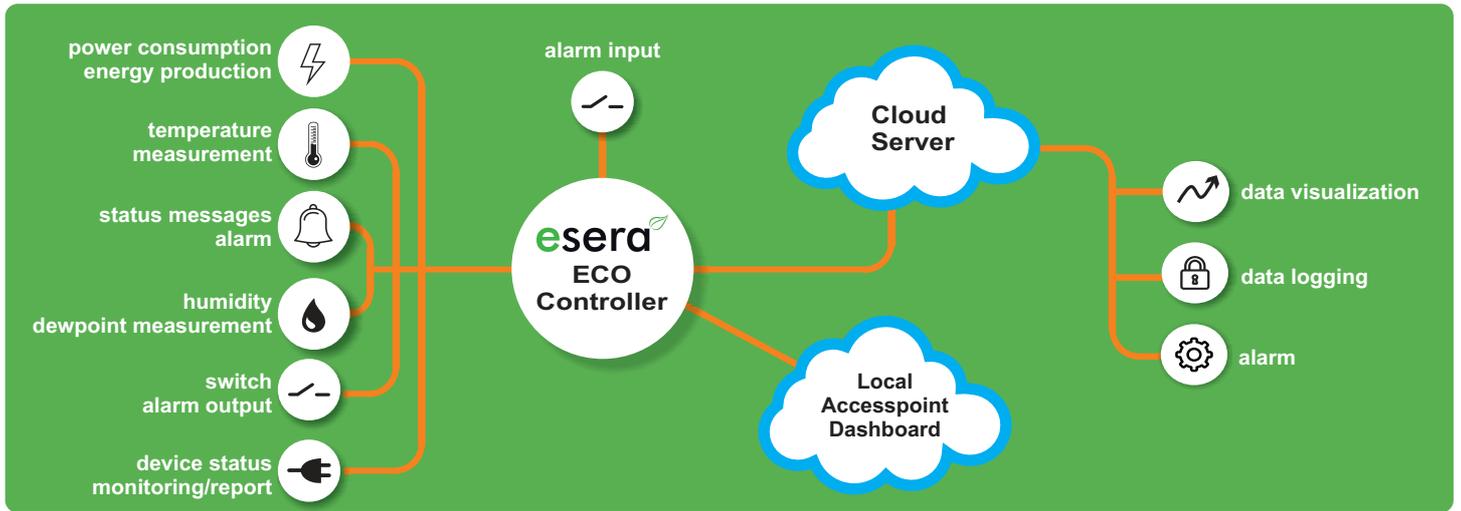
To ensure permanent and reliable operation in an industrial environment, the system is supplied with main voltage (90V - 260VAC).

The Wifi radio interfaces have protected antennas inside the housing.

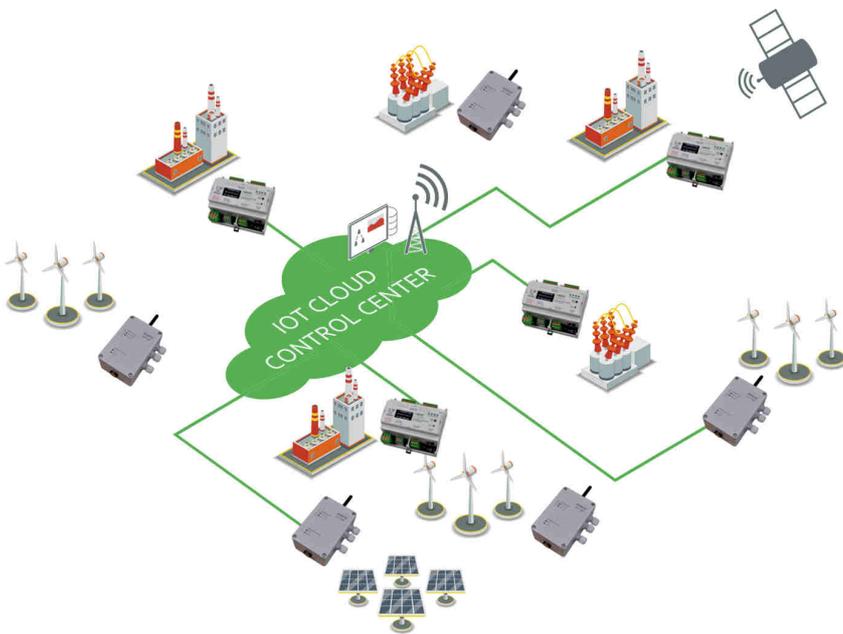


- Highlights**
- LoRaWAN connection 868 Mhz or NB-IoT LPWAN
 - Modbus/TCP via WLAN
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 - OLED Display
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 - Plug and Play interface for up to 30 sensors
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 - 4 x Digital alarm Inputs (closing contact)
 - 2 x HV-inputs (230VAC)
 - 1 x Relais output (NO/NC) 10A
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 - WLAN, webserver and access point for configuration, debug and firmware updates
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 - data interface for LoRaWAN, Modbus/TCP (WLAN) and ASCII (WLAN) protocol
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 - low-maintenance IoT device, since without Linux
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 - self-monitoring system
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 - IP 65 protection class
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 - robust industrial design
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 - easy mounting
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 - power supply 90-260VAC

Conception, controller, up to 30 sensors



Plug and Play - user-friendly - data safety - robust and sustainable



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



Technical data

IoT interface	<ul style="list-style-type: none"> LoRaWAN, Low Power Network (default equipment) alternatively NB-IoT LPWAN
Special features	<ul style="list-style-type: none"> OLED Dot Matrix Display Many inputs (4 x closing contact, 2 x HV-input) and relay output IoT Interface and WLAN interface in parallel operation Controller without Linux, native programmed WLAN access point and web server for configuration and updates
Sensors, 1-wire bus, internal	<ul style="list-style-type: none"> Up to 30 sensors via 1-Wire bus, each sensor can deliver up to 5 measurement data in total up to 150 sensor data 4 digital alarm inputs (closing contact) and 2 HV inputs and relay output
Range	up to 8 km range for LoRaWAN, up to 100m for WLAN
Protocol IoT interface	LoRaWAN or alternatively MQTT(s) for NB-IoT
Radio frequency	<ul style="list-style-type: none"> LoRa frequency range for Europe, 868MHz WiFi 2,4GHz
WLAN interface	802.11 b/g, up to 16 dynamic connections
Protocol, WLAN	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 consumption	90 - 260VAC, 5W at 230VAC
Connection	Plug and Play concept with screwless clamps (push-in) for quick connection
Dimensions	120 x 120 x 57mm (antenna excluded)
housing material, color	ABS plastic, light grey
Protection type, protection class	IP 65 / 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



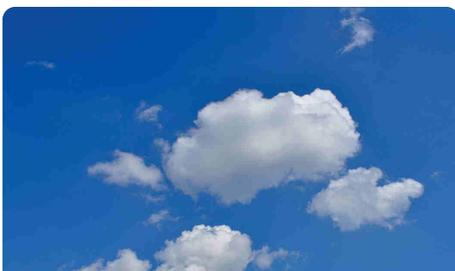
Barometric air pressure, hPa



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 - data integrity - robust and sustainable

Contact us

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