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.

The Node Controller represents a low-maintenance IoT device, since it does not use a Linux OS. The controller is natively programmed and no unknown libraries are used.

Up to 30 sensors can be connected to the ECO 1206 fully automatically via Industrial 1-Wire Bus and 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 the ESERA GmbH as a German and European Patent.

A wide range of sensors is available, such as for 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. This means that the ECO 1206 controller can supply up to 150 sensor data to your control system.

The ECO 1206 device has a convenient WLAN web interface for configuring the device and software updates. Furthermore, live- and productiondata of all connected sensors.

The ECO 1000 is equipped as standard 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 avoided and early planning of maintenance work is made possible.

To ensure permanent and reliable operation in an industrial environment, the ECO 1206 is supplied by mains voltage (90V - 260VAC).

The WLAN radio interfaces have protected antennas inside the housing.

Highlights

LoRaWAN connection 868 Mhz
or NB-IoT LPWAN
Modbus/TCP via WLAN

•

OLED Display

•

4 x Digital alarm Inputs (closing contact)
2 x HV-inputs (230VAC)
1 x Relais output (NO/NC) 10A

•

WLAN, webserver and access point
for configuration, debug and firmware
updates

•

data interface for
LoRaWAN, Modbus/TCP (WLAN)
and ASCII (WLAN) protocol

•

low-maintenance IoT device,
since without Linux OS

•

Plug and Play interface
for up to 30 sensors

•

self-monitoring system

•

IP 65 protection class

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robust industrial design

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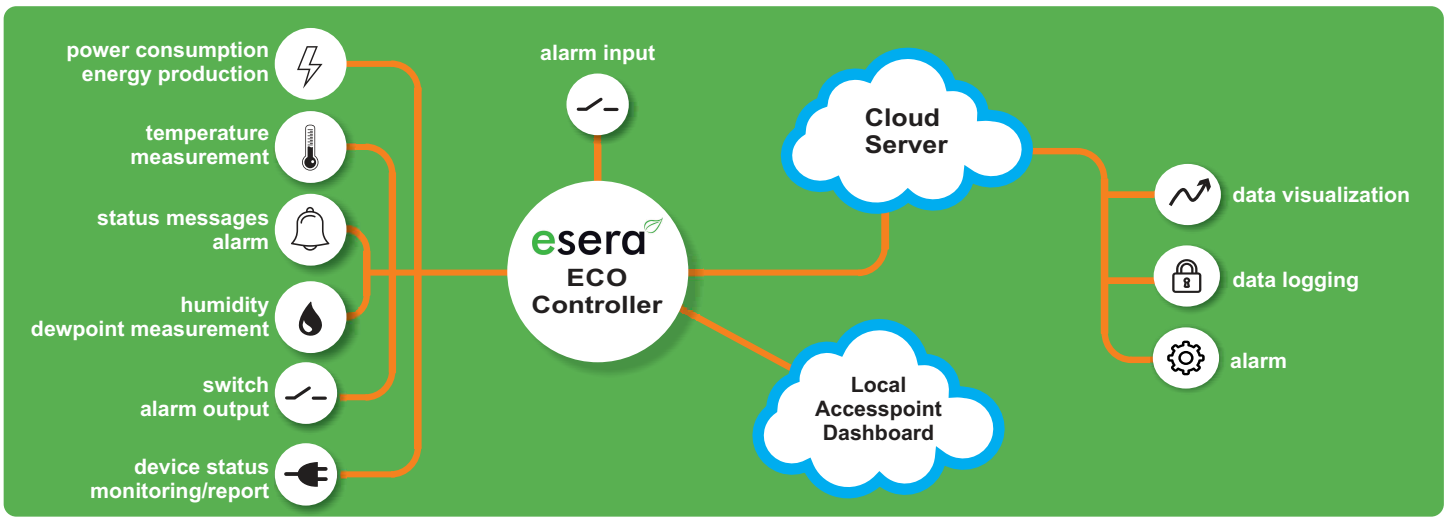
easy mounting

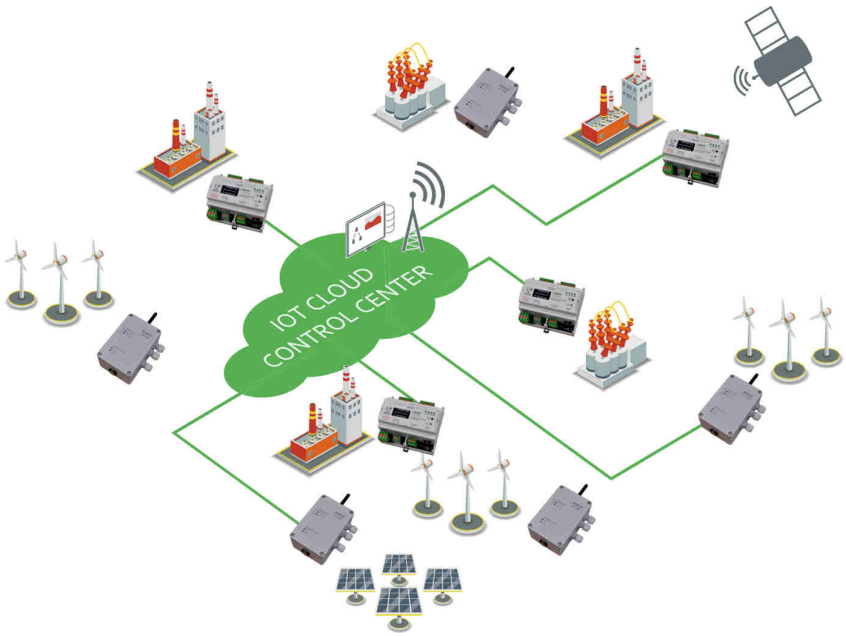
•

power supply 90-260VAC

Conception, controller, up to 30 sensors



Plug and play - user-friendly - data integrety - robust and sustainable



IoT (Internet of Things)

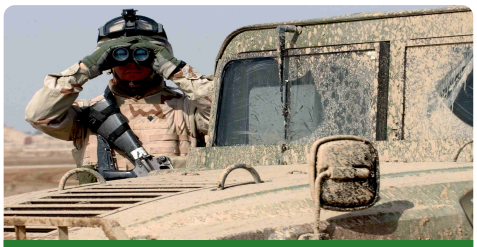
Monitoring and status reporting of plants machines, buildings and systems.

IoT projects

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

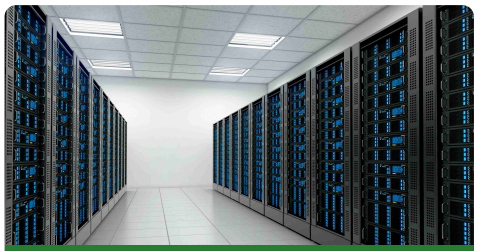
Realize your project with us!

Range of application IoT and Industry 4.0



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

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Technical data

IoT interface	• LoRaWAN, Low Power Network (default equipment alternatively • NB-IoT LPWAN
Special features	• 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 OS, native programmed • WLAN access point and web server for configuration and updates
Sensors, 1-wire bus, internal	• 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 internal digital alarm inputs (closing contact)
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	• LoRa frequency range for Europe, 868MHz • WLAN 2,4GHz
WLAN interface	802.11 b/g, up to 16 dynamic connections
Protocol, WLAN	Modbus/TCP and ASCII text interface (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	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, 10 - 92%

Cloud services, software and logic

ttn
The Things Network
IoT Network

ms azure
Secure IoT Cloud

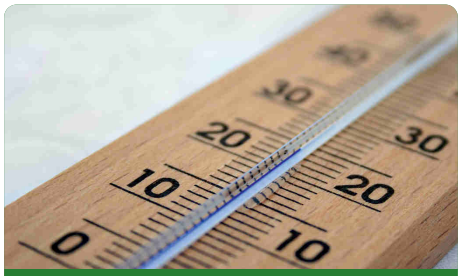
akenza
IoT Cloud

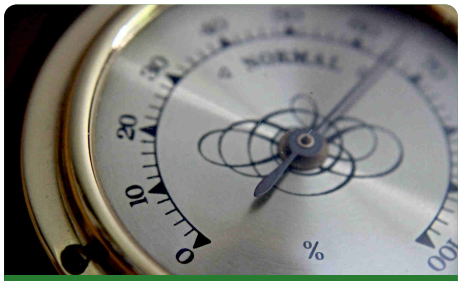
sap
Secure IoT Cloud

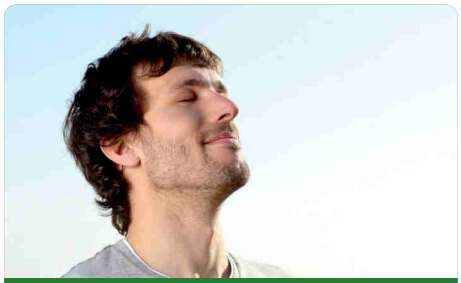
mindsphere
Siemens IoT Cloud

wago
Energy Management

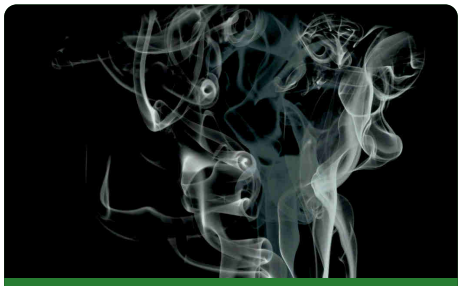
Environmental measurement system, sensors and actuators


Temperature

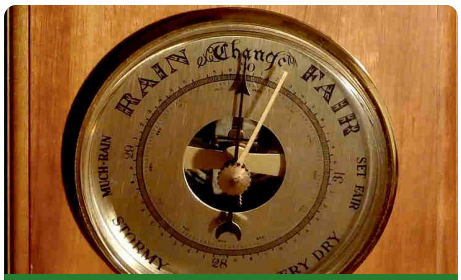

Humidity, rel.

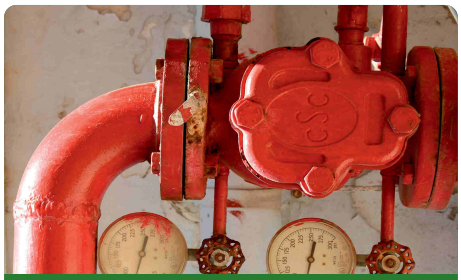

VOC, air quality


Co2, carbon dioxide

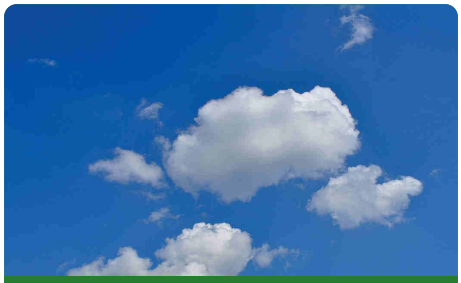

Smoke, fire


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 integrety - robust and sustainable

11613-230 V1.1 Datasheet

Contact us

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