



# EC1 SMART HOME SENSOR GATEWAY

Art. No. 11319

## APPLICATION

- Intelligent system interface between 1-Wire sensors and your smart home system and smart home software

## ADVANTAGE

- Affordable entry-level central processing unit for 1-Wire
- With the ESERA-patented PLUG and PLAY system AUTO-E-CONNECT, you can quickly achieve the desired smart home solution: connect, switch on and you will receive processed measured values in clear text
- Intuitive operation via Config Tool

## DESCRIPTION

The EC 1 sensor gateway is designed for autonomous management of a 1-wire network. The user does not have to worry about any 1-Wire commands or formulas for evaluating the sensor data. The gateway independently scans the 1-Wire network for devices (sensors and actuators)

The EC 1 sensor gateway evaluates the sensor and actuator data internally and outputs the converted data (e.g. for temperature sensors in C°) cyclically (1-2 sec.) in plain text.

In addition, the article number for ESERA modules can be entered; the calculation and output are adapted to the function of the module

A wide range of sensors is available, such as temperature, humidity, dew point, air quality (CO<sub>2</sub>, VOC or fine dust), digital alarm contacts, glass breakage and smoke detectors.

The 1-Wire interface of the EC 1 sensor gateway is designed so that both small and large 1-Wire networks with long cable runs can be set up safely. The 1-Wire sensors can be operated simultaneously in mixed parasitic\* or normal mode.

The currently most powerful 1-Wire interface for maximum data security has been installed, even for complex network structures.

The EC 1 sensor gateway has a wide-range input of 9 - 30VDC for the power supply. It is therefore equally suitable for 12VDC and the industry-typical 24VDC supplies. DIN rail and plug-in power supplies: see homepage.



## HIGHLIGHTS

Intelligent interface to many smart home devices and software solutions

Auto-E-Connect Plug and Play: fast and fully automatic reading of all 1-Wire devices

Data interface for ASCII text protocol

LAN interface for data, configuration, debug and firmware updates

Expandable via ESERA 1-wire hub, therefore also suitable for large networks

LAN interface for data, configuration, debug and firmware updates

Extensive protective circuits and good device protection

Simple installation with top-hat rail housing for control cabinet installation



## EQUIPMENT OPTIONS

- Ultrafast iButton or RFID Read function for access or security authentication
- Optional firmware versions, e.g. for 1-wire memory (EEPROM) and iButton read without programming.
- Customization and branding possible

## TECHNICAL DATA

<b>Ethernet interface:</b>	TCP/IP or UDP - 10/100 MBit Ethernet interface (RJ45) - Auto Negotiation (Full-duplex and Half-duplex) - Auto MDI/MDIX - Support for DHCP and fixed IP address
Firmware update/ Configuration:	ESERA Config Tool III
Supply voltage:	9-30VDC
Power consumption:	max. 500mA
RTC power supply:	Gold cap, buffering of the internal clock (RTC) in the event of failure of the Supply voltage for approx. 2 days. In the event of a longer failure, the RTC must be reset. The Goldcap is charged after approx. 2 hours.
<b>1-Wire interface:</b>	1-wire bus (+5V, ground and data)
Protective circuits:	ESD and reverse polarity protection
Connection:	Screw terminals (up to 2.5qmm cable cross-section)
Output voltage:	5V (+/-10%), max. 200mA, overload and short-circuit proof
Isolation:	Galvanic isolation between Ethernet and 1-Wire interface
Supported 1-Wire devices:	DS2401, DS1963, DS1990, DS1820, DS18S20, DS18B20, DS2413, DS2438, DS2450, DS2408, DS2405, DS2406 (input only), DS2423, Further chips on request. We are happy to support further modules as OEM product for you.
Temperature, operation:	-5°C to +55°C
Humidity:	10 - 92% (non-condensing)
Protection class	IP20
Protection class	III
Dimensions	35 x 90 x 70mm (WxHxD)

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