



Professional Environmental Measurements per UMS 2205

small – compact – robust – expandable

Art. No. 11611-230

Product description

The UMS2205 system represents a high performance environmental measurement system of the latest generation for long-term use.

A wide range of sensors is available, such as **fine dust, ozone, NO3, CO2, temperature, humidity, dew point, air pressure**, wind direction, wind speed, acoustics, smoke, irradiation, digital alarm contacts, etc. and thus an almost complete environmental monitoring is possible.

Further sensors on request. Sensor modules are exchangeable.

Our solution is an expandable and modular measuring system in industrial quality for at least 10 years of operation without calibration.

Up to 15 sensors can be installed in the UMS 2205 on 5 sensor measuring stations as required.

The sensor values are transmitted via two long-distance data radio systems, LoRaWAN and NB-IoT.

Live data can be read out via the WLAN interface and configured and updates imported via web server.

The UMS2205 can be expanded by up to 30 additional external sensors via Industrial 1-Wire Bus and Auto-E-Connect Plug and Play System fully automatically.

The ESERA Auto-E-Connect system, which is an extension of the 1-Wire Bus standard, has been registered by ESERA GmbH as a German and European patent.

Each of the maximum 30 additional sensors can provide up to 5 data values. Thus, the UMS2205 can supply up to 200 sensor data to your control system.

The UMS2005 is designed for pole mounting (lamppost) or wall mounting.



Highlights

- space for 5 measurement modules with up to 15 sensors
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- LoRaWAN, NB-IoT long range data interfaces
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- WLAN interface for commissioning, maintenance and testing
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- Insect proof, ball-shot proof housing
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- energy saving
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- OLED Display intern
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- vandalism sensor for alarms
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- Plug and Play interface for up to 30 additional sensors (e.g. ground temperature, air quality or gas sensors)
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- Webserver for configuration, Debug and Firmware Updates
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- robust industrial design
-
- power supply -230VAC
-
- compact and shapely housing



Optional equipments

- a UPS function via rechargeable battery for min. 10 minutes of operation. Power failures are detected, reported and the sensor data can still be sent to the higher-level control system.
- Long-term data logger function in the housing for measured value recording or logging.
- Vandalism protection for detection of housing openings.
- External antenna for radio data transmission and WLAN interfaces possible.



Rear side pole mount

Key Features (Basic unit)

Sensors	maximum 5 sensor modules for max. 4 measuring sensors each Standard: CO2, temperature, rel. humidity, dew point, air pressure optional: ozone, NO3, fine dust (certified), wind direction, wind speed, precision temperature sensor, acoustics. further sensors on request. Sensor modules are exchangeable
Data interfaces	<ul style="list-style-type: none"> • LoRaWAN 868MHz • NB-IoT (4G) with Fall Back Function to 2G GSM radio system • LAN and WLAN, WLAN: 802.11 b/g ASCII Text interface (ESERA Protocol)
Operating modes	operation, test and commissioning
Ext. Sensor Bus (1-Wire Industrial Bus)	1-Wire Bus system for parasitic or standard mode Support for ESERA Auto-E-Connect system, level 1 - 3
Digital inputs	4 x digital inputs for external alarm signalling contacts, e.g. lantern connection cover (normally open contacts, 5V working voltage)
Power supply	230VAC (100VAC to 250VAC), max. 10 Watt
Connection	screwless terminals, Push In terminals
Housing	300 x 200 x 150mm (HxWxD), plastic, color light gray, impact resistance IK 10, UV stabilized polycarbonate, corrosion resistant
Temperature, Operation	-25°C to +60°C (optional -40°C to +70°C)
Protection system, Protection class	IP44 / Protection class II
System clock (RTC)	min. 48 hours RTC operation without mains voltage

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