



# WIRELESS SYSTEMS

## WIRELESS DATA LOGGER FOR HUMIDITY AND TEMPERATURE PROBES.

- HygroClip2 probes for humidity and temperature measurement
- Wireless frequency: 433.92 or 915 MHz (USA) for optimized communication
- Highest possible measuring accuracy:  $\pm 0.8$  %RH and 0.1 °C
- Outstanding repeatability
- Battery life up to 6 years
- Large storage capacity of up to 300,000 measured values
- Transmission distance up to 300 meters
- With USB or Ethernet receiver
- Integrated battery monitoring



rotronic  
www.rotronic.de  
SERIAL NO.: C20105  
OPERATION RANGE: -45...+85°C  
ART. NO.: LOG-H102-100  
CE



## BE PRECISE: THE MAIN ADVANTAGES AT A GLANCE.

The wireless data loggers are suitable for a wide range of humidity and temperature monitoring tasks. Wireless transmission - possible over distances of up to 300 m - saves the user wiring costs and the data can be collected and recorded from inaccessible points quickly and easily. Thanks to the combination of wireless transmission and data logging, the greatest possible reliability against failure is insured. Up to 100 devices can be connected and configured via HW4 software using an Ethernet or an USB receiver.

The wireless data loggers are suitable for a wide range of monitoring tasks in meteorology, the food industry, building services equipment, museums, environmental and laboratory technology climate chambers, clean rooms research and development, the pharmaceutical and chemical industries, logistics and the textile industry.

## SYSTEM OVERVIEW

### Wireless LAN network



### Wireless USB network



# TRANSMITTERS

## Wireless humidity/temperature data loggers

Thanks to the data logging function, the data are not lost in the event of an interruption in wireless transmission and can be retrieved at any time.

### Features

- Digital probe input for connection of all ROTRONIC HygroClip2 probes
- Probes can be interchanged without further adjustment
- Transmission distance: up to 100 m
- Integrated battery monitoring (HL-RC only)
- Operating range: -40...85 °C
- High storage capacity: up to 175,000 measured values (RH & T) with serial number, time and date
- Flash memory for data security in the case of power failures
- Long-term recording up to 6 years without battery replacement
- Data security: PIN for activation and data access
- Plastic housing, white, IP65

### Order code

### Device type

LOG-HC2-RC	Wireless humidity/temperature logger 433.92 MHz
HL-RC-B	Wireless humidity/temperature logger 433,92 MHz with battery monitoring
LOG-HC2-RC-US	Wireless humidity/temperature logger 915 MHz (US version)
HL-RC-B-US	Wireless humidity/temperature logger 915 MHz (US version) with battery monitoring



# PROBES FOR THE LOG-HC2.

The HygroClip2 probes come in various versions. You can find exactly the probe you need: from simple plug in probes for handheld instruments and data loggers to highly developed cable probes for high temperature and high pressure applications. Common to all is the high precision the probes offer thanks to our patented AirChip3000. This technology is exactly what makes every probe in our range a high-end product for normal and industrial applications.

## Standard climate probe



Probe with maximum accuracy for all climate measurements.

Operating range -50...100 °C, 0...100 %RH.

## Mini probes



4 and 5 mm probes for measurements in confined spaces such as packaging etc. and for building material tests.

Operating range -40...85 °C, 0...100 %RH.

## Industrial probe



Probe for process applications  
 Operating range 0...100 %RH,  
 -100...200 °C and 0...100 bar.  
 Also available as screw-in probe.  
 Probe with maximum accuracy  
 for all climate measurements.

**Contact us if you need assistance in selecting the most suitable probe for your application, we will be pleased to advise you.**

## Wireless temperature data loggers

PT1000 temperature probe integrated or remote with 30 cm cable

### Features

- Accuracy:  $\pm 0.1$  K at 0 °C
- Temperature operating range: -40...+85 °C
- Integrated battery monitoring (HL-RC only)
- High storage capacity: up to 300,000 measured values with serial number, time and date
- Flash memory for data security in the event of power failures
- Long-term recording up to 6 years without battery replacement
- Transmission distance: up to 300 m (free field) with remote probe, 100 m with integrated temperature probe
- Data security: PIN for activation and data access
- Plastic housing, white, IP69 (submersible)

### Order code

LOG-PT1000-RC

LOG-PT1000-RC-US

LOG-PT1000-ET030-RC

LOG-PT1000-30-RC-US

HL-RC-T

HL-RC-T-US

HL-RC-T030

HL-RC-T030-US

### Device type

Wireless temperature logger 433.92 MHz

Wireless temperature logger 915 MHz (US version)

Wireless temperature logger with remote probe 433.92 MHz

Wireless temperature logger with remote probe 915 MHz (US version)

Wireless temperature logger 433.92 MHz with battery monitoring

Wireless temperature logger 915 MHz (US version) with battery monitoring

Wireless temperature logger with remote probe 433.92 MHz with battery monitoring

Wireless temperature logger with remote probe 915 MHz (US version) with battery monitoring



## ACCESSORY

### 433 MHz ground plane antenna

### Features

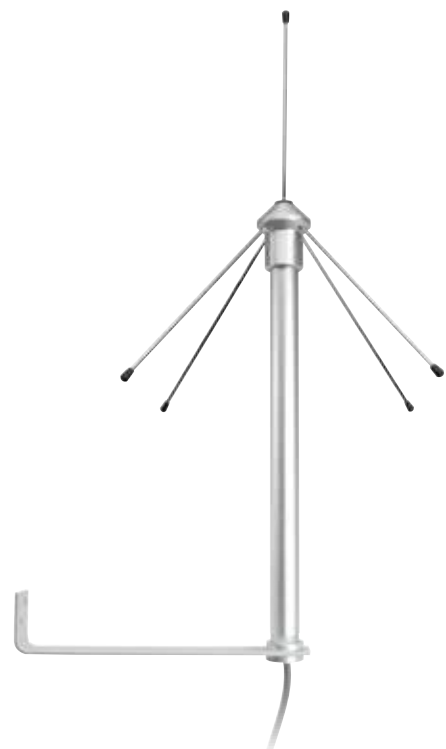
- Industrial antenna for improved reception
- Suitable for both indoor and outdoor use
- Incl. 2.5 m coaxial cable (50 ohms) and SMA connector
- Dimensions (Ø x H): 190 mm x 460 mm

### Order code

LOG-AN-GP433

### Device type

433 MHz Ground plane antenna, cable length 2.5 m



# RECEIVERS

## LAN interface

### Applications

Using an existing Ethernet infrastructure, the LAN interface serves as an interface between the wireless network and the PC.

### Features

- Manages up to 100 digital wireless data loggers
- Improved reception performance compared with the USB wireless adapter
- Network connection: 100 MBit Ethernet LAN (RJ-45)
- Communication: via TCP/IP protocol
- Wireless: connection of external SMA antenna possible
- Configurable via web browser
- Housing material: aluminum
- Power supply: AC mains adapter

### Order code

LAN-INTERFACE

LAN-INTERFACE-US

### Device type

LAN interface 433.92 MHz

LAN interface 915 MHz (US version)

### Compatible

- Wireless data loggers
- Ground plane antenna

### Included

- Short instruction manual
- Standard antenna
- AC mains adapter



## USB wireless adapter

### Applications

The USB wireless adapter serves as an interface between the wireless network and the PC.

### Features

- Manages up to 100 digital wireless data loggers
- Wireless: connection of external SMA antenna possible
- Plug & Play

### Order code

LOG-DS-EXT

HL-DS-EXT USB

LOG-DS-EXT-US

HL-DS-EXT-US USB

### Device type

USB wireless adapter 433.92 MHz

USB wireless adapter 433.92 MHz for logger with battery monitoring

USB wireless adapter 915 MHz (US version)

USB wireless adapter MHz for logger with battery monitoring (USA-Version)

### Compatible

- Wireless data loggers
- Ground plane antenna

### Included

- Short instruction manual
- Standard antenna



# TECHNICAL INFORMATION.

## Radio frequencies.

There are two radio frequencies available for transmission of the data: 915 MHz for the USA and 433.92 MHz for Europe and the rest of the world. These frequencies are ideal for optimal data transmission.

## Range.

Depending on the type of transmitter and type of building, ranges of up to 300 meters.

## Data logging/Transmission.

Up to 300,000 measured values can be stored in the wireless data logger. The data is transmitted and recorded continuously as long as the wireless data logger is located in the vicinity of a receiver (LAN interface, USB wireless adapter). If the distance between the transmitter and receiver is too large or the wireless connection is lost, the data is nevertheless recorded. In this way it is ensured that no data is lost.

	LOG-HC2-RC-(US) HL-RC-B	LOG-PT1000-RC-(US) HL-RC-T	LOG-PT1000-ET HL-RC-T030
Type	Data logger for humidity and temperature HC2 probes	Temperature logger	Temperature logger with remote sensor
Sensor	IN-1	Pt100 (HC2)	Pt1000
Accuracy	Probe dependent	± 0.1 K at 0 °C	
Measurement range	Probe dependent	-40 ... 85 °C	-40...85 °C -90...180 °C (optional)
Radio frequency	433.92 MHz (US: 915 MHz)		
Storage capacity	175,000 measured values (%RH & °C)	300,000 measured values (°C)	
Logging interval	1 min. to 12 h		
Power supply	Lithium (Li-SOCl <sub>2</sub> ) battery 2400 mAh		
Battery life	Up to 6 years depending on logging interval (1 h)		
Battery status indicator	Via software, recording of battery voltage and internal temperature		
Transmission distance	Max. 100 m (free field)		Max. 300 m (free field)
Data security	4-digit PIN (access code for activation/reading)		
Dimensions without probe	140 mm x Ø 20 mm		
Housing material	POM (housing) / PUR (cable)		
Protection	IP-65	IP-69	
Norm	EN 12830		
Software	HW4 V3.2 or higher		
Order code	LOG-HC2-RC	LOG-PT1000-RC	LOG-PT1000-ET030-RC
Order code (US)	LOG-HC2-RC-US	LOG-PT1000-RC-US	LOG-PT1000-ET-RC-US

	LAN interface-(US)	USB wireless adapter-(US)
Type	100 MBit Ethernet LAN interface	Local readout device for data logger to PC
Radio frequency	433.92 MHz (US: 915 MHz)	
Power supply	Via AC adapter, 5 V, min. 200 mA, included in the delivery package	USB power supply via PC
Dimensions	30 mm x 130 mm x 80 mm	15 mm x 77 mm x 20 mm
Software	HW4 V3.2 or higher	
Order code	LAN-INTERFACE	LOG-DS-EXT
Order code (US)	LAN-INTERFACE-US	LOG-DS-EXT-US



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