WIRELESS SYSTEMS

AIR CHIP TECHNOLOGY

AUTONOMOUS WIRELESS LOGGER SYSTEM FOR HYGROCLIP2 AND TEMPERATURE PROBES.

- Digital probe input for interchangeable HygroClip2 probes
- Logs relative humidity and temperature
- Wireless frequency: 433.92 or 915 MHz (USA) for optimised communication
- Highest possible measuring accuracy: ±0.8 %rh and 0.1 °C
- Outstanding accuracy and repeatability
- Battery life up to 6 years
- Large storage capacity of up to 500,000 measured values
- Transmission distance up to 100 metres (free field)
- With USB or Ethernet receiver
- Saves wiring costs

omni INSTRUMENTS

www.omniinstruments.co.uk

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 100 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 ensured. Up to 100 devices can be connected and configured via HW4 software using a Ethernet or a USB receiver.

The wireless data loggers are suitable for a wide range of monitoring tasks in meteorology, the food industry, building services equipment, museums (glass cabinets), environmental and laboratory technology, 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 HygroClip2 probes
- Probes can be interchanged without further adjustment
- Transmission distance: up to 100 m (free field)
- Operating range: -40 to 85 °C
- High storage capacity: up to 500,000 measured values 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 possible
- 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
LOG-HC2-RC-US	Wireless humidity/temperature logger 915 MHz (US version)

THE PROBES FOR THE LOG-HC2.

The HygroClip2 series come in various versions. You can find exactly the probe you need: from simple plugon probes for handheld instruments and data loggers to highly developed cable probes for high temperature and other special applications. Common to all is the high precision the probes offer, which, thanks to our patented AirChip3000, can be raised even further. Common to all is the high precision the probes offer, which thanks to our patented AirChip3000, can be raised even further. And that is exactly what makes every probe in our range a highend 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 -50...100 °C, 0...100 %rh.

Industrial probe

Probe for process applications
Operating range 0...100 %rh,
-100...200 °C and 0...400 bar.
Also available as screw-in probe.
Probe with maximum accuracy
for all climate measurements.

You do not know which probe is best for your application? Contact us! We will find the best solution together with you.

Wireless temperature data loggers

PT1000 temperature probe firmly integrated or remote with 30 cm cable

Features

- Accuracy: ± 0.1 °C
- Temperature operating range: -40 to +85 °C
- High storage capacity: up to 500,000 measured values 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 possible
- Transmission distance: up to 300 m (free field) with remote probe, 100 m with sensor tip of stainless steel at housing
- Data security: PIN for activation and data access
- Plastic housing, white, IP69 (submersible)

Order code	Device type
LOG-PT1000-RC	Wireless temperature logger 433.92 MHz
LOG-PT1000-RC-US	Wireless temperature logger 915 MHz (US version)
LOG-PT1000-ET030-RC	Wireless temperature logger with remote probe 433.92 MHz
LOG-PT1000-30-RC-US	Wireless temperature logger with remote probe 915 MHz (US version)

LOG-PT1000-RC-(US)

LOG-PT1000-ET030-RC
LOG-PT1000-30-RC-US

ACCESSORIES

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 Ohm) and SMA connector
- Dimensions (Ø x H): 190 mm x 460 mm

Order code	Device type
LOG-AN-GP433	433 MHz Ground plane antenna, cable length 2.5 m

RECEIVERS

LAN interface

Applications

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

Features

- Manages up to 100 digital wireless data loggers
- 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	Device type
LAN-INTERFACE	LAN interface 433.92 MHz
LAN-INTERFACE-US	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 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	Device type
LOG-DS-EXT	USB wireless adapter 433.92 MHz
LOG-DS-EXT-US	USB wireless adapter 915 MHz (US 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 metres (free field) can be achieved.

Data logging/Transmission.

Up to 500,000 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.

Adjustment / Calibration.

Users of HygroClip2 probes have various possibilities for calibration and adjustment of the probes.

A) Return to Omni Instruments.
B) Using a HygroGen2 humidity/temperature generator.
C) With the help of ROTRONIC EAxx-SCS humidity standards, the ER-15 calibration device as well as an AC3001 connection cable from the probe to the PC.

	LOG-HC2-RC-(US)	**LOG-PT1000-RC-(US)**	**LOG-PT1000-ET030-RC- LOG-PT1000-30-RS-US**
Type	Digital input for HC2 probes (UART)	Pt1000 temperature probe	Pt1000 temperature probe with remote probe
Accuracy	Probe dependent	±0.1 °C (resolution: 0.01°C)	
Radio frequency	433.92 MHz (US: 915 MHz)		
Storage capacity	Up to 500,000 measured values		
Logging interval	1 min. to 12 h		
Power supply	Lithium (Li-SOCl2) battery 2400 mAh		
Battery life	Up to 6 years depending on storage interval		
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		
Software	HW4 V3.1 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 V3.1 or higher	
Order code	LAN-INTERFACE	LOG-DS-EXT
Order code (US)	LAN-INTERFACE-US	LOG-DS-EXT-US

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For pricing, or any further, information please contact us.
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