



# TEMPERATURE & RELATIVE HUMIDITY TRANSMITTERS

## ABB ScreenMaster SM500F

**Wall-mount paperless recorder with in-built temperature and humidity sensor.**

With the tried and tested ABB SM500F, we have the option of having an integrated T&H sensor mounted underneath. With the addition of an in-built 24Vdc transmitter power supply this can supply the loop for both the temperature and humidity reading. On top of this build there is further I/O available on the SM500F, for example a volt free digital input could be added for monitoring the opening and closing of a door. This would be ideal for clean room applications and is compliant to CFR 21 Part 11 requirements. Using ABB DataManager Pro software also allows the user to create charts and spreadsheets with the data.



## HygroFlex1 - HF1 - Inexpensive HVAC Transmitter

### Features

- Two freely scalable analogue, voltage or current outputs
- Adjustable at 35% / 80% RH
- USB service interface
- Small footprint
- Easy mechanical installation



The HygroFlex1 series is the latest development in inexpensive HVAC transmitters for relative humidity and temperature. The devices are equipped with the tried and tested Hygromer® IN-1 sensor and boast unbeatable value for money.

The ROTRONIC SW21 software enables you to change the scale and calibrate and adjust the transmitter.

## HygroFlex5 - HF5 - High-end HVAC Transmitter

### Features

- Wide choice of probes to satisfy every application
- Interchangeable probe for easy maintenance
- Low voltage and mains versions
- Freely scalable analogue signals
- Various digital outputs available
- Available with metal housing

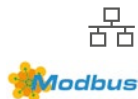


The HF5-series is compatible with HygroClip2 probes with integrated AirChip3000 technology - thanks to which the probes achieve an unparalleled degree of accuracy not seen before.

In combination with advances in sensor technology and integration, the HygroFlex5 series transmitters combined with a HC2A-S probe provide superb precision and state of the art functionality, taking humidity and temperature measurement to a whole new level of accuracy <0.8% RH.

### The HygroFlex5 can measure:

- Humidity (%RH)
- Temperature (°C)
- Wet-bulb temperature (°C)
- Dew point (°C)
- Frost point (°C)
- Vapour concentration (g/m<sup>3</sup>)
- Specific humidity (moist) Q (g/kg)
- Mixing ratio by Wt. (dry) R (g/kg)
- Vapour partial pressure (hPa)
- Vapour saturation pressure (hPa)
- Saturation vapour concentration (g/m<sup>3</sup>)
- Enthalpy (kJ/kg)



## HygroFlex5-EX - HF5-EX - Two-Channel Transmitter

### Features

- Measurement of relative humidity and temperature, optional output of dew point and other calculated parameters
- Intrinsically safe measurement probe
- Interchangeable stainless steel probes



The HygroFlex5-EX series is the latest development in two-channel transmitters for use in explosive atmospheres. This device conforms to the latest international standards. The HF5-EX series consists of a robust aluminium transmitter with or without display. The attached probes are cast into a stainless steel tube, and are certified for operation in Zone 0/20. The transmitter itself is certified for Zone 1/21. Compatible with the following EX Probes: HC2-SM-EX, HC2-IM-EX, HC2-IE-EX and HC2-LDP-EX.



## CRP1 - Clean Room Panel

### Features

- Measures humidity and temperature
- Designed specifically for clean rooms
- FDA and GAMP compatible
- Stainless steel front panel highly resistant to chemicals
- Alarm output acoustic, or via relay or LCD display
- Analog output signals freely configurable



The CRP1 Clean Room Panel is characterised by its compact construction and simple handling. Its HygroClip2 compatibility allows humidity to be registered to the highest degree of accuracy. The data can be transferred via analogue outputs or MODBUS. Measured values, alarms and measurement curves are shown on the display.





# TEMPERATURE & RELATIVE HUMIDITY PROBES

## HC2A-S - Safe Area Probe

- Relative humidity, temperature and dew point calculation
- Excellent long-term stability <1%RH / year
- Integrated data acquisition and calibration history
- Auto-diagnostics with error compensation
- Programmable alarm functions
- Advanced easy-to-use calibration features
- 100% field interchangeable



The HC2A-S / HC2A-S3 probe is ideal for the HVAC, food, building services, paper, textile and pharmaceutical industries. It is an ambient air probe for indicators, transmitters or data loggers.

## HL-RC-B - Temperature & Humidity Wireless Logger

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

Ideal for pharmaceutical and food industries, meteorology, environmental engineering, museums / glass cabinets, monitoring of store rooms, mechanical engineering, chemical industry, research and development.



## Hazardous Area Probes

### HC2-SM-EX

- Standard HygroClip2 EX probe
- Ø15 x 104mm



### HC2-IM-EX

- HygroClip2 EX cable probe
- Ø15 x 125/285mm
- Cable lengths 2/5/10 metres



### HC2-IE-EX

- HygroClip2 EX screw-in cable probe
- ½" G/NPT thread
- Cable lengths 2/5/10 metres



### HC2-LDP-EX

- Low dew point probe
- Excellent repeatability
- AirChip4000 measurement technology
- Reliable measurement of trace moisture
- Highly accurate dew point and temperature measurement
- Withstands pressures up to 100bar
- HYGROMER® LDP-1 sensor element
- Trace moisture monitoring at low limits
- AirChip4000 measurement technology



## HygroPalm HP23-A - Handheld Indicator

- Data recording function up to 10,000 records
- Integrated clock for timestamp
- Battery charging function, USB interface
- Adjustment of transmitters HF3, HF4, HF5, HF7, HF8, via service cable
- All psychrometric calculations
- Two connections for all HC2 probes or analogue third-party probes

The HP23 is a multi-function hand-held indicator that can read the data from two HygroClip2 probes and display relative humidity, temperature and a variety of calculated parameters (dew point, frost point, etc.) Depending on the HygroClip2 probe model, the measurement range is between 0 to 100%RH and -100 to 200°C (-148 to 392°F).



## CP11 - Handheld for CO<sub>2</sub>, Humidity & Temperature

- Hygromer® IN-1 humidity sensor
- 18,000 data point memory
- Max, min and average value display
- Adjustable audible CO<sub>2</sub> alarm
- Display with backlight
- Mini USB interface
- Calculates the dew point and wet bulb temperature

The CP11 handheld instrument is an economical multiple parameter meter that simultaneously measures and records CO<sub>2</sub>, humidity and temperature. Using the software that comes with the device, it can be set as required and data can be downloaded, saved and analysed. Ideal for measuring indoor air quality, monitoring in underground car parks, and leak monitoring in filling plants.

