

HYGROFLEX6

THE TRANSMITTER FOR MAINS OR LOW VOLTAGE POWER SUPPLY WITH GALVANIC ISOLATION.

BASED ON THE AIRCHIP3000 DIGITAL TECHNOLOGY.



INNOVATION IN HUMIDITY AND TEMPERATURE MEASUREMENT

- Measures relative humidity, temperature and dew/frost point
- Highest accuracy: 1.0 %rh and 0.2 °C
- Wall, duct and cable versions
- Mains or low voltage power supply
- Galvanically isolated outputs
- Service interface (UART)



HYGROFLEX6-SERIES

SPECIFY THE BEST: HYGROFLEX6 ADVANTAGES AT A GLANCE.

The new HygroFlex6 series provides the highest specification and a wide range of configurations for industrial applications and a guaranteed system accuracy of 1 %rh and 0.2 K. The HygroFlex6 was specifically designed for specific industrial applications. With the different types of mounting, wall, duct and cable, the HF6 is very versatile. This new instrument not only offers mains or low voltage power supply, but also galvanic isolated outputs.

AirChip3000 Digital Technology - The latest generation of ROTRONIC probes and instruments use the AirChip3000 technology with features such as:

- Compensates humidity and temperature over 30,000 reference points
- Dew/frost point calculation
- Sensor auto-diagnostics and automatic correction
- Active alarming and information
- User configurable fixed output signals
- Conforms to FDA21 CFR Part 11 and GAMP4 (audit trail)



Functional display

- The clear, backlit graphic display is easy to read and the simple menu navigation provides fast access to all the information available
- Trend indication
- Configuration by keypad possible
- Display resolution to 2 decimal points

Output signals

- Two freely selectable and scalable analogue outputs
- Optional digital outputs allow integration on a network via RS-485, Ethernet or Wireless
- Available as 2-wire (HF62), 3/4-wire (HF63)
3/4-wire with galvanic isolation (HF66)
and digital (HF66) transmitter

Power supply

- Models with mains or low voltage power supply



APPLICATIONS.

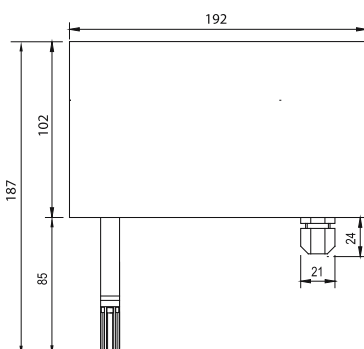
The HygroFlex6-series is ideal for all applications where exact measurement of humidity and temperature is of decisive importance. The transmitters can be used in a variety of fields for heating, ventilation and air conditioning applications, museums, warehouses, libraries, railway stations and for climate control in office buildings.

Thanks to the exceptional long term stability of the sensor and auto-diagnostics, the transmitters are both service friendly and reliable, thereby saving you both time and money.

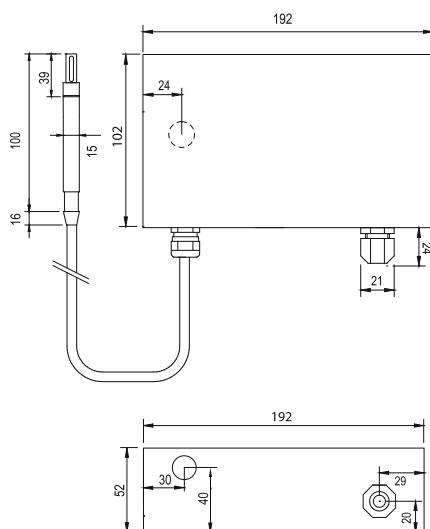
HF6XX Wall version



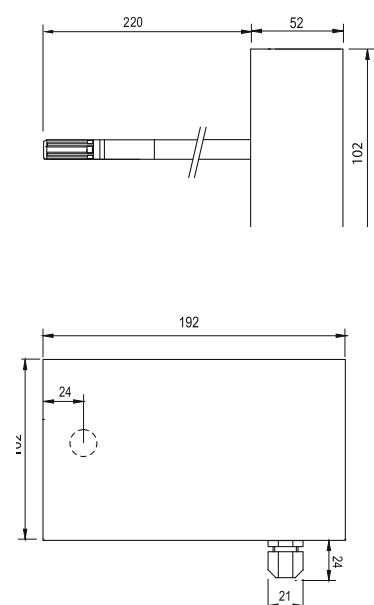
Dimension



HF6XX Cable version



HF6XX Duct version



TECHNICAL INFORMATION.

General	HF62	HF63/66	HF65
Device type	Humidity temperature transmitter with analogue output signals		Humidity temperature transmitter with digital output
Circuit type	Two independent 2-wire, loop powered circuits	3-wire	
Supply voltage	10...28 VDC V min = 10 V + (0.02 x Load*) *Load resistance in ohms.	15...40 VDC or 12...28 VAC / 85...265 VAC	
Nominal current consumption (low voltage models)	2 x 20 mA	< 50 mA	Model with USB interface: 50 mA Model with Ethernet interface: 300 mA
Measuring range	0...100 %rh / -100...200 °C / -148...392 °F		
Measurement accuracy at 23 °C	±1.0 %rh / ±0.2 K		
Repeatability	0.3 %rh / 0.05°C		
Long term stability	< 1 %rh / year or < 0.1°C / year		
Sensor time constant	Typical 10 sec, 63% of a 35 to 80 %rh step change (1m/sec air flow at sensor) Typical 4 sec, 63% of a step change (1m/sec air flow at sensor)		
Psychrometric calculations	Dew or frost point (user configurable option)		
Start-up time	3.4s (typical)		1.9s (typical)
Data refresh rate	3.4s (typical)		1.7s (typical)
Output 1 and Output 2	0...20 mA / 4... 20 mA / 0... 1 V / 0... 5 V / 0... 10 V		
Interface type			RS-485, USB + RS-485 Ethernet (RJ45) + RS-485 Ethernet Wireless + RS-485
Optional display	LC, 1 or 2 decimals resolution, backlight, trend and alarm indication		
Storage and transit	-50...70 °C / -20...70 °C (models with display), 0...100 %rh, non condensing		
Operating range electronics (device)	-40 ...60 °C / -10....60 °C (models with display), 0...100 %rh, non condensing		
Temperature limits at probe	-50...100 °C (valid for wall and duct versions), -100...200°C (cable version)		
Housing protection grade	IP 65 (except models with USB or Ethernet		
Weight	300 g (10.6 oz)		
Maximum humidity at sensor	100 %rh up to 80 °C (176 °F) 75 %rh at 100 °C (212 °F) 45 %rh at 125 °C (260 °F) 15 %rh at 150 °C (302 °F)		
CE-/EMV-Festigkeit	EMC Directive 2004/108/EG: EN 61000-6-1: 2001 EN 61000-6-2: 2005 EN 61000-6-3: 2005, EN 61000-6-4: 2001 + A11		
Solder type	Lead free (RoHS directive)		
Fire protection class	Corresponds to UL94-HB		
FDA / GAMP directives	Compatible		

Subject to technical change without notice. Errors and omissions excepted.

Interested in further information (special applications, order codes)? A complete and up-to-date overview of our HygroFlex6-series is available on our web site www.rotronic.com.

Change over now to the HygroClip2 probes with integrated AirChip3000 technology for your temperature and humidity measurements. You can find detailed information about our probes at www.rotronic.com. We would also be happy to advise you in person or on the phone.

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MEASUREMENT SOLUTIONS

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