

## INSTRUKART HYGROFLEX HF132

# Rotronic HYGROFLEX HF132 Temperature and Humidity Transmitter

## User Manual

### 1. INTRODUCTION

---

The Rotronic HYGROFLEX HF132 is a wall-mount transmitter designed for accurate measurement of relative humidity and temperature. It is suitable for various applications including Heating, Ventilation, and Air Conditioning (HVAC) systems, clean rooms, and Building Management Systems (BMS). This device features the Hygromer IN-1 sensor and a blue backlit LCD display for clear readings. It provides two analog outputs for integration into control systems.

The HF132 transmitter measures temperature within a range of -20 to 50 °C and humidity from 0 to 100% RH (non-condensing). It offers reliable performance with a long-term stability of less than 1.5% RH per year.



Figure 1: Rotronic HYGROFLEX HF132 Transmitter

## 2. SAFETY INFORMATION

---

Before installation or operation, read this manual thoroughly. Ensure all electrical connections comply with local and national electrical codes. Only qualified personnel should perform installation and maintenance. Do not expose the device to conditions outside its specified operating ranges.

## 3. SETUP

---

### 3.1 Unpacking and Inspection

Carefully unpack the HF132 transmitter and inspect it for any signs of damage. The supply scope includes one HF132 transmitter unit and this instruction manual.

### 3.2 Mounting

The HF132 is designed for wall mounting. Select a location that accurately represents the environmental conditions to be measured, away from direct heat sources, ventilation outlets, or direct sunlight. Use appropriate screws and wall plugs for secure installation.



Figure 2: HF132 Transmitter with included mounting hardware and calibration sheet

### 3.3 Electrical Connection

The device requires a supply voltage of 12 to 28 VAC or 15 to 40 VDC. It is a 3-wire type connection. The cable gland (M16 x 1.5) is designed for horizontal cable entry. Connect the power supply and analog output wires according to the wiring diagram provided in the full technical documentation (not included here).

### 3.4 Initial Configuration

The HF132 can be configured using the optional ROTRONIC HW4/SW21 software. This software allows for changing the scale, calibration, and adjustment of the transmitter parameters. Refer to the software manual for detailed instructions on configuration.

## 4. OPERATING INSTRUCTIONS

### 4.1 Power On

Once properly installed and wired, apply power to the device. The blue backlit LCD display will illuminate, showing the current relative humidity (%RH) and temperature (°C) readings.

### 4.2 Reading Measurements

The display provides real-time measurements. The response time for changes in environmental conditions is approximately 4 seconds. The device continuously measures and outputs temperature and humidity data via its analog outputs.

### 4.3 Analog Outputs

The HF132 features two freely scalable analog outputs. These outputs can be configured for either current (4 to 20 mA) or voltage (0 to 1V, 0 to 5V, or 0 to 10V DC) signals, allowing integration with various control and monitoring systems.

## 5. MAINTENANCE

---

### 5.1 Cleaning

Clean the exterior of the device with a soft, damp cloth. Do not use abrasive cleaners or solvents. Ensure the sensor probe remains free from dust and debris to maintain accuracy.

### 5.2 Calibration

The HF132 offers adjustable accuracy for humidity measurements (typically  $\pm 2\%$  RH between 10-90% RH, adjustable at 35% RH & 80% RH). Regular calibration is recommended to ensure continued accuracy, especially in critical applications. Calibration can be performed using the ROTRONIC HW4/SW21 software and appropriate calibration standards.

## 6. TROUBLESHOOTING

---

If the device is not functioning as expected, consider the following:

- **No Display:** Check the power supply connections and ensure the correct voltage is applied.
- **Incorrect Readings:** Verify the sensor probe is clean and unobstructed. Check for environmental factors that might affect readings (e.g., direct airflow, heat sources). Consider recalibration if readings are consistently inaccurate.
- **No Output Signal:** Inspect the analog output wiring. Ensure the receiving system is correctly configured to interpret the 4-20 mA or 0-10 VDC signal.

For further assistance, refer to the full technical documentation or contact INSTRUKART support.

## 7. SPECIFICATIONS

---

Parameter	Value
Model Number	IK-HF132
Operating Temperature Range	-20 °C to 50 °C (-4 °F to 122 °F)
Humidity Range	0-100% RH (non-condensing)
Humidity Accuracy	$\pm 2\%$ RH (10-90% RH) adjustable
Supply Voltage	12 to 28 VAC / 15 to 40 VDC
Long Term Stability	<1.5% RH per year
Response Time	4 seconds
Output Type	2 analog outputs (current/voltage)
Output Current	4 to 20 mA
Output Voltage	0 to 1V / 0 to 5V / 0 to 10V DC
Sensor Type	Hygromer IN-1 (Humidity), Thermistor (Temperature)
Display	Blue Backlit LCD Display

Parameter	Value
Mounting Type	Wall Mount
Housing Material / IP Rating	ABS / IP65
Product Dimensions	0.59"W x 3.35"H (approx.)
Item Weight	140 grams / 7.1 ounces
CE/EMC Compatibility	2004/108/EC
Manufacturer	Rotronic

## 8. WARRANTY

---

This product is sold with NO Warranty. Please refer to your purchase agreement for any specific return or exchange policies from the seller.

## 9. SUPPORT

---

For technical support, inquiries, or additional documentation, please contact INSTRUKART, the authorized distributor of Rotronic products. You can visit the [INSTRUKART Store on Amazon](#) for more information.