

# 6740 Series

## Humidity Monitoring in Compressed Air

The 6740 Series incorporates a  $\pm 1\%$  accuracy, maintenance free humidity probe ideal for checking humidity measurements for validation of critical environments. It's rugged, compact and protected by a waterproof aluminum housing. The accuracy of this probe has been tested and proven time and again in worldwide laboratory tests. The probe is equipped with a patented capacitive polymer RH sensor.

Edgetech Instruments' services are performed in the USA at their modern, well-staffed, ISO/IEC 17025:2005 accredited, ISO 9001:2015 registered manufacturing facility. All recertifications and calibrations are traceable to NIST.

### Applications

- Continuous monitoring of compressed air systems
- Checking drying efficiency in refrigeration and desiccant compressed air dryers to  $-60^{\circ}\text{C}$
- Checking dew/frost point in process control and compressed air
- Checking condensate deposit in refrigeration dryers
- Monitoring desiccant dryers
- Monitoring blow-by in liquid ring compressors

### Benefits

- Maximum reliability
- Long-term stability
- Demonstrably correct indication of measurement ranges and data
- Highest manufacturing quality
- Calculation of the most important trace humidity variables: Dew/frost point, temperature, PPMv Calculation protocol
- Convenient operation via the display menu without additional aids
- Without display via the internal interface and scaling adapter software
- Local 1-point calibration
- Easy adjustment of limit values



Model 6744 with display



Model 6742 without display

 **Edgetech Instruments**

ISO 9001:2015 Registered

ISO/IEC 17025:2005 Accredited

## Technical Specifications

### Standard for All Models:

#### Dew Point Range:

- -60°F to 30°C (-76°F to 86°F)

#### Pressure Range:

- -1.0 to 50 bar (0 to 700 psia)

#### Accuracy:

- $\pm 2^{\circ}\text{C}$  at  $-5^{\circ}\text{C}$  (typical)

#### Interface Output:

- 4 to 20 mA (electrically isolated)

#### Power Supply:

- 24 Vdc  $\pm 10\%$

#### Application Temperature:

- $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  ( $32^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ )

#### Storage Temperature:

- $-20^{\circ}\text{C}$  to  $70^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $158^{\circ}\text{F}$ )

#### Mechanical Connection:

- 1/2" NPT, stainless steel screw-in thread

#### Electrical Connections:

- Flange plug/coupler socket M12 x 1

### Calibration:

- Via 4 internal buttons

### Protection Class:

- IP65

### CE Class:

- Confirms with EN 50081-2, EN 50082-2

### Housing Dimensions:

- Length 7.5"x Height 1.75"

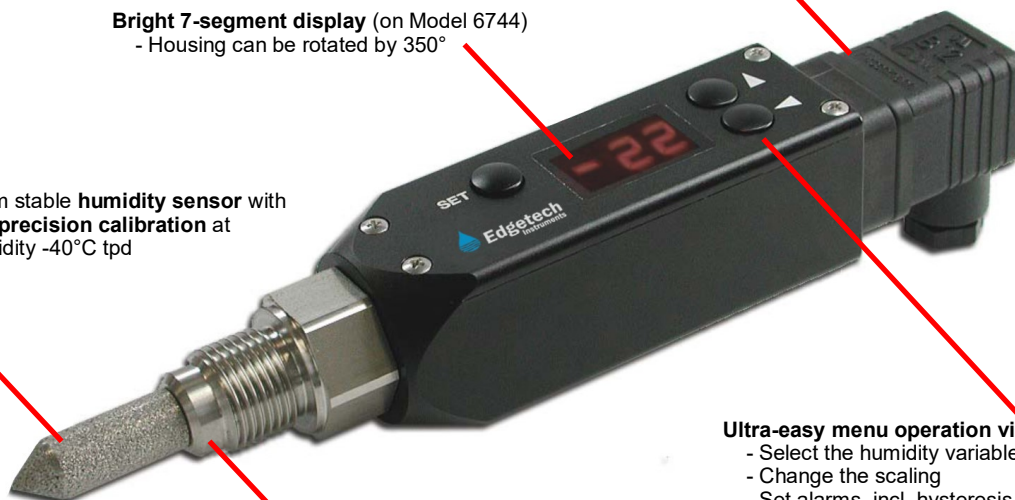
### Model 6744 Only:

- Display: 3 digit LED display, flashes if limit value exceeded
- Relay output: 1 change-over contact, voltage free (230 VAC, 1A)
- Resolution:  $1^{\circ}\text{C}$

**Analog output 4 to 20 mA (2-wire)**  
**2 limit signal outputs (optional)**  
- Pre and main alarm as floating contact  
- 2 LEDs displaying the alarm status

**Bright 7-segment display (on Model 6744)**  
- Housing can be rotated by  $350^{\circ}$

The long-term stable **humidity sensor** with **protocolled precision calibration** at residual humidity  $-40^{\circ}\text{C}$  tpd



**The right process connection**  
- NPT 1/2"  
- Pressure-tight up to 50 bar

**Ultra-easy menu operation via buttons**  
- Select the humidity variable  
- Change the scaling  
- Set alarms, incl. hysteresis  
- Carry out local 1-point calibration  
- Test analog signal and alarm outputs  
- Call up historic min./max. values

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