WM261
Digital Relative Humidity & Temperature Transmitter, Wall Mount

The WM261 has been developed for high precision measurement of relative humidity and temperature. This transmitter is available with a range of outputs.

### Highlights
- Designed for accurate measurement in a controlled environment
- Temperature output scaling configurable on request
- Linearization for a specific isotherm on request

### Technical Specifications

#### Performance
- **Measurement range (RH)**: 0–100% RH
- **Measurement range (T)**: -20 to +80°C (-4 to +176°F)
- **Accuracy at 23°C (73°F)**
  - Humidity: <±2% RH (5–95% RH)
  - Temperature: Pt100 1/3DIN direct ±0.2°C (±0.36°F)
  - Current output ±0.3°C (±0.54°F)
- **Stability - RH sensor**: <±1% RH/year
- **Response time**: 10 sec typical (for 90% of the step change)

#### Electrical output/input
- **Output signal (RH)** configurable on request
  - 4–20 mA
  - 0–1, 0–5, 0–10 V
- **Output signal (T)** configurable on request
  - 4–20 mA
  - 3-wire 1/3 DIN Pt100 direct
  - 0–1, 0–5, 0–10 V

#### Supply voltage
- **Output 4–20 mA**: Output 0–10 V: Output 0–5 V: Output 0–1 V: V + = 12–30 V DC V + = 15–30 V DC V + = 10–30 V DC V + = 8–30 V DC
- **Load resistance**
  - Output 4–20 mA: Rload < (Uv-9) / 0.02
  - Output 0–10 V: R > 10 kΩ
  - Output 0–5 V: R > 5 kΩ
  - Output 0–1 V: R > 1 kΩ
- **Current consumption**: 2 x 20 mA max

#### Operating conditions
- **Operating temperature**
  - Probe: -30 to +85°C (-22 to +185°F)
  - Housing: -30 to +70°C (-22 to +158°F)
  - Storage: -40 to +70°C (-40 to +158°F)

#### Mechanical specification
- **Ingress protection**: IP65 (NEMA 4 level)
- **Housing material**: PPO + POM
- **Dimensions**
  - Housing: 80 x 80 x 34mm (3.15 x 3.15 x 1.34”)
  - Probe: L=85mm, ø12mm (L=3.35”, ø0.47”)
- **Weight**: 100g (3.53oz)
- **Electrical connections**: Screw terminals

### Electrical Connections

#### Version mA output and Pt100 direct
- **Pin 1**: Output RH +
- **Pin 2**: Output RH -
- **Pin 3**: Pt100 direct

#### Version mA output for RH and Temperature
- **Pin 1**: Output temperature +
- **Pin 2**: Output Temperature -
- **Pin 3**: Output RH +
- **Pin 4**: Output RH -

**Warning:** Temperature channels Pin 1 and Pin 2 must be powered always

#### Version V output and Pt100 direct
- **Pin 1**: Power supply V +
- **Pin 2**: Common ground
- **Pin 3**: Output RH +
- **Pin 4**: Output RH +
- **Pin 5**: Pt100 direct

### Version V output for RH and Temperature
- **Pin 1**: Power supply V +
- **Pin 2**: Common ground
- **Pin 3**: Output Temperature +
- **Pin 4**: Output RH +