

DMW19 Wall Mount Dewpoint Transmitter for Indoor Applications



Vaisala HUMICAP® Dewpoint Transmitter DMW19 is a compact wall mount dewpoint transmitter.

The wall mount Vaisala HUMICAP® Dewpoint Transmitter DMW19 is designed for use in air conditioning and other indoor wall mount applications where accurate and stable dewpoint measurement is required. DMW19 is an ideal choice for demanding building automation applications where dewpoint is the preferred parameter for humidity measurement.

Proven Vaisala HUMICAP® Sensor Technology

The operation of DMW19 is based on Vaisala HUMICAP® Sensor. The dewpoint is calculated from relative humidity and temperature. The patented Vaisala HUMICAP® Sensor is insensitive to dust, particulate dirt and most chemicals. This results in high accuracy, excellent long-term stability and negligible hysteresis.

Easy to install

DMW19 is compact and lightweight. In addition, DMW19 is easy to install and it is suitable for different junction boxes.

Fast, on-site field check

The accuracy of the transmitter is simple to check on-site using the Vaisala HUMICAP® Hand-Held Humidity and Temperature Meter HM70.

Customized calibration and maintenance contracts for the DMW19 are available on request.

Features/Benefits

- Designed for demanding building automation applications and other wall mount indoor applications where dewpoint measurement is needed
- Dewpoint measurement range $-20...+55\text{ }^{\circ}\text{C T}_d$ ($-4...+131\text{ }^{\circ}\text{F T}_d$)
- Accuracy $\pm 2\text{ }^{\circ}\text{C T}_d$
- Vaisala HUMICAP® Sensor for excellent accuracy and long-term stability, negligible hysteresis and resistance to dust and most chemicals.
- Electronic, on site, one-point field check with Vaisala HUMICAP® Hand-Held Humidity and Temperature Meter HM70



DMW19 is suitable for demanding building automation and other wall mount indoor dewpoint measurements.

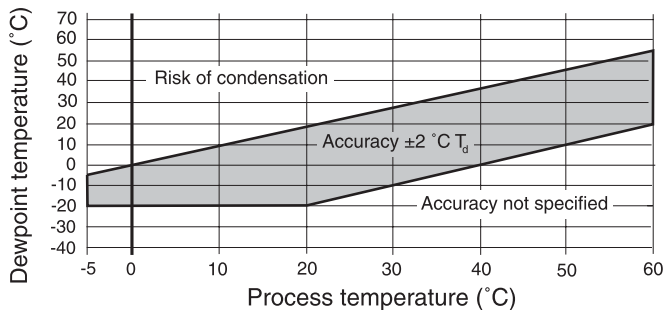
The Vaisala HUMICAP® Hand-Held Humidity and Temperature Meter HM70 is an easy and fast way to confirm the performance of DMW19 on site.



Technical Data

Dewpoint temperature

Measurement range	-20...+55 °C (-4...+131 °F)
Accuracy	±2 °C (±3.6 °F) (See the graph below)



Response time	15 s
Humidity sensor	Vaisala HUMICAP® 180
Temperature sensor	Pt 100 IEC 751 1/3 class B

Operating environment

Operating temperature	-5...+60 °C (+23...+140 °F)
Storage temperature	-40...+80 °C (-40...+176 °F)
Relative humidity	0...95 %RH operating and storage

Outputs

Analog output (scalable)	4...20 mA 0...1 V 0...5 V
Resolution for current output	0.002 mA
Resolution for voltage output	0.3 mV
Typical temperature dependence	0.005% of span/°C

General

Operation voltage with voltage output	12...35 VDC 11...28 VAC
Operation voltage with current output	20...35 VDC / 19...28 VAC with RL500 ohm 17...35 VDC / 16...28 VAC with RL50 ohm
Supply current	10 mA + load current
Load for voltage output	min. 10 kohm
Load for current output	max. 500 ohm
Connections	screw terminals 0.5...1.5 mm ²
Housing	ABS plastics
Housing classification	IP33
Weight	110 g

Options and Accessories

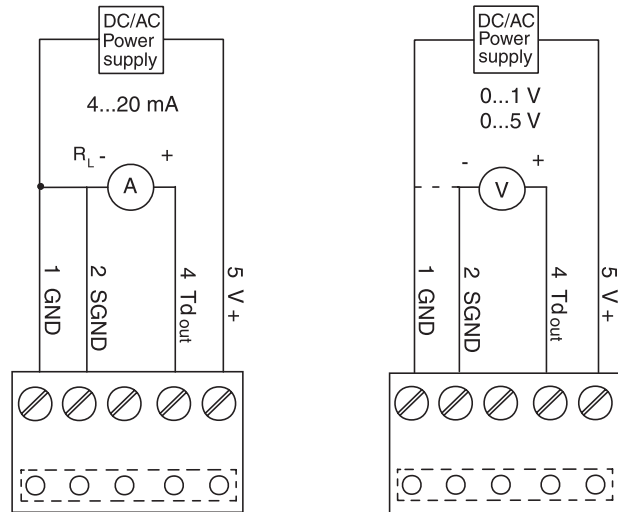
For field check	HM70 hand-held humidity and temperature meter
Connection cable for HM70	211917ZZ

Electromagnetic compatibility

Complies with EMC standard EN61326-1:1997 + Am1:1998 + Am2:2001; Generic Environment.

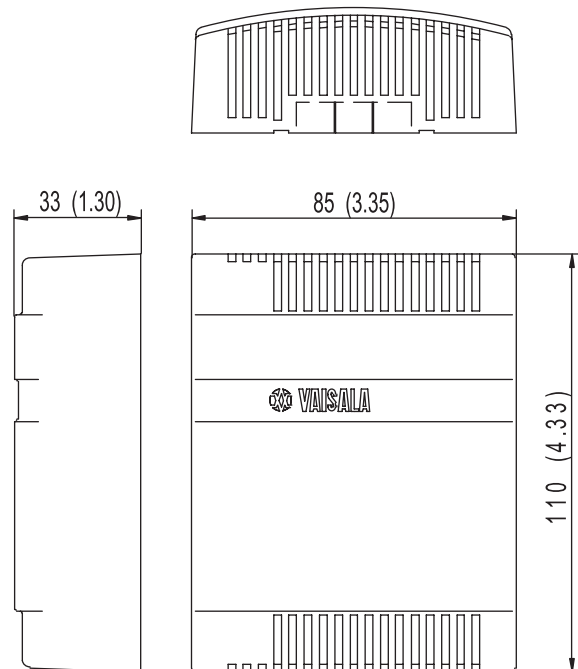
Wiring

R _L 50 Ohm:	R _L 500 Ohm:	R _{L min} 10 kohm
17-35 VDC	20-35 VDC	12-35 VDC
16-28 VDC	19-28 VAC	11-28 VAC



Dimensions

Dimensions in mm.



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