DATASHEET

DMT132

Vaisala · Authorized Partner

Distributed by AKRIBIS

DMT132 Dew Point Transmitter

For refrigerant dryers

Features

- High accuracy ±1 °C (±1.8 °F) in the measurement range of refrigerant dryers
- Excellent long-term stability - resistant to compressor oil and most other chemicals thanks to HUMICAP® technology
- Low power requirements, 10–28 V DC with 2-wire 4–20 mA analog output
- Optional LED warning light

Vaisala HUMICAP® Dew Point Transmitter DMT132 is an affordable dew point measurement instrument designed to verify the functionality of refrigerant dryers. It is especially well suited for OEM dryer manufacturers.

Direct measurement cuts costs

Direct outlet air dew point measurement provides accurate information about dryer functionality and is more reliable than the traditional method of measuring refrigerator temperature only.
Knowledge of the real dew point ensures high quality compressed air at all times and enables customers to optimize dryer capacity. This helps to prevent investment in redundant dryer capacity and avoid unnecessary maintenance and costly malfunctions.

High accuracy and long-term stability

DMT132 provides optimal performance in the operating range of refrigerant dryers. In the measurement range of −3 ... 20 °C (+26.6 ... +68 °F), where the refrigerator dryers typically operate, the T_d accuracy is ±1 °C (±1.8 °F). The instrument incorporates the proven Vaisala HUMICAP® sensor, which is resistant to compressor oil and most other chemicals, thereby providing excellent long-term stability.

Quick installation and easy field checking

It takes just a few minutes to install DMT132 directly into a dryer or compressed air line through a G1/2″ ISO thread. Vaisala sampling cells can also be used. The loop-powered electronics mean that wiring is easy and power requirements are low. DMT132 operating voltages can be as low as 10 V DC.

The user can perform possible adjustments with Vaisala HMK15 Humidity Calibrator.

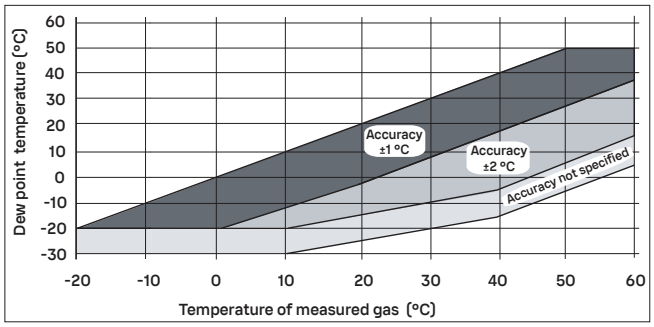
Demand for dew point sensors to verify refrigerant dryers is increasing. Direct dew point measurement enables energy savings and improved efficiency.

Technical data

Measurement performance

Measurement range	−30 ... +50 °C (−22 ... +122 °F) T_d
Accuracy at +20 °C (+68 °F)	±1 °C for −3 ... 20 °C (+26.6 ... +68 °F) T_d [1)] ±2 °C for −15 ... −3 °C (+5 ... +26.6 °F) T_d [1)] See accuracy graph below
Typical response time at 20 °C (+68 °F) gas temperature and 1 bar pressure	
−14 → +3 °C (+7 → +37 °F) T_d	17 s (63 %) 40 s (90 %)
+3 → −14 °C (+37 → +7 °F) T_d	33 s (63 %) 85 s (90 %)
Calculated variables	
Dew point converted to atmospheric pressure	$T_{d/f}$ atm

1) When dew point is below 0 °C (+32 °F), the transmitter outputs frost point.



Operating environment

Operating temperature	−30 ... +50 °C (−22 ... +122 °F)
Operating pressure	0–20 bar
Relative humidity	0–100 %RH
Sample flow rate	No effect on measurement accuracy
Measured gases	Non-corrosive gases
IP rating	IP65

Outputs

Analog output (scalable)	4– 20 mA, 2-wire
Resolution for current output	0.002 mA
Accuracy of analog outputs at +20 °C	±0.05 % full scale
Typical temperature dependence	±0.005 % of full scale/ °C
Connector	4-pin M8 (IEC 60947-5-2)
LED indication available for defined dew point limit/error state indication	
RS-485 serial line for service use	

Mechanical specifications

Sensor	Vaisala HUMICAP® 180R
Recommended calibration interval (in refrigerant dryer application)	2 years
Mechanical connection	G1/2″ ISO
Operating voltage	10–28 V DC
External load	Max. 100 Ω for supply voltages < 20 V DC Max. 500 Ω for supply voltages 20–28 V DC
Weight	65 g (2.3 oz)
Housing material	PPS + 40 % GF
Storage temperature range	−40 ... +80 °C (−40 ... +176 °F)
Start-up time	3 s

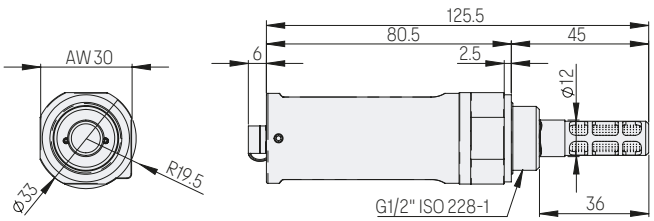
Compliance

EU directives and regulations	EMC Directive (2014/30/EU) RoHS Directive (2011/65/EU) as amended by 2015/863
Electromagnetic compatibility (EMC)	EN 61326-1, industrial environment [1)] FCC part 15 B, Class B ICES-3 / NMB-3 (Class B)
Compliance marks	CE, RCM

1) Dew point output may deviate in industrial environments of 0.15–1 MHz.

Spare parts and accessories

Tube filter	230602
Special cover set for HMK15 (calibrator fitting DMT132 and HMP60)	230914
NPT adapter	210662SP
Sample cells	DMT242SC, DMT242SC2, DSC74, DSC74B, DSC74C, DMCOIL
Duct installation flange	DM240FA
Cables (several lengths available)	HMP50Z032, HMP50Z300SP, HMP50Z500SP, HMP50Z1000SP
Loop-powered external display	226476
USB service cable	219690
Connection cable to DM70/HM70	219980
LED plug	230388
ISO 1/2″ plug	218773
NPT 1/2″ plug	222507
Sealing ring set (3 pcs U-seal)	221525SP



DMT132 dimensions in mm

VAISALA

Published by Vaisala | B211105EN-E © Vaisala 2026

All rights reserved. Any logos and/or product names are trademarks of Vaisala or its individual partners. Any reproduction, transfer, distribution or storage of information contained in this document is strictly prohibited. All specifications — technical included — are subject to change without notice.