

Introduction :

The ADP14-DM transmitter series incorporate the best high accuracy and great stability for dewpoint and temperature sensors. They convert the measured values into linear 4 to 20 mA signals or 0 to 10 VDC output can also be offered under request



The microprocessor based circuit enables full configuration of output range when used with the COML protocol for calibration.

The sensor can be configured for dewpoint or absolute humidity.

Features :

Dew Point

- Power Supply : 4-20 mA output : 12 to 30 VDC
0-10 VDC output : 18 to 30 VDC
- Accuracy : $\pm 1^{\circ}\text{C TdC}$
- Repeatability : $\pm 0.2\%$ of F.S
- Hysteresis : $\pm 0.2\%$ of F.S
- Non-linearity : $\pm 0.3\%$ of F.S
- Stability : $\pm 0.5\%$ of F.S / Year
- Range : Programmable from -40° and 100°TdC
- Response Time : 4 s in fairly still air.
- Default Range : -20 to 60°TdC

Temperature

- Accuracy : $\pm 0.5\%$ of F.S
- Repeatability : $\pm 0.1\%$ of F.S
- Range : Programmable between -40° and 100°C .
- Response time : up to 30s in fairly still air.
- Default Range : 0 to 50°C

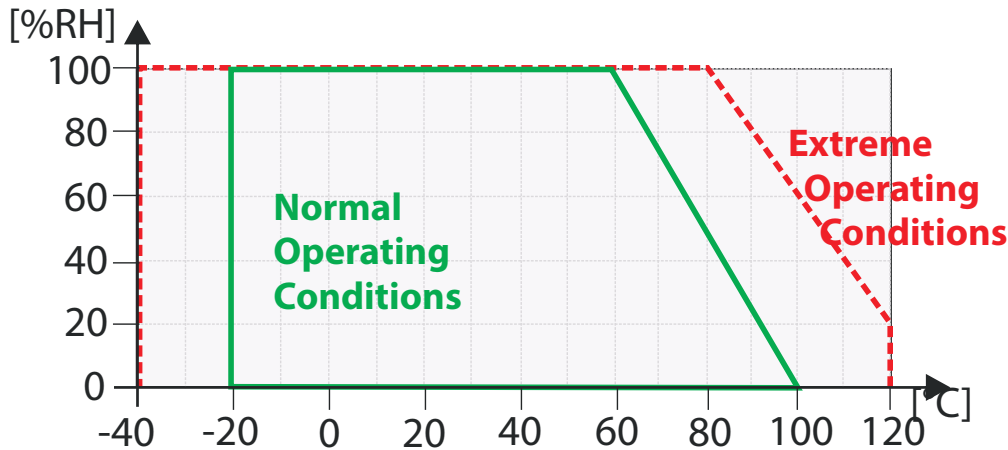
Specifications :

General Features

- **Output** : ADP14-DM-C 4-20 mA
ADP14-DM-V 0-10 VDC
- **Isolation between outputs** : Isolated 4-20 mA outputs.
Non-isolated 0-10 VDC outputs.
- **Output load (RL)** : Model 4-20 mA: 600 Ω
Model 0-10VDC: 10 KΩ Minimum
- **Internal protection against reversed voltage wire polarity.**
- **Cable input** : PG9 cable gland.
- **Operational Limits** : Sensor and Probe (ADP14-DM): refer to diagram below.
Electronic Module: -10° to +65°C, 0 to 95%RH.
- Protection** : IP65, Fireproof ABS, UL94V0
- Calibration Protocol** : COML

Measuring Accuracy and Sensor Operational Limits

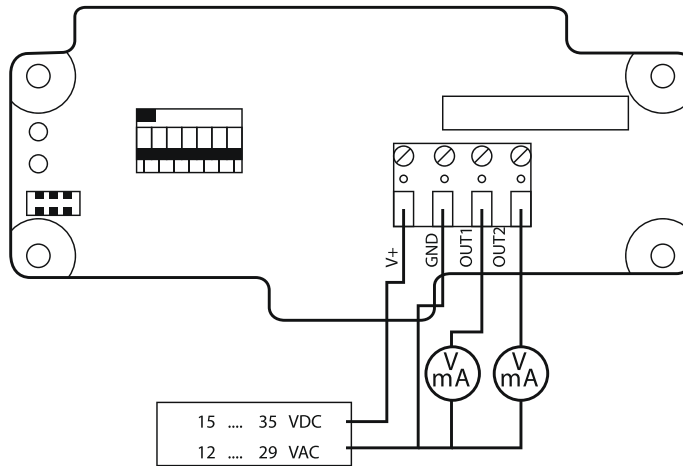
Operating Conditions



The sensor used in this equipment may be damaged or become out of calibration if it is exposed to chemical agents contaminated atmosphere. Hydrochloric Acid, Nitric Acid, Sulphuric Acid and Ammonia in high concentrations may damage the sensor. Acetone, Ethanol and Propylene Glycol may cause a reversible measurement error.

Electrical Connections :

3-wire 4...20 mA or voltage output



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