

KLED Dew Point Transmitter - KL510/515



The KL510/515 Dew Point Transmitter by KLED Measurement is a cutting-edge solution designed to provide precise and reliable dew point measurement in various applications. With its range of special features and new enhancements, this transmitter offers exceptional stability, quick adaptation, and pressure-tight performance, making it ideal for a wide range of industries.

Dew Point Transmitter



The KL510/515 Dew Point Transmitter is a state-of-the-art solution developed by KLED Measurement for precise and reliable dew point measurement in diverse applications. With its advanced features and innovative enhancements, this transmitter delivers exceptional stability, quick adaptation, and pressure-tight performance, making it the ideal choice for a wide range of industries.

Key Features



Feature	Description
Extremely Stable	Ensures long-term measurement accuracy.
Analog Output	4...20 mA output for dew point measurement.
Condensation-Resistant	Built to resist condensation in demanding environments.
Pressure-Tight	Capable of operating in pressures up to 350 bar (special version).
Modbus-RTU Interface	Allows for easy data communication.
Improved Signal Resolution	Enhanced evaluation electronics for higher resolution.
On-Site Sensor Diagnosis	Diagnostic capability with a portable device or KLED Service Software.
Multiple Readable Parameters	Readable via Modbus, including pressure dew point, temperature, relative humidity, absolute humidity, degree of humidity, moisture content, partial vapor pressure, and atmospheric dew point.

Technical Data



Parameter	Value
Measuring Range	-80...20 °Ctd, -20...50 °Ctd
Accuracy	± 1 °C at 50...-20 °Ctd ± 2 °C at -20...-50 °Ctd ± 3 °C at -50...-80 °Ctd
Pressure Range	-1...50 bar Special version up to 350 bar
Power Supply	24 VDC (10...36 VDC)
Protection Class	IP 65
Operating Temperature	-20...70 °C
Connection	M12, 5-pin
PC Connection	Modbus-RTU interface (RS 485)
Analogue Output	4...20 mA = -80...20 °Ctd 4...20 mA = -20...50 °Ctd KL510: 4...20 mA (3-wire) KL515: 4...20 mA (2-wire)
Burden for Analogue Output	< 500 Ω
Screw-In Thread	G 1/2" Optional UNF 5/8", NPT 1/2"
Dimensions	Ø 30 mm, length approx. 130 mm

Via Service Software



Features	Description
Choose Units	Units selection for readings
Scaling	Calibration scaling options % RH, °Ctd, g/m ³ , mg/m ³ , ppm V/V
Available measurement units	4...20 mA Change Calibration and output adjustment

Ordering Information

Product	Measurement Range (°Ctd)	Output	Connection
KL510	-80...20	4...20 mA (3-wire)	Modbus-RTU
KL515	-80...20	4...20 mA (2-wire)	Modbus-RTU
KL510	-20...50	4...20 mA (3-wire)	Modbus-RTU
KL515	-20...50	4...20 mA (2-wire)	Modbus-RTU

Connection Cables

Cable Description	Part Number
5 m Cable	0553 0104
10 m Cable	0553 0105