

LCM 473

The Model LCM 473 is a High Performance Chilled Mirror Hygrometer With Cable Mounted Measuring Heads. The RP2 dew point measuring head has a two-stage Peltier element in a compact probe format and includes a connection for temperature measurement. Suitable for direct insertion into applications with moving air such as relative humidity generators, climatic chambers, manufacturing processes and air ducts.



APPLICATIONS

Calibration Laboratories
Climatic chamber validation
RH generator transfer standard
Weather station calibration
Engine test cells

HIGHLIGHTS

Highly precise chilled mirror dew point
Cable mounted dew point and temperature
Barometric pressure measurement options
Intuitive color touch screen user interface
User verifiable calibration

General Information

Highly Precise Chilled Mirror Dew Point Technology
High quality platinum resistance thermometer (PRT)
Highly precise, stable and repeatable results
Chilled mirrors used by national standards and accredited laboratories worldwide
Intuitive color touch screen user interface
User verifiable calibration



Technical Data

Measuring ranges:

Frost/Dew Point	-20...70°C
Relative humidity	5...99%RH**
Temperature (head mount PRT)	-20...80°C
Temperature (cable mount PRT)	-50...100°C

Accuracy:

Frost/Dew Point	<±0,15°C
Temperature (cable mount PRT)	<±0,07°C

Reproducibility:

Frost/Dew Point	<±0,07°C
Temperature (cable mount PRT)	<±0,05°C

Operating conditions:

Instrument	0...40 °C, 90 %rh non-condensing
Measuring head	-50...80 °C, 99 %rh non-condensing
Storage conditions	-20...50 °C
Display	5.7" LCD with color touch screen
Mirror temperature sensor	Platinum Resistance Thermometer (Pt-100)
Temperature probe	RP2: Ø3 x 30 mm PRT, 0.5 m cable
Digital I/O	RS-232
Operating instructions	English
Calibration certificate	Factory calibration: 5 points FP/DP, 3 points temperature

** Operating conditions: The measuring head as well as the connectors must be operated under non-condensing conditions.

Mechanical

Dimensions	Width 310mm	Depth 265mm	Height 155mm
Weight	5 KG		
Protection	IP20		
Power Supply	100...120 VAC / 200...240 VAC, 50/60 Hz, 100 Watt (auto)		

Standard delivery:

473 Display Unit, RP2 measuring head with cable 0,5m
Temperature probe with cable 3m
Power cable, cotton swab pack
Calibration documents and instruction manual

Optional

Pelican transport case	
ISO17025 Accredited calibration	
Int. barometric pressure sensor	0.1% or 0.01% accuracy, 700...1200 mbar
Analog outputs	Two user programmable, -10...+10 V and 4...20 mA

Consumables

Cotton swab pack

