

S 305 DEW POINT MONITOR (-50 °C ... +50 °C)



Refrigeration dryers are among the dryers in compressed air treatment most commonly used. If the required drying is not achieved, the impact of wet air can be serious: Rust in the pipes, failures of machines, and a negative impact on product quality.

CS-iTEC offers with the S 305 a measuring device for dew point monitoring that kicks in alarm indications when drying values are not within the desired range.

The All-In-One dew point monitor serves as a measuring and display device. The connection to the compressed air network is via a 6-mm quick connect and corresponding connecting hose. The entire measuring unit is integrated together with the display in a rugged housing (IP 65) and is available both as a panel variant or as a wall-mounted housing. Two alarm levels can be programmed (pre and main alarm), serving an optical indications or separate relay outputs. The dew point meter allows a simple and inexpensive dew point monitoring.

Stated accuracy under following conditions:

- Ambient temperature $23\text{ °C} \pm 3\text{ °C}$
- Process temperature $23\text{ °C} \pm 3\text{ °C}$
- Ambient humidity $< 95\%$, no condensation
- Airflow $> 1\text{ l/min}$ at sensor tip

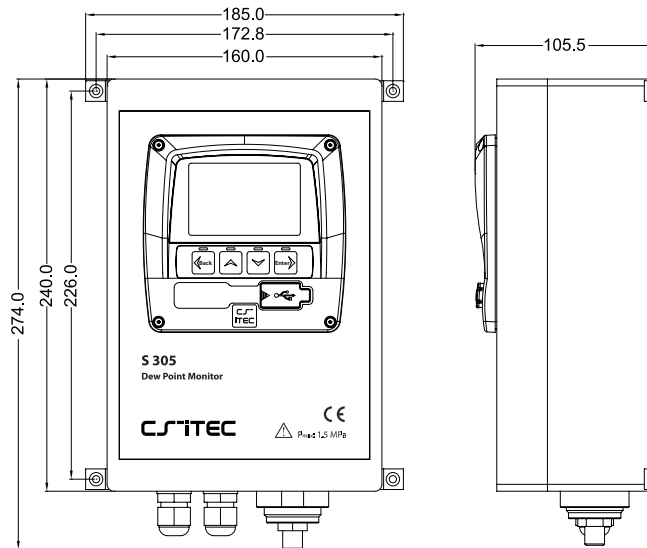
Features

- 2 models: $-50\text{ °C} \dots +20\text{ °C}$ and $-20\text{ °C} \dots +50\text{ °C}$
- Plug & Play (complete solution)
- Compressed air supply through 6 mm Quick-Connect
- Power supply: 100 ... 240 VAC
- Wall or panel mountable
- Accuracy of $1\text{ °C} \dots 2\text{ °C}$
- IP65 casing provides robust protection in rough industrial environment
- 4 ... 20 mA output to PLC or SCADA system
- Pre- and Main-Alarm programmable:
 - Optical: red blinking display
 - 2 relay outputs

Technical data S 305

Measuring range	A: $-50\text{ °C} \dots +20\text{ °C}$ B: $-20\text{ °C} \dots +50\text{ °C}$
Accuracy	$1\text{ °C} \dots 2\text{ °C}$ dew point
Pressure range	$-0.1 \dots 1.5\text{ MPa}$
Power supply	100 ... 240 AC / 10 VA
Measured gas	Non-corrosive gases
Ambient conditions	$-10\text{ °C} \dots +40\text{ °C}$
Transport temperature	$-30\text{ °C} \dots +70\text{ °C}$
Response time t_{90}	$< 30\text{ sec}$ (descending), $< 10\text{ sec}$ (ascending)
Output signal	4 ... 20 mA 2 relay, 230 VAC / 3 A
Gas connection	6 mm hose quick connector
Cable glands	2 cable glands for supply and signal cable
Casing	Al alloy, ABS
Classification	IP 65
Sensor protection	Stainless steel sinter cap pore size $< 30\text{ }\mu\text{m}$
EMC	According to IEC 61326-1

Dimensions



Alarm adjustment at dew point sensor

Order no. Description

D699 3050	S 305, dew point monitor, -20 °C ... +50 °C, 6 mm quick connector, 15 bar, 1 x 4 ... 20 mA, 100 ... 240 VAC, 2 relay outputs
D699 3051	S 305, dew point monitor, -20 °C ... +50 °C, 6 mm quick connector, 15 bar, 1 x 4 ... 20 mA, 24 VDC, 2 relay outputs
D699 3052	S 305, dew point monitor, -50 °C ... +20 °C, 6 mm quick connector, 15 bar, 1 x 4 ... 20 mA, 100 ... 240 VAC, 2 relay outputs
D699 3053	S 305, dew point monitor, -50 °C ... +20 °C, 6 mm quick connector, 15 bar, 1 x 4 ... 20 mA, 24 VDC, 2 relay outputs
C198 0005	Filter cap, stainless steel, 30 µm pore size
A554 0024	Alarm unit, red light and buzzer alarm, wall mountable (unit is using the relay outputs of S 305 to trigger the alarm)
A554 0025	Alarm unit, red light and buzzer alarm, mounted at S 305 casing (unit is using the relay outputs of S 305 to trigger the alarm)