

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



DEW POINT MEASUREMENT

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.

SUTO 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

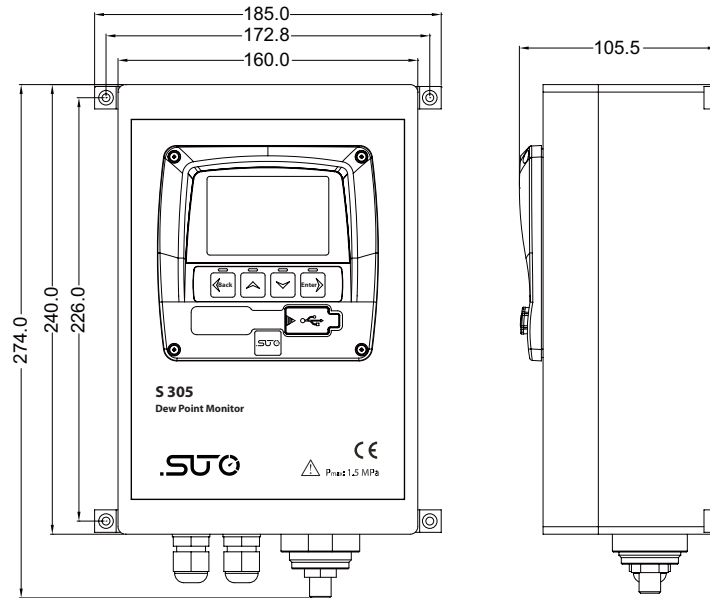
Features

- 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, 24VDC, 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, 24VDC, 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)