

S305

Dew Point Monitor

Opt. 1

-60 ... +20 °C Td

Opt. 2

-20 ... +50 °C Td





PLUG & PLAY Simply connect your compressed air



DEW POINT MEASUREMENT-60 ... +50 °C Td
depending on
the model



PRECISE MEASUREMENT ± 2 °C Td accuracy



ALARM INDICATION With internal relays or alarm units



Benefits

- Plug and play solution with easy setup and installation
- 6mm hose connection with quick coupling for easy installation
- Two ranges available for increased flexibility
- Wall-mountable housing with large display and optional alarm unit
- Easy connection with 4 ... 20 mA output
- Alarms set up for pre-alarm and main alarm

Permanent Monitoring

Refrigeration dryers are the most commonly used type of dryer in compressed air systems around the world. If the required drying is not achieved, the effects of wet air can be serious: Rust in the pipes, machine breakdowns and a negative impact on product quality.

SUTO's S305 is a dew-point monitoring instrument that gives an alarm if the drying values are not within the desired range.

Two models for more flexibility

-60 ... +20 °C Td

For desiccant dryers

-20 ... +50 °C Td

For refridgeration dryers



Reliable polymer dew point sensor with integrated measuring chamber for accurate readings and fast response time

2 Robust Casing

The entire measuring unit is integrated together with the display in a rugged housing (IP65)



3 Power Supply

100 ... 240 VAC or 24 VDC

4 Output

4 ... 20 mA output to PLC or SCADA system

5 Connection

The connection to the compressed air network is via a 6-mm quick connect and corresponding connecting hose.

2/5 S305 Dew Point Monitor

Dimensions



Exchange Service

No Downtime anymore!

The Exchange Calibration Service eliminates downtime and provides users with a complete record of their dew point measurements.

The user receives a calibrated sensor unit with calibration certificate and the same sensor settings in advance. The on-site sensor is then exchanged for the calibrated one and returned to the supplier.

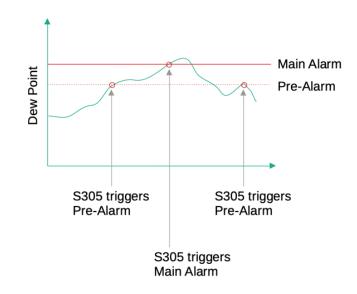


Pre- and Main-Alarm programmable

Advanced monitoring with dew point transmitter:

Program two alarm levels (pre-alarm and main alarm) for increased sensitivity to changing conditions.

Customisable alarm notifications: Customise alarms with the Dew Point Transmitter by selecting visual indicators or configuring separate relay outputs for seamless integration into wider alarm systems, ensuring adaptability to specific needs.







Optional Alarm Unit

Wall mounted housing with large display for dew point, temperature and humidity. The optional alarm unit can be wall-mounted or mounted directly on the housing.

The 360° visible LED and alarm buzzer provide reliable alarm indication.

Installation

The S305 is designed to be plug and play. No complicated setup or configuration is required. Just connect your compressed air and start measuring.

Technical Data

Measurement	
Dew Point	
Accuracy	±2°C Td
Selectable units	°C, °F
Measuring range	-60 +20 °C Td
(Model depending)	-20 +50 °C Td
Sensor	Polymer
Response time t90 (@ 4l/min)	-60 °C Td $-> -20$ °C Td $= 20$ sec
	$0 ^{\circ}\text{C Td} \rightarrow -40 ^{\circ}\text{C Td} = 120 \text{sec}$
Temperature	
Accuracy	0.3 ℃
Measuring range	-30 +70 °C
Sensor	NTC
Reference conditions	
Selectable conditions	Pressure Dew Point

Signal /	Interface	& Supp	ly
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Analog output	
Signal	4 20 mA 3-Wire
Scaling	-60 +20 °C Td or -20 +50 °C Td
Load	250R
Update rate	3 / sec
Supply	
Voltage supply (model	100 240 VAC ; 50/60 Hz
depending)	24 VDC
Current consumption (mod-	40 mA @ 220 VAC
el depending)	120 mA @ 24 VDC

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Configuration	
PC Software	S4C-Display Software
Others	Instrument comes pre-configured Plug & Play
Display	
Integrated	LCD Display, indicates values and alarms
Material	
Process connection	Stainless steel 1.4301 (SUS 304)
Housing	ABS, Aluminum alloy
Sensor	Polymer
Metal parts	Sinter Filter (stainless steel)
Miscellaneous	
Electrical connection	Screw terminals
Protection class	IP65
Approvals	CE
Process connection	6 mm quick connector
Weight	520 g
Operating conditions	s
Medium	Non-corrosive gases
Medium quality	ISO 8573-1: 4.6.3 or better
Medium temperature	-30 +70 °C
Medium humidity	≤ 20 °C Td or ≤ 50 °C Td (model depending)
Operating pressure	0.3 1.5 MPa
Ambient temperature	-10 +40 °C
Ambient humidity	0 100 % rH
Storage temperature	0 +40 °C
Transport temperature	-30 +70 °C

Stated accuracy under following conditions:

- Ambient temperature 23 °C ±3 °C
- Process temperature 23 °C ±3 °C
- Ambient humidity < 95 %, no condensation
- Airflow > 2 l/min at sensor tip

Ordering

Please use the following tables to assist in placing your order with our sales staff.

S305 Dew Point Monitor
(-60 +20 °C Td / -20 +50 °C Td)

Order No.	Description
D699 3050	S305, Dew Point Monitor, -20 +50 °C Td, 6 mm quick connector, 15 bar, 1 x 4 20 mA, 100 240 VAC, 2 relay outputs
D699 3051	S305, Dew Point Monitor, -20 +50 °C Td, 6 mm quick connector, 15 bar, 1 x 4 20 mA, 24 VDC, 2 relay outputs
D699 3052	S305, Dew Point Monitor, -60 +20 °C Td, 6 mm quick connector, 15 bar, 1 x 4 20 mA, 100 240 VAC, 2 relay outputs
D699 3053	S305, Dew Point Monitor, -60 +20 °C Td, 6 mm quick connector, 15 bar, 1 x 4 20 mA, 24 VDC, 2 relay outputs

S305 Accessories	
Order No.	Description
A554 0024	Alarm unit for wall mounting, 100 240 VAC, red flashing light and buzzer (connection cables for the alarm unit are not included; the unit uses the integrated alarm relays of the S305)
A554 0025	Alarm unit mounted on the S305 housing, 100 240 VAC, red flashing light and buzzer (pre-wired Plug & Play; the unit uses the integrated alarm relays of the S305)
A553 0106	Power cable with mains plug, 1.8 m

