Be smart. **Measure it.**

S305

Dew Point Monitor

Opt. 1	-50 ... +20 °C Td
Opt. 2	-20... +50 °C Td



PLUG & PLAY
Simply connect your compressed air

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

PRECISE MEASUREMENT
± 2°C Td accuracy

ALARM INDICATION
With internal relays or alarm units



Benefits

- Plug & Play solution, no need for complicated setup and installation
- 6 mm hose connection with quick coupling for most convenient installation
- Two ranges available:
  -20 ... +50 °C Td for fridge driers
  -50 ... +20 °C Td for desiccant driers
- Wall mountable housing with a big display and optional alarm unit
- 4 ... 20 mA output to connect it to a PLC or BMS system
- Easy alarms set up for pre- and main alarm

Refrigeration dryers are the most commonly used dryer type in compressed air system around the world. 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 S305 a measuring device for dew point monitoring that kicks in alarm indications when drying values are not within the desired range.

2 Models

-50 ... +20 °C Td and -20 ... +50 °C Td

1 Dew Point Sensor

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

2 Robobust 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

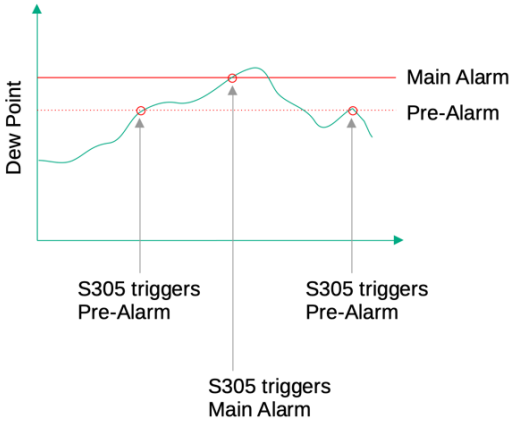
The connection to the compressed air network is via a 6-mm quick connect and corresponding connecting hose.



Dimensions



Pre- and Main-Alarm programmable



Two alarm levels can be programmed (pre and main alarm), serving an optical indications or separate relay outputs.



Exchange Service

No Downtime anymore!

The exchange calibration service eliminates down time and enables users to have a seamless record of their dew point measurements.

The user receives in advance a calibrated sensor unit with calibration certificate and the same sensor settings. The onsite sensor is then switched against the calibrated one and returned to the supplier.



SUTO | Exchange Service

Installation

S305 is designed to be Plug & Play. There is no need for complicated setup or configuration. Simply connect your compressed air and start measuring.

Optional Alarm Unit

Wall mounted housing with a big 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 the alarm buzzer indicate alarms reliably.

Technical Data

Measurement

Dew Point	
Accuracy	±2 °C Td
Selectable units	°C, °F
Measuring range	-50 ... +20 °C Td
(model depending)	-20 ... +50 °C Td
Sensor	Polymer
Response time t90 (@ 4l/min)	-50 °C Td -> -20 °C Td = 20 sec
	0 °C Td -> -40 °C Td = 120 sec
Temperature	
Accuracy	0.3 °C
Measuring range	-30 ... +70 °C
Sensor	NTC
Reference conditions	
Selectable conditions	Pressure Dew Point

Signal / Interface & Supply

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

General data

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, Aluminium alloy
Sensor	Polymer
Metal parts	Sinter Filter (stainless steel)
Miscellaneous	
Electrical connection	Screw terminals
Protection class	IP65
EMC	IEC 61326-1
Process connection	6 mm quick connector
Weight	520 g
Operating conditions	
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 (-50 ... +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, -50 ... +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, -50 ... +20 °C Td, 6 mm quick connector, 15 bar, 1 x 4 ... 20 mA, 24 VDC, 2 relay outputs

Accessories

Order No.	Description
A554 0024	Alarm unit, 100 ... 240 VAC, red light and buzzer alarm, wall mountable (unit is using the relay outputs of S305 to trigger the alarm)
A554 0025	Alarm unit, 100 ... 240 VAC, red light and buzzer alarm, mounted at S305 casing (unit is using the relay outputs of S305 to trigger the alarm)
A553 0106	Power cable with mains plug, 1.8 m

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