S305

Dew Point Monitor

.SUO

Be smart. Measure it.

| **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	-20 ... +50 °C Td
For desiccant dryers	For refridgeration dryers

1 Dew Point Sensor

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.

Dimensions

160mm
105.5mm
240mm

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Dew point Monitor

P max 1.5 MPa

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.
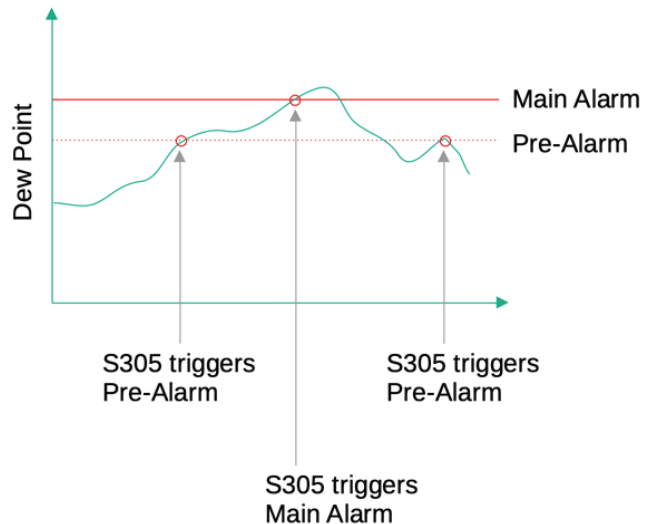
.SUTO | Exchange Service

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.

Dew Point

Main Alarm
Pre-Alarm

S305 triggers Pre-Alarm
S305 triggers Pre-Alarm
S305 triggers Main Alarm

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.

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Dew Point Monitor

P max 1.5 MPa

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 °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	-60 ... +20 °C Td or -20 ... +50 °C Td
Load	250R
Update rate	3 / sec

Supply

Voltage supply (model depending)	100 ... 240 VAC ; 50/60 Hz
	24 VDC
Current consumption (model depending)	40 mA @ 220 VAC
	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, 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

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

S305 Dew Point Monitor

Ordering

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

S305 Dew Point Monitor (-60 ... +20 ºC Td / -20 ... +50 ºC 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, 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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