

# 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

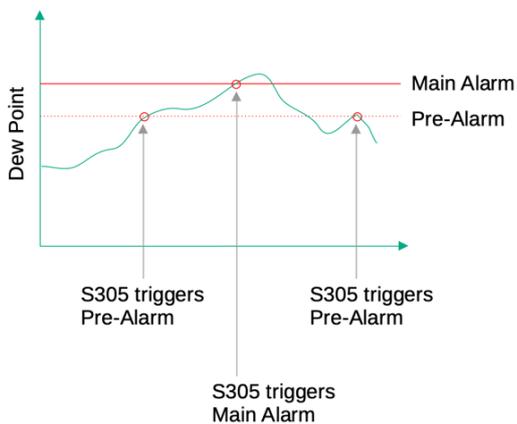
The connection to the compressed air network is via a 6-mm quick connect and corresponding connecting hose.



## 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 (model depending)	-50 ... +20 °C Td -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
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## 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 (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
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### Material

Process connection	Stainless steel 1.4301 (SUS 304)
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Housing	ABS, Aluminium alloy
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Sensor	Polymer
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Metal parts	Sinter Filter (stainless steel)
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### Miscellaneous

Electrical connection	Screw terminals
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Protection class	IP65
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Approvals	CE
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Process connection	6 mm quick connector
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Weight	520 g
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### Operating conditions

Medium	Non-corrosive gases
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Medium quality	ISO 8573-1: 4.6.3 or better
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Medium temperature	-30 ... +70 °C
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Medium humidity	≤ 20 °C Td or ≤ 50 °C Td (model depending)
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Operating pressure	0.3 ... 1.5 MPa
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Ambient temperature	-10 ... +40 °C
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Ambient humidity	0 ... 100 % rH
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Storage temperature	0 ... +40 °C
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Transport temperature	-30 ... +70 °C
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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

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
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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
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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

# Nordic Filtration

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You can buy our products on local websites or by contacting us by phone or e-mail. Information about our products as well as brochures and manuals can be found on our website ([www.nordicfiltration.com](http://www.nordicfiltration.com)).

We can adapt all of our filtration products to your needs, and we offer visits from our consultants in order to find the right solution for you.

