

# PORTABLE DEW POINT METER (-100 ... +50 °C TD) S520



# Ultra portable — All in one single handheld



## S520 FEATURES



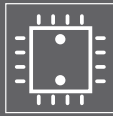
**SMART  
DEVICE**  
Dew point  
prediction



**TOUCH  
SCREEN**  
Intuitive  
user interface



**PRESSURE  
SENSOR**  
Enables various  
humidity units



**DATA  
LOGGER**  
Integrated  
mass storage



**LOW  
DEW POINT**  
Measures  
down  
to -100 °C Td



**CAMERA  
INTEGRATED**  
Pictures for  
better reports



**PORTABLE  
UNIT**  
Handheld unit  
within a rugged  
case



**DEW POINT  
AUDITS**  
Indication of  
class on display

## S520 BENEFITS

- Measures dew point, temperature and pressure in one device
- Sensor selection according to your needs:
  - 100 ... +20 °C Td with pressure sensor as standard version
  - 50 ... +50 °C Td without pressure sensor as economic version
- Easy to use, but powerful performance
- Optional smart features: End value prediction, camera and measurement snapshot
- Wireless printer for on-site reporting, perfect for audits
- Unique Measuring chamber with parking function as standard included

## DEW POINT PREDICTION

The S520 offers a unique dew point end value prediction algorithm as a built-in technology.

Based on the dew point measurement curve our algorithm is able to predict the end value before actually reaching the end value.

This feature enables the user to predict the dew point end value in a minimum amount of time. It helps on-site engineers to save time and to perform faster dew point audits.

Dew point end value prediction is a part of the smart features. With the smart features option, users also get a 5 Megapixel camera and the snapshot function for quick measurement logging.

# S520 TECHNICAL DATA

General Specification		
<b>Measuring range</b>	Standard: -100 ... +20 °C Td Economic: -50 ... +50 °C Td Pressure*: 0 ... 1.5 MPa(g) Temperature: -30 ... +50 °C	
<b>Dew Point Sensor</b>	Sensor A1370: QCM + Polymer ; Sensor A1371: Polymer	
<b>Temperature Sensor</b>	Pt100	
<b>Pressure Sensor</b>	Piezo resistive type (only with Sensor A1370)	
<b>Accuracy</b>	Dew point: +/- 1 °C Td (0 ... 20 °C Td) +/- 2 °C Td (-60 ... 0 °C Td / +20 ... +50 °C Td) +/- 3 °C Td (-100 ... -60 °C Td)	Temperature: +/- 0.3 °C Pressure: 0.5 % FS
<b>Measured units (selectable)</b>	°C Td • g/m <sup>3</sup> • mg/m <sup>3</sup> • g/m <sup>3</sup> atm (@zero pressure) • mg/m <sup>3</sup> atm (@zero pressure) • ppmv • g/kg (@ reference pressure) • °C Tdatm (@ zero pressure) • % RH	
<b>Operating Pressure</b>	-0.1 ... 1.5 MPa(g) (at least 0.3 MPa is needed for the measuring chamber supplied with the instrument)	
<b>Measured gas (Medium)</b>	Air, CO <sub>2</sub> , N <sub>2</sub> , Argon (CO <sub>2</sub> measurements with the A1371 module are limited to -40 °C Td)	
<b>Operating Parameters</b>	Medium Temperature: -30 ... +70 °C / Ambient Temperature: 0 ... +40 °C / Ambient Humidity: 0 ... 80 % rH	
<b>Housing material</b>	PC + ABS	
<b>Transport &amp; Storage</b>	Transport Temperature: -30 ... +70 °C / Storage Temperature: -20 ... +50 °C	
<b>Weight</b>	2.7 kg (complete set in transport case)	
<b>Process Connection</b>	G1/2" for direct sensor connection, Measuring chamber with 6 mm hose quick coupling	
<b>Battery</b>	Operating time on one charge: ~8 h / Charging time until full: ~3 h	
<b>Interface</b>	USB-C (charging and data transfer), wireless printer	
<b>Display</b>	3.5" color LCD Touch screen	
<b>Camera</b>	5.0 Megapixel (only with smart features option)	
<b>Logger</b>	Integrated mass storage, 100 Mio. values	

\*at least 0.3 MPA is needed for the measuring chamber supplied with the instrument. For low pressure measurements below 0.3 MPa please choose the by-pass measuring chamber A699 3501.

## Scope of delivery



PTFE hose with quick connect



Unique measuring/parking chamber for fast sensor response



Option: wireless printer used to print the measurement results on site. Perfect solution for quick audits.



Memory stick



USB charger with USB-C cable



The included transport case protects the measurement instrument. At the same time it holds all accessories.

## S520 ORDERING

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

S520 PORTABLE DEW POINT METER		
Order No.	Code	Description
P600 0520	S520	<b>S520 Handheld meter with data logger</b> - Measuring chamber with parking function - USB-OTG memory stick - 1.5 m PTFE hose 6 mm with quick coupling, - Certificate of calibration - USB charger with USB-C cable - Transport casing
<b>Measuring range (Sensor unit)</b>		
A1370	A	-100 ... +20 °C Td Standard range sensor unit, with integrated pressure sensor -0.1 ... 1.5 MPa
A1371	B	-50 ... +50 °C Td Economic range sensor unit, without integrated pressure sensor
<b>Wireless printer</b>		
	A	Without printer
A1372	B	With wireless printer for measurement printouts on site
<b>Smart features</b>		
	A	Without smart features
A1373	B	With smart features (Measurement snapshot, Dew point end value prediction, Camera)

Example: S520ABB

S520 Handheld meter with data logger, measuring chamber, incl. transport casing, -100 ... +50 °C Td Standard range sensor unit with pressure measurement, wireless printer, smart features

S520 PORTABLE DEW POINT METER ACCESSORIES	
Order No.	Description
A699 3501	By-pass measuring chamber with parking function, 0 ... 1.0 MPa, 6 mm hose quick connector as in- and outlet
A554 0021	Paper rolls for wireless printer