



## DP 500/510 - Mobile dew point meters with data logger

### Applications:

- Compressed air: Examination of refrigeration, membrane, adsorption dryers
- Technical gases: Residual moisture measurement in gases such as N<sub>2</sub>, O<sub>2</sub> etc.
- Plastics industry: Examination of granulate dryers

### Special features:

- Precise dew point measurement down to -80 °Ctd
- Quick response time
- 3.5" graphic display / easy operation via touch screen
- Integrated data logger for storage of the measured values
- USB interface for reading out via USB stick
- Calculates all necessary moisture parameters like g/m<sup>3</sup>, mg/m<sup>3</sup>, ppm V/V, g/kg, °Ctdatm
- 2nd freely assignable sensor input for third-party sensors (only DP 510)
- International: up to 8 languages selectable



Transfer of data to the PC via USB stick

2nd freely assignable sensor input for third-party sensors (only DP 510)



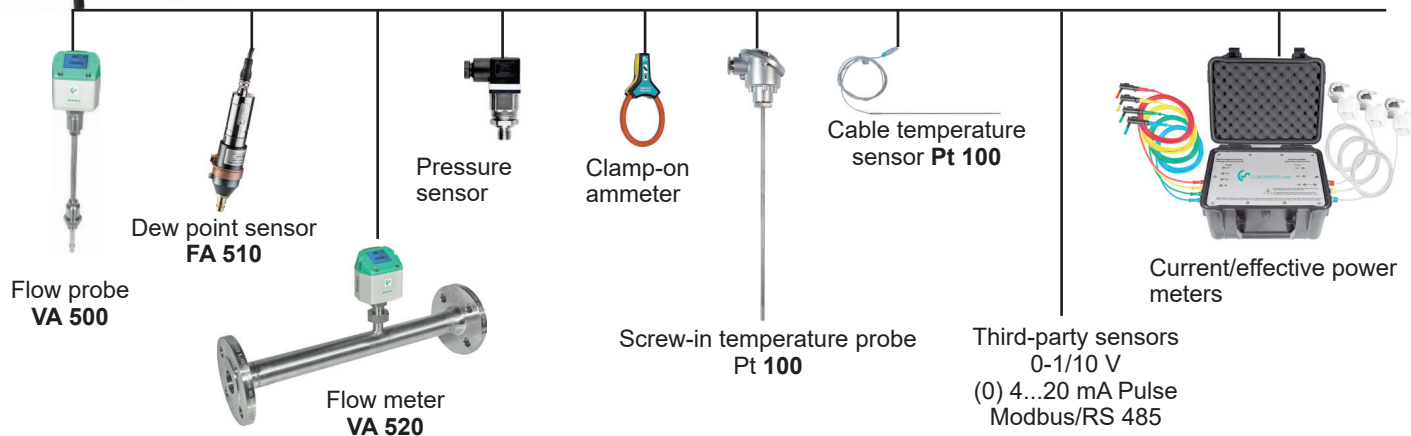
Quick installation by means of measuring chamber and quick coupling



Ideal for service technicians - everything in one case



Dry container - for sensor protection and quick adaption time



Flow probe  
VA 500

Dew point sensor  
FA 510

Pressure  
sensor

Clamp-on  
ammeter

Screw-in temperature probe  
Pt 100

Cable temperature  
sensor Pt 100

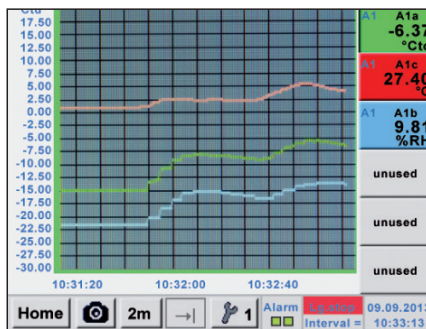
Third-party sensors  
0-1/10 V  
(0) 4...20 mA Pulse  
Modbus/RS 485

Current/effective power  
meters

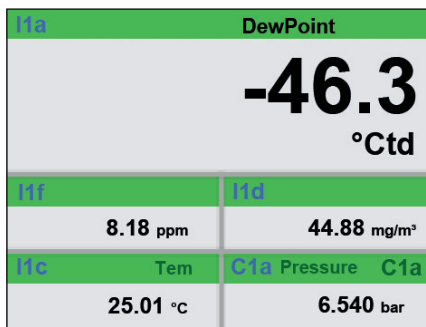
Flow meter  
VA 520

The whole range of suitable sensors can be found on pages 38 to 41

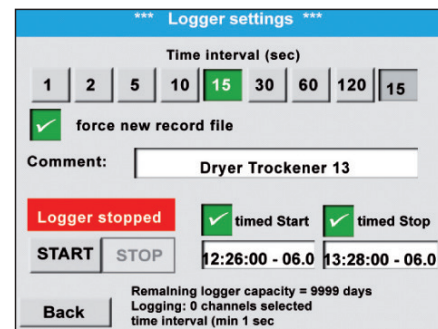
## Everything at a glance



measurement curves are displayed graphically, so the operator sees at a glance the behavior of the dryer since the start of the measurement.



All physical parameters of the humidity measurement are calculated automatically. The DP 510 also displays the measured values of the external sensor.



Up to 100 million measured values can be stored. Each measurement can be stored with a comment, e.g. measuring site name. The time interval can be freely set.

DESCRIPTION	ORDER NO.
<b>Set DP 500 in a case - consisting of:</b>	<b>0600 0500</b>
- Portable dew point meter DP 500 for compressed air and gases	0560 0500
- Mobile measuring chamber up to 16 bar	0699 4490
- Diffusion-tight PTFE hose with quick coupling, length 1 m	0554 0003
- Power supply for DP 500/DP 510	0554 0009
- Control and calibration set 11.3% RH	0554 0002
- Quick-lock coupling	0530 1101
- Dry container for CS dew point sensors	0699 2500
- Transportation case (small) for DP 500	0554 6500
<b>Set DP 510 in a case - consisting of:</b>	<b>0600 0510</b>
- Mobile dew point meter DP 510 with one additional input for external sensors	0560 0510
- Mobile measuring chamber up to 16 bar	0699 4490
- Diffusion-tight PTFE hose with quick coupling, length 1 m	0554 0003
- Power supply for DP 500/DP 510	0554 0009
- Control and calibration set 11.3% RH	0554 0002
- Quick-lock coupling	0530 1101
- Dry container for CS dew point sensors	0699 2500
- Transportation case (large) for DP 510 as well as other sensors	0554 6510
<b>Further options, not included in the set:</b>	
Option: Integrated pressure sensor 0...30 bar (g)	Z699 0521
Option: „Mathematics calculation function“ for 4 freely selectable channels, (virtual channels): addition, subtraction, division, multiplication	Z500 5107
Option: „Totaliser function for analogue signals“	Z500 5106
CS Basic – data evaluation graphically and in table form - reading of the measured data via USB or Ethernet, licence for 2 workstations	0554 8040
Precision calibration at -40 °Ctd or 3 °Ctd with ISO certificate	0699 3396
Additional calibration point freely selectable in the range between -80...+20 °Ctd	0700 7710
High pressure measuring chamber up to 350 bar	0699 3590
Measuring chamber for atmospheric dew point	0699 3690
Measuring chamber for granulate dryers with minimum overpressure	0699 3490
Portable dew point meter DP 510 for compressed air and gases (high pressure version up to 350 bar)	0560 0512
Portable dew point meter DP 500 for compressed air and gases (high pressure version up to 350 bar)	0560 0501



Photo key saves current screen as an image file. No additional software necessary.

### TECHNICAL DATA DP 500/510

<b>Display:</b>	3.5" touch screen
<b>Measuring range:</b>	-80...+50 °Ctd -20...+70 °C 0...100% RH
<b>Accuracy:</b>	± 0.5 °Ctd at -10...+50 °Ctd Typ. ± 2 °Ctd (further range)
<b>Moisture parameters:</b>	g/m³, mg/m³, ppm V/V, g/kg, °Ctdatm, % RH
<b>Pressure range:</b>	-1...50 bar standard -1...350 bar special version
<b>Interface:</b>	USB interface
<b>Data logger:</b>	16 GB SD memory card (100 million values)
<b>Power supply:</b>	Output voltage: 24 VDC ± 10% Output current: 120 mA in continuous operation
<b>Power supply:</b>	Internal rechargeable Li-Ion batteries, approx. 12 h continuous operation, 4 h charging time
<b>Screw-in thread:</b>	Stainless steel 1.4404: NPT 1/2" or G 1/2"
<b>Ambient temperature:</b>	0...+50 °C
<b>EMC:</b>	DIN EN 61326-1