DP 500/ DP 510

Portable dew point meters with data logger

The new instruments **DP 500/ DP 510** are the ideal portable service instruments for dew point measurement for all types of driers down to -80°Ctd dew point.

The 3.5“ graphic display with touch screen makes the operation very easy.

The graphic indication of coloured measuring curves is unique. Ideal for measurement of the current dew point and for graphic indication of the dew point curve/ the switching behavior of the dryer over a longer period of time.

Up to 100 million measured values can be stored with date and measuring site name. The measured data can be transferred to the computer via USB stick. The data can be evaluated comfortably by means of the software CS Soft Basic.

Measured data and service reports can be issued easily and quickly.

DP 510 additionally disposes of one further freely assignable sensor input.

Apart from the internal dew point measurement one further optional sensor can be connected like for example:

- Pressure sensors
- Flow sensors, VA 500/520
- Temperature sensors Pt 100, 4...20mA
- Further dew point sensors
- Effective power meters
- Optional third-party sensors with the following signals: 0...1/10 V, 0/4...20 mA, Pt 100, Pt 1000, pulse, Modbus

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

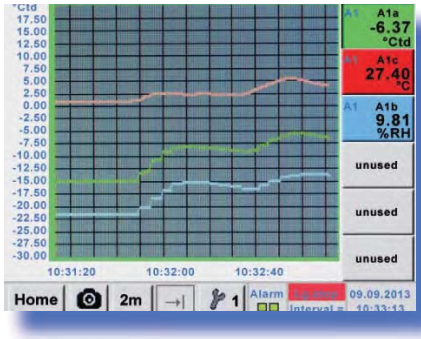
Special features:

- 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/m³, mg/m³, ppm V/V, g/kg, °Ctdatm
- 2nd freely assignable sensor input for third-party sensors (only DP 510)
- International: Up to 8 languages selectable

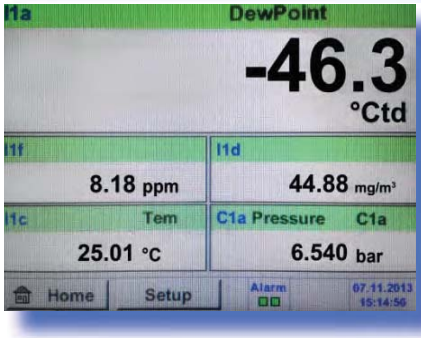
Application ranges:

- Compressed air: Examination of refrigeration, membrane, desiccant driers
- Technical gases: Residual moisture measurement in gases like N2, O2 and so on
- Plastics industry: Examination of granulate driers
- Medical compressed air/breathing air

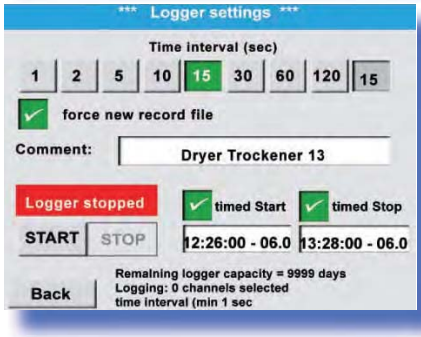
Everything at a glance



Measurement curves are indicated graphically and thus the user can see at a glance the behaviour of the dryer since the start of the measurement.



All physical parameters of moisture measurement are calculated automatically. In case of DP 510 the measured values of the third-party sensor are indicated additionally.



It is possible to store up to 100 million measured values.
Each measurement can be stored with a comment, e.g. measuring site name.
The time interval can be freely determined.

Quick installation by means of measuring chamber and quick connector

Ideal for service technicians - everything in one case

Dry container - for sensor protection and quick adaptation time

Description	Order No.
Set DP 500 in a case - consisting of:	**0600 0500**
- 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 connector, length 1 m	0554 0003
- Power supply for DP 500/510	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
Further options, not included in the set	
CS Soft Basic - data evaluation in graphic and table form- reading out of the measured data of DP 500/510 via USB	0554 7040
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 driers with minimum overpressure	0699 3490
Portable dew point meter DP 500 for compressed air and gases (high pressure version up to 350 bar)	0560 0501

Technical data:

Display:	3.5“ touch screen
Measuring range:	-80...+50°Ctd -20...+70°C 0...100 % rH
Accuracy:	± 0,5°Ctd at -10...+50°Ctd typ. ± 2°Ctd remain. range
Moisture-parameters:	g/m³, mg/m³, ppm V/V, g/kg, °Ctdatm, %RH
Pressure range:	-1...50 bar standard -1...350 bar special version
Interface:	USB interface
Data logger:	2 GB SD memory card (100 million values)
Power supply for sensors:	Output voltage: 24 VDC ± 10 % Output current: 120 mA continuous operation
Power supply:	Internal rechargeable Li-Ion batteries, approx 12 h continuous operation, 4 h charging time
Screw-in thread:	G 1/2“ stainless steel
Surrounding temperature:	0...+50°C
EMV:	DIN EN 61326

DP 500 / DP 510

Flexible data recording and transfer via USB cable or USB stick

The stored measured data can be easily transferred to the computer via a USB stick or via a USB cable.

The time periods are freely selectable or you just read out the whole memory.

The data can be evaluated by means of the software CS Soft Basic in table and in graphic form.

USB-Stick

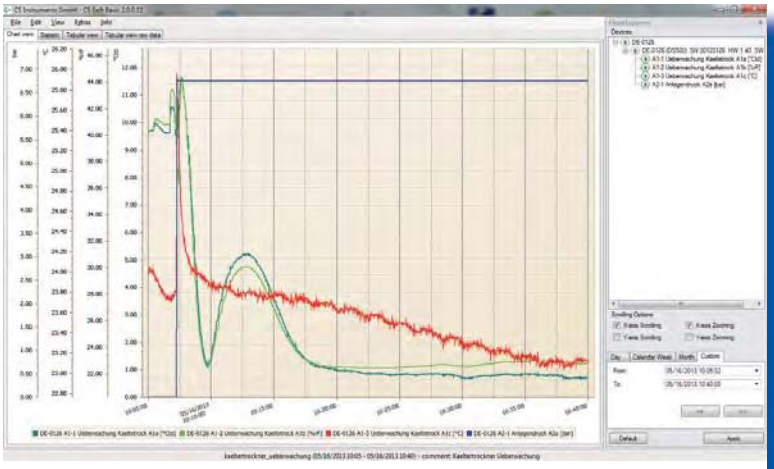
World debut screen-shot key

Ideal for documentation of the measured values/measurement curves on site. Coloured measurement curves can be sent by e-mail or integrated into a service report. By means of the screen-shot key the „current screen“ can be stored as an image file and printed out at the computer or edited without any additional software.

In the past mini thermo transfer printers were used frequently. The lifetime of the printout is temporary and it cannot be used in the computer. Therefore the printout was glued onto a paper very often.

Data evaluation in 5 languages by means of CS Soft Basic

Everything at a glance: Table, graph, statistics-
at the touch of a button the user gets all necessary information



Graphic evaluation

All measurement curves are indicated in terms of colour. All necessary functions such as zoom, selection/deselection of single measurement curves, freely selectable time periods, scaling of the axis, selection of colours and so on are integrated:
This view can be stored as a pdf file and sent by e-mail. Different data can be consolidated to a common file.

Chart view | Statistic | Tabular view | Tabular view raw data

Time	DE-0126 (DS500) A1-1 Ueberwachung Kaeltetrock A1a [°Ctd]	DE-0126 (DS500) A1-2 Ueberwachung Kaeltetrock A1b [%r F]	DE-0126 (DS500) A1-3 Ueberwachung Kaeltetrock A1c [°C]	DE-0126 (DS500) A2-1 Anlagendruck A2a [bar]
05/16/2013 10:07:20	10.1300	37.4600	25.7200	6.7700
05/16/2013 10:07:25	9.3700	38.4600	25.3050	6.7600
05/16/2013 10:07:30	11.2000	42.0000	25.0100	6.7600
05/16/2013 10:07:35	11.5500	43.7400	24.7100	6.7600
05/16/2013 10:07:40	11.6000	44.3200	24.5500	6.7600
05/16/2013 10:07:45	11.3350	43.6650	24.4050	6.7600
05/16/2013 10:07:50	10.9200	43.0000	24.3000	6.7600
05/16/2013 10:07:55	10.6900	42.4250	24.2600	6.7600
05/16/2013 10:08:00	10.1600	41.1200	24.1900	6.7600

Table view

All measuring points are listed with exact time interval. The desired measuring channels with measuring site name can be selected via the diagram explorer.

Statistic Report

Timespan: 05/16/2013 10:05 - 05/16/2013 10:40

DE-0126

DE-0126 (DS500) *Devicetyp:* 1 *Serialnumber:* 30120126

ID	Value name	Unit	Average	Min	Time of min	Max	Time of max
1	A1-1 Ueberwachung Kaeltetrock A1a	°Ctd	2.432	0.667	05/16/2013 10:30:18	11.604	05/16/2013 10:07:40
2	A1-2 Ueberwachung Kaeltetrock A1b	%rF	25.534	22.428	05/16/2013 10:09:42	44.324	05/16/2013 10:07:42
3	A1-3 Ueberwachung Kaeltetrock A1c	°C	23.553	23.045	05/16/2013 10:38:08	25.924	05/16/2013 10:07:18
4	A2-1 Anlagendruck A2a	bar	6.328	0	05/16/2013 10:05:02	6.768	05/16/2013 10:07:18

Statistics

All necessary statistics data are visible at a glance. So the user can quickly see which minimum or maximum measured values occurred at which time and for how long.