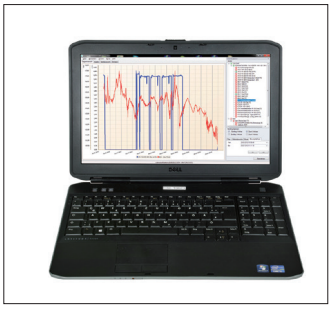
DP 400 mobile - With integrated dew point and pressure measurement

For measurement of all humidity parameters under pressure up to 16 bar

The DP 400 mobile with integrated, rechargeable battery has been developed especially for field use. In addition to a highly precise dew point sensor, a precise pressure sensor is also installed in the device up to 16 bar. So in addition to the pressure dew point in °Ctd, the temperature in °C and the line pressure in bar, further moisture parameters (% RH, mg/m³, g/m³) as well as pressure-dependent measured values (g/kg, ppm v/v, atm. dew point °C) can also be calculated.



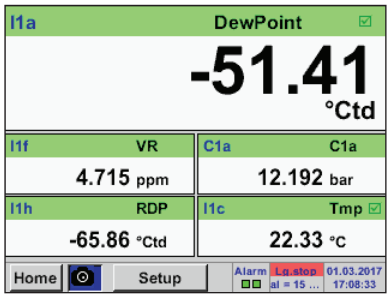
SPECIAL FEATURES:

- Precise dew point measurement down to -80 °Ctd, ppm V/V, atmospheric dew point
- Robust service case for field use
- Integrated pressure measurement up to 16 bar
- Integrated measuring chamber with integrated dry container protects the dew point sensor during transport and guarantees quick adaption time
- Humidity sensor with long-term stability: precise, condensation-resistant, quick adaption time
- Optional: 2 further sensor inputs for external sensors
- Optional: Integrated data logger

6 mm plug connection for measuring gas/compressed air feed

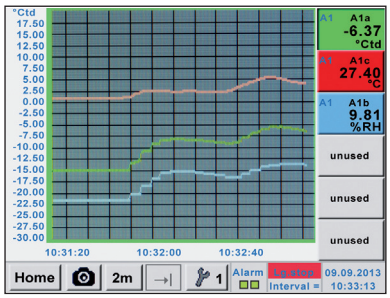
Option: Two further sensor inputs for: (flow, pressure, dew point, 4...20 mA, Modbus-RTU…)

Easy operation via touchscreen



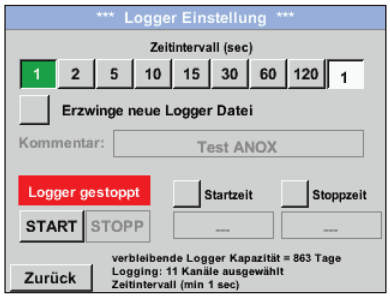
Actual measured values

All measured values can be seen at a glance.
Threshold value exceedances are indicated in red color. Thanks to the integrated pressure sensor, DP 400 mobile is able to calculate the atmospheric dew point.



Graphic view

In the graphic view all measured values are indicated as curves. It is possible to browse back on the time axis by a slide of the finger (without data logger maximum 24 h, with data logger back to the start of the measurement).



Data logger

Measured values are stored in DP 400 by means of the option „integrated data logger“.
The time interval can be freely set. Furthermore there is the possibility to fix the starting time and the end time of the data recording.
Read-out of the measured data via USB interface or via the optional Ethernet interface.

DESCRIPTION	ORDER NO.
DP 400 mobile - Portable dew point meter with integrated pressure measurement, incl. transportation bag for PTFE hose and power supply	0500 4505
Option: Integrated data logger for 100 million measured values	Z500 4002
Option: Integrated Ethernet and RS 485 interface	Z500 4004
Option: Integrated webserver	Z500 4005
Option: “Mathematics calculation function” for 4 freely selectable channels, (virtual channels): addition, subtraction, division, multiplication	Z500 4007
Option: 2 additional sensor inputs for external sensors (1 x digital sensor Modbus, 1 x analogueue sensor)	Z500 4001
CS Basic – data evaluation graphically and in tabular form - reading of the measured data via USB or Ethernet, license for 2 workstations	0554 8040
Connection cable for VA / FA sensors to mobile devices, ODU/M12, 5 m	0553 1503
Connection cable for pressure, temperature or third-party sensors on mobile devices, ODU/open ends, 5 m	0553 0501
Connection cable for pressure, temperature or third-party sensors on mobile devices, ODU/open ends, 10 m	0553 0502
Extension cable for mobile instruments ODU/ODU, 10m	0553 0504

TECHNICAL DATA DP 400 MOBIL	
Display:	3.5" touch screen
Measuring range:	-80…+50 °Ctd -20…+70 °C 0…100% RH 0…16 bar ± 0.5 %
Accuracy:	± 1 °C at 50…-20 °Ctd ± 2 °C at -20…-50 °Ctd ± 3 °C at -50…-80 °Ctd
Moisture parameters:	g/m³, mg/m³, ppm V/V, g/kg, °Ctdatm, % RH
Interface:	USB interface
Data logger option:	16 GB SD memory card (100 million values)
Power supply for external sensors:	Output voltage: 24 VDC ± 10% Output current: 120 mA in continuous operation
Power supply:	Internal rechargeable Li-Ion batteries, approx. 12 h continuous operation, 4 h charging time
Process connection:	6 mm plug connections
Ambient temperature:	0…+50 °C
EMC:	DIN EN 61326-1

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