



PI 500 - Hand-held measuring device for the industry

The new **PI 500** is an all-purpose hand-held measuring device for many applications in the industry, like e. g.:

- **Flow measurement**
- **Pressure/vacuum measurement**
- **Temperature measurement**
- **Moisture/dew point measurement**

The graphic indication of colored measurement curves is inimitably.

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

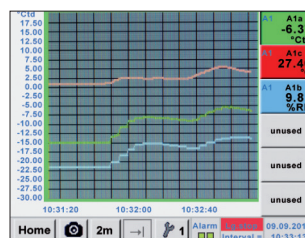
Measured data and service reports can be issued easily and quickly. The following probes can optionally be connected to the freely configurable sensor input of PI 500:

- Pressure sensors (high and low pressure)
- Flow probes, VA 500/VA 520
- Temperature sensors Pt 100, Pt 1000/4...20 mA
- Dew point sensors FA 510
- 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



Special features:

- Universal sensor input for many common sensor signals
- Internal rechargeable Li-Ion batteries (approx. 12 h continuous operation)
- 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
- International: International: Up to 8 languages selectable



Measurement curves are displayed graphically, so the operator sees at a glance the behaviour of the dryer from the start of the measurement.



DewPoint	
-46.3 °Ctd	
H1	H2
8.18 ppm	44.88 mg/m ³
H3	C1a
25.01 °C	6.540 bar

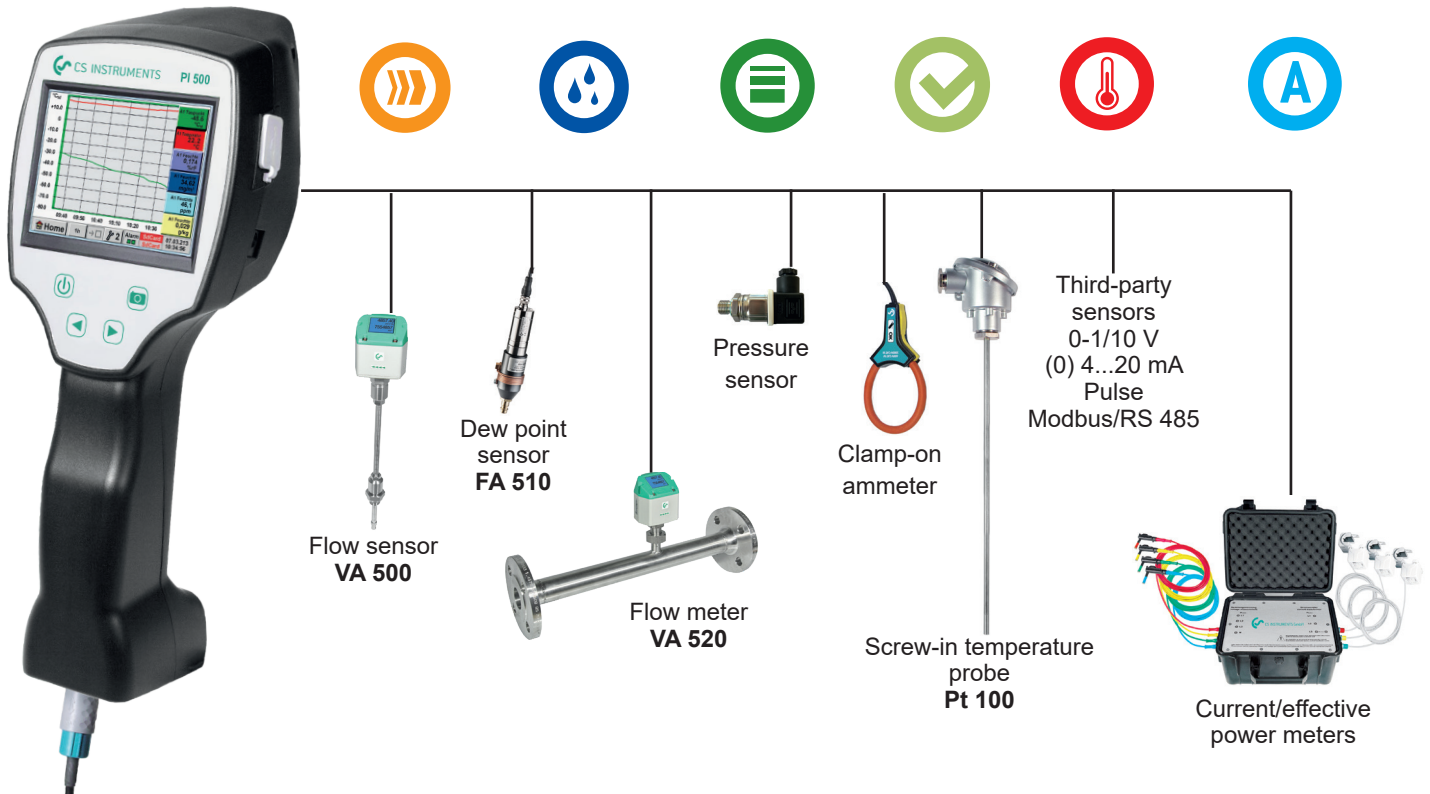
All physical parameters of the humidity measurement are calculated automatically. The PI 500 also displays the measured values of the external sensor.

Logger settings	
Time interval (sec)	
1	2 5 10 15 30 60 120 15
<input checked="" type="checkbox"/>	force new record file
Comment: <input type="text" value="Dryer Trockener 13"/>	
<input checked="" type="checkbox"/>	Logger stopped
<input checked="" type="checkbox"/>	timed Start
<input checked="" type="checkbox"/>	timed Stop
START	STOP
12:26:00 - 06.0	13:28:00 - 06.0
Remaining logger capacity = 9999 days	
Logging: 0 channels selected	
time interval (min) 1 sec	
Back	

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.



PI 500 - Hand-held measuring instrument with large sensor selection



INPUT SIGNALS

Current signals internal or external power supply	(0...20 mA/4...20 mA)
Measuring range	0...20 mA
Resolution	0.0001 mA
Accuracy	$\pm 0.03 \text{ mA} \pm 0.05 \%$
Input resistance	50 Ω
Voltage signal:	(0...1 V)
Measuring range	0...1 V
Resolution	0.05 mV
Accuracy	$\pm 0.2 \text{ mV} \pm 0.05 \%$
Input resistance	100 k Ω
Voltage signal	(0...10 V / 30 V)
Measuring range	0...10 V
Resolution	0.5 mV
Accuracy	$\pm 2 \text{ mV} \pm 0.05 \%$
Input resistance	1 M Ω
RTD Pt 100	
Measuring range	-328...1562 $^{\circ}\text{F}$
Resolution	0.1 $^{\circ}\text{F}$
Accuracy	$\pm 0.2 \text{ }^{\circ}\text{F}$ (-148...-752 $^{\circ}\text{F}$) $\pm 0.3 \text{ }^{\circ}\text{F}$ (further range)
RTD Pt 1000	
Measuring range	-328...1562 $^{\circ}\text{F}$
Resolution	0.1 $^{\circ}\text{F}$
Accuracy	$\pm 0.2 \text{ }^{\circ}\text{F}$ (-148...-752 $^{\circ}\text{F}$)
Pulse	
Measuring range	Min pulse length 500 μs frequency 0...1 kHz max. 30 VDC

DESCRIPTION	ORDER NO.
PI 500 portable measuring instrument with integrated data logger	0560 0511
Option: "Mathematics calculation function" for 4 freely selectable channels, (virtual channels): addition, subtraction, division, multiplication	Z500 5107
Option: „Totalizer function for analog signals“	Z500 5106
CS Basic – data evaluation graphically and in tabular form - reading of the measured data via USB or Ethernet, license for 2 workstations	0554 8040
Transport case	0554 6510

Further sensors can be found on pages 38 to 41

TECHNICAL DATA PI 500

Display:	3.5" touch panel TFT transmissive, graphics, curves, statistics
Interfaces:	USB interface
Power supply for sensors:	Output voltage: 24 VDC $\pm 10\%$ Output current: 120 mA in continuous operation
Power supply:	Internal rechargeable Li-Ion batteries, charging time approx. 4 h, PI 500 continuous operation > 4h depending on power consumption for ext. sensor
Power adapter:	100 - 240 VAC / 50 - 60 Hz, 12 VDC - 1A, safety class 2 only for use in dry rooms
Dimensions:	3.2 x 3.7 x 9.6 inch
Housing material:	PC/ABS
Weight:	0.9 lbs
Operating temperature:	32...122 $^{\circ}\text{F}$ ambient temperature
Storage temperature:	-4...158 $^{\circ}\text{F}$
EMC:	DIN EN 61326
Sensor input:	For connection of pressure and temperature sensors, clamp-on ammeters, third-party sensors with 4 ... 20 mA, 0-10 V, Pt 100, Pt 1000, Modbus
Memory Size:	16 GB memory card standard