



## PI 500 - Hand-held measuring device for the industry

The new PI 500 is an all-purpose hand-held logger for many applications in the industrial manufacturing, like e. g.:

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

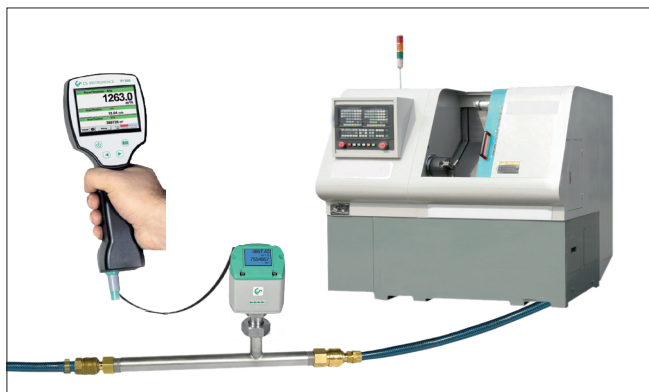
The graphic indication of colored measurement curves is inimitably.

Up to 100 million measured values can be stored with date and name of measuring site. The measured values can be transferred to a 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:

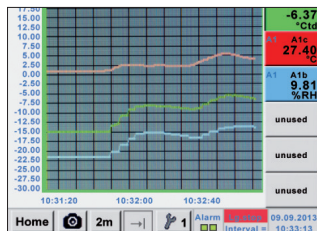
- Pressure sensors (high and low pressure)
- Flow probes, VA 500/VA 520
- Temperature sensors Pt 100, Pt 1000/4...20 mA
- Dew point sensors FA 510
- Effective power meters
- Optional third-party sensors with the following signals: 0...1/10 V, 0/4...20 mA, Pt 100, Pt 1000, pulse, Modbus

### Using PI500 with a dew point sensor



#### 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: Up to 8 languages selectable



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

<b>Dew Point</b>			
<b>-46.3 °Ctd</b>			
HI	HId		
8.18 ppm	44.88 mg/m <sup>3</sup>		
HC	Tem	C1a Pressure	C1a
25.01 °C	6.540 bar		

All physical parameters of the humidity measurement are calculated automatically.

Time interval (sec)

1 2 5 10 15 30 60 120 15

force new record file

Comment:

**Logger stopped**  timed Start  timed Stop

START STOP 12:26:00 - 06.0 13:28:00 - 06.0

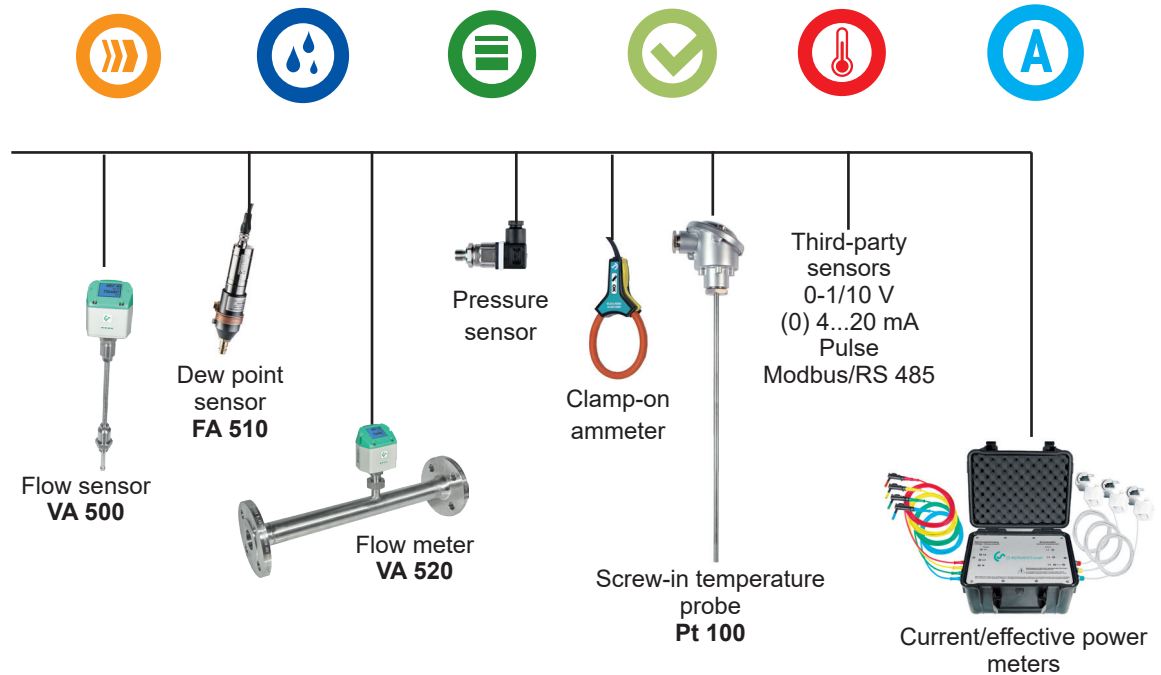
Remaining logger capacity = 9999 days  
Logging: 0 channels selected  
time interval (min 1 sec)

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

<b>Current signals internal or external power supply</b>	(0...20 mA/4...20 mA)
Measuring range	0...20 mA
Resolution	0.0001 mA
Accuracy	± 0.03 mA ± 0.05 %
Input resistance	50 Ω
<b>Voltage signal:</b>	(0...1 V)
Measuring range	0...1 V
Resolution	0.05 mV
Accuracy	± 0.2 mV ± 0.05 %
Input resistance	100 kΩ
<b>Voltage signal</b>	(0...10 V / 30 V)
Measuring range	0...10 V
Resolution	0.5 mV
Accuracy	± 2 mV ± 0.05 %
Input resistance	1 MΩ
<b>RTD Pt 100</b>	
Measuring range	-328...1562 °F
Resolution	0.1 °F
Accuracy	± 0.2 °F (-148...-752 °F) ± 0.3 °F (further range)
<b>RTD Pt 1000</b>	
Measuring range	-328...1562 °F
Resolution	0.1 °F
Accuracy	± 0.2 °F (-148...-752 °F)
<b>Pulse</b>	
Measuring range	Min pulse length 500 μs frequency 0...1 kHz max. 30 VDC

### DESCRIPTION

PI 500 portable measuring instrument with integrated data logger

Option: "Mathematics calculation function" for 4 freely selectable channels, (virtual channels): addition, subtraction, division, multiplication

Option: „Totalizer function for analog signals“

CS Basic – data evaluation graphically and in tabular form - reading of the measured data via USB or Ethernet, license for 2 workstations

Transport case

Further sensors can be found on pages 38 to 41

### TECHNICAL DATA PI 500

<b>Display:</b>	3.5" touch panel TFT transmissive, graphics, curves, statistics
<b>Interfaces:</b>	USB interface
<b>Power supply for sensors:</b>	Output voltage: 24 VDC ± 10% Output current: 120 mA in continuous operation
<b>Power supply:</b>	Internal rechargeable Li-Ion batteries, charging time approx. 4 h, PI 500 continuous operation > 4h depending on power consumption for ext. sensor
<b>Power adapter:</b>	100 - 240 VAC / 50 - 60 Hz, 12 VDC - 1A, safety class 2 only for use in dry rooms
<b>Dimensions:</b>	3.2 x 3.7 x 9.6 inch
<b>Housing material:</b>	PC/ABS
<b>Weight:</b>	0.9 lbs
<b>Operating temperature:</b>	32...122 °F ambient temperature
<b>Storage temperature:</b>	-4...158 °F
<b>EMC:</b>	DIN EN 61326
<b>Sensor input:</b>	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
<b>Memory Size:</b>	16 GB memory card standard

### 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