



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.

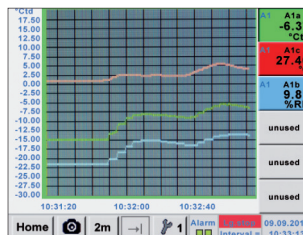
Measured data and service reports can be issued easily and quickly. The following probes can optionally be connected to the freely configurable sensor input of PI 500:

- 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/m³
H3	H4
Tem	Pressure 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

force new record file

Comment:

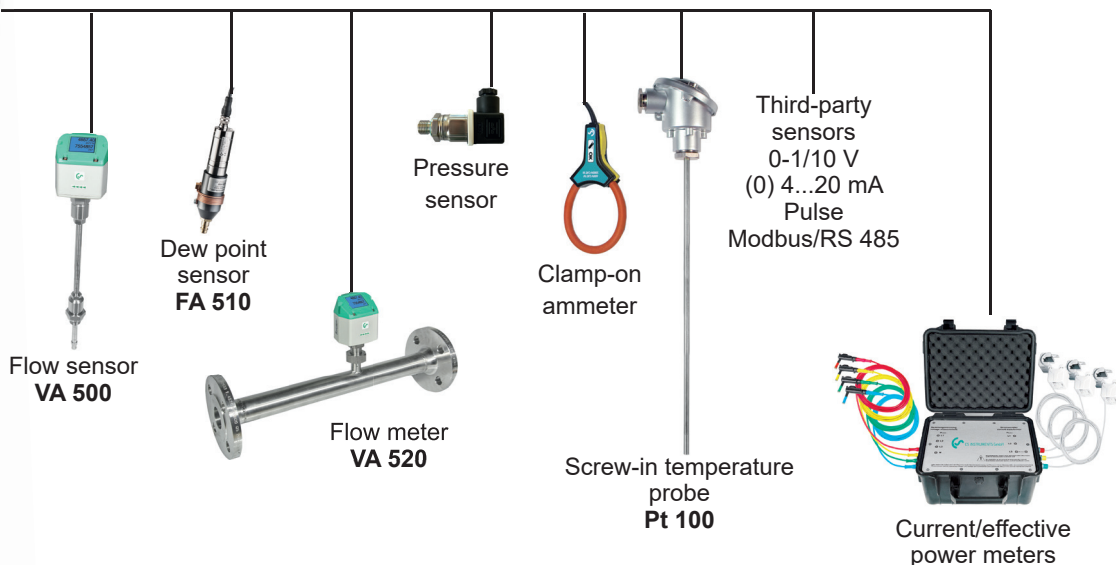
Logger stopped timed Start timed Stop

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

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 -200...850 $^{\circ}\text{C}$
 Resolution 0.1 $^{\circ}\text{C}$
 Accuracy $\pm 0.2 \text{ }^{\circ}\text{C}$ (-100...400 $^{\circ}\text{C}$)
 $\pm 0.3 \text{ }^{\circ}\text{C}$ (further range)

RTD Pt 1000

Measuring range -200...850 $^{\circ}\text{C}$
 Resolution 0.1 $^{\circ}\text{C}$
 Accuracy $\pm 0.2 \text{ }^{\circ}\text{C}$ (-100...400 $^{\circ}\text{C}$)

Pulse

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: „Totaliser function for analogue 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

ORDER NO.

0560 0511
 Z500 5107
 Z500 5106
 0554 8040
 0554 6510

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:	82 x 96 x 245 mm
Housing material:	PC/ABS
Weight:	450 g
Operating temperature:	0...50 $^{\circ}\text{C}$ ambient temperature
Storage temperature:	-20 to +70 $^{\circ}\text{C}$
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