

Pressure Transmitter Model CPT2500 with USB-Adapter Model CPA2500 and Software USBsoft2500

WIKA Data Sheet CT 05.01

Applications

- Calibration service companies/service industry
- Quality assurance
- Recording and monitoring of pressure history

Special Features

- Measurement period adjustable from 1 ms to 10 s
- Pressure ranges from 0 ... 0.1 up to 0 ... 1,000 bar
- Accuracy 0.2 %
- No external power supply required
- USBsoft2500 software for configuration, measurement recording and analysis



Pressure transmitter Model CPT2500 with
USB-Adapter Model CPA2500

Description

The pressure transmitter CPT2500 is suitable for connection to any PC with a USB-port by using the CPA2500 USB adapter.

All settings can be made by the USBsoft2500 software which is provided with the USB-adapter CPA2500. The recorded values can be graphically displayed and evaluated by the software. The measurement period is adjustable from 1 ms up to 10 sec. If the measurement period is longer than 5 ms the mean and min/max-values will also be recorded.

In this way pressure peaks can be easily identified within the recording time.

It's also possible to set start and stop conditions for the recording. In this way it's possible to detect pressure peaks with a resolution of 1 ms.

The CPT2500 is a capable solution for all applications where, within a fixed period, pressure trends must be recorded and analysed with high resolution.

For easy transport and safe storage, the USB-Adapter is delivered in a compact case, which also holds one or more pressure transmitters.

Specifications

Specific data Pressure transmitter Model CPT2500

Pressure range	bar	0.1	0.16	0.25	0.4	0.6	1	1.6	2.5	4	6		
Over pressure safety	bar	1	1.5	2	2	4	5	10	10	17	35		
Burst pressure	bar	2	2	2.4	2.4	4.8	6	12	12	20.5	42		
Resolution	mbar	0.1						1					
Pressure range	bar	10	16	25	40	60	100	160	250	400	600	1000	
Over pressure range	bar	35	80	50	80	120	200	320	500	800	1200	1500	
Burst pressure	bar	42	96	250	400	550	800	1000	1200	1700	2400	3000	
Resolution	bar	0.01						0.1					
Type of pressure		Relative pressure (absolute pressure 0.25 up to 16 bar abs and vacuum on request)											
Pressure connection		G½ (others by adapters on request)											
Material													
■ Wetted parts		stainless steel (from 40 bar additionally with sealing gasket NBR)											
■ Housing		stainless steel											
■ Internal transmission fluid		synthetic oil (only pressure ranges up to 16 bar)											
One year stability		0.2 % of span at reference conditions											
Permissible													
■ Medium temperature	°C	-25 ... +100											
■ Ambient temperature	°C	-20 ... +80											
■ Storage temperature	°C	-40 ... +80											
Compensated range	°C	0 ... 70											
Temperature coefficients													
■ Mean tc of zero signal	% / K	0.2 / 10 (< 0.4 for pressure ranges < 250 mbar)											
■ Mean tc of span	% / K	0.2 / 10											
Calibration		3.1 calibration certificate per DIN EN 10 204 (option: DKD-calibration certificate)											
Weight	g	approx. 220											

Specific data USB Adapter Model CPA2500

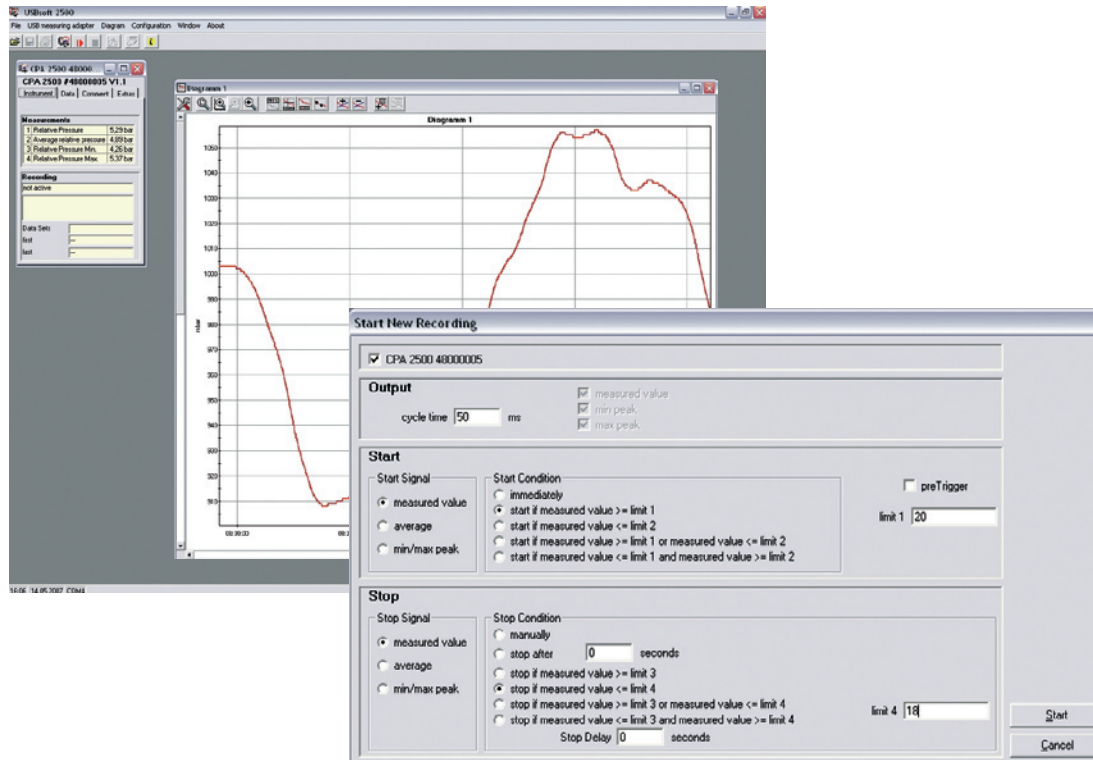
Pressure units		mbar, bar, kPa, MPa, mmHg, psi, mH ₂ O, switchable, depending on sensor selected										
Recording options		start/stop conditions, pretrigger, stop-delay										
Max. range		-19999 to 19999 digit										
Accuracy	FS	± 0.2 % (at reference temperature 25 °C)										
Measurement period		1 ms to 10 s										
Measuring rate		1,000 measurements / sec.										
PC-connection		Standard USB plug (Type A)										
Transmitter		Circular connector, 7-pin, M16 x 0.75										
Power supply		via USB-port										
Operating conditions	°C	-25 ... +50; 0 ... 95 % rel. humidity (non-condensing)										
Reference temperature	°C	25										
Storage temperature	°C	-25 ... +70										
Dimensions	mm	approx. 56 x 31 x 24										
Cable-length	m	approx. 1.4										
Weight	g	approx. 120										
EMC		Tested to EN 55 022 class A and EN 55 024										

Evaluation Software USBsoft2500

The software USBsoft2500 is required for the operation of the CPT2500 pressure transmitter in combination with the USB-adapter CPA2500. This enables configuration of the pressure transmitter and also the selection of different recording options.

The software also allows different start/stop conditions to be defined in order to easily identify, for example, a single pressure peak.

Graphical evaluation of the measured data is possible, including mean, min- and max-values, in addition the export of the measured data to other software is also possible. Several series of measurements can be displayed in a single chart.



System requirements

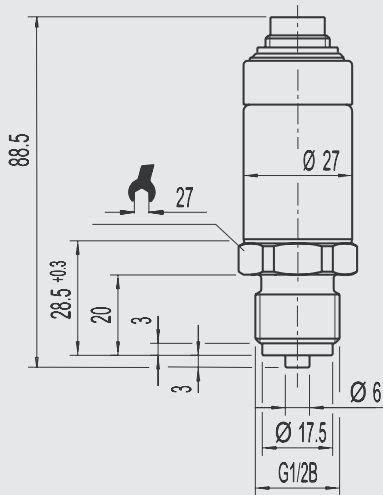
- IBM compatible PC (Pentium™)
- At least 20 MB hard disc capacity available
- CD-ROM drive
- At least 32 MB main memory
- Windows™ 95, 98, 2000, XP
- Mouse
- One unassigned USB-Port

Performance data

- Measurement period adjustable from 1 ms to 10 s
- Data export into other programs e.g. Excel
- Languages: English/German/Spanish

Dimensions in mm

Pressure transmitter Model CPT2500



Transport case with pressure transmitter and USB-adapter

Scope of supply

- Pressure transmitter model CPT2500
- USB-adapter model CPA2500
- Software USBsoft2500
- Transport case
- Operating instructions
- 3.1 calibration report per DIN EN 10 204

Options

- DKD calibration certificate

Accessories

- Additional pressure sensor
- Quick-connect process connection system "Minimesh"
- Various pressure adapters
- Extension cable on sensor side, length 3.8 m

Products and Services within our Calibration Technology Program

- DKD calibration services for pressure
- Repair of all makes of calibration units
- Portable pressure measuring devices for test and calibration tasks
- Precision pressure measuring units and pressure controllers
- Primary standards for pressure
- Testing technology system solutions
- DKD calibration services for temperature
- Temperature dry-well calibrators
- Calibration baths and furnaces
- Temperature measuring instruments for test and calibrating tasks
- Precision thermometers
- Primary standards for temperature
- Consulting and seminars

Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing. Modifications may take place and materials specified may be replaced by others without prior notice.



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