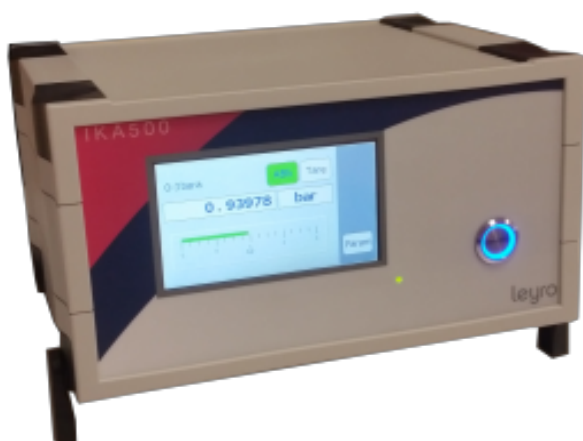


# IKA 500

The precision pressure indicator IKA 500 is equipped with up to two modular precision sensors (in two separate channels) and an optional barometric reference. Due to an optionally certified measurement inaccuracy of 0.01 % FS, differential pressure of  $\pm 0.03$  % FS of the entire measuring chain, it is primarily used as transfer / working standard for the testing resp. calibration of diverse pressure measuring instruments.

A colour touch screen and intuitive navigation ensure very easy operation. Especially with manual pressure generation, the very high measuring rate of this fully digital pressure indicator is of advantage, as pressure changes in the measuring system are indicated nearly in real time. Besides the optionally available calibration software DCal, which allows for comfortable calibration of pressure measuring instruments, including automatic creation of test certificates, the user is able to create own software programmes. For integration in existing systems an RS-232, Ethernet or optionally an IEEE-488.2 interface or an analogue output 4 – 20 mA are available.

Completely mobile or stationary test equipment can be manufactured upon request.



## APPLICATIONS

Laboratories

Service industries and calibration services

Research and development

Transmitter calibration

Long-term measurement

## HIGHLIGHTS

Accuracy up to 0.008 % FS

Internal precision sensors possible

6 digits resolution

Modular design

Approx. 10 ms of response time

## Technical data

<b>Gauge pressure</b>	(bar rel.)	-1 ... 1	0 ... 2	-1 ... 3	0 ... 5	-1 ... 10	0 ... 20
		-1 ... 30	0 ... 60	-1 ... 100	0 ... 200	0 ... 40	0 ... 1,000
<b>Absolute pressure</b>	(bar abs.)	0 ... 1	0 ... 3	0 ... 10	0 ... 30		
		0 ... 100	0 ... 300	0 ... 700	0 ... 1,000		
<b>Differential pressure</b>	(mbar)	$\pm 30$	$\pm 100$	$\pm 300$			
<b>Function</b>	barometric reference is required for the change of absolute pressure $\Leftrightarrow$ gauge pressure						
<b>Pressure range</b>	800 mbar to 1,200 mbar abs.						
<b>Accuracy</b>	0.01% FS (Optional 0.008 % FS (optional))						
<b>Pressure units</b>	23 and 1 freely programmable						
<b>Instrument version</b>	desktop case optional: 19" rack mounting with side panels incl. mounting kit						
<b>Weight</b>	approx. 2.0 kg (4.41 lb)						
<b>Display resolution</b>	6 digits						
<b>Screen division</b>	1 line per sensor						
<b>Keyboard</b>	colour touch screen approx. 10 ms						
<b>Response time</b>	amount of assimilable sensors 1 (channel A) or optionally 2 (channel B)						
<b>Connections</b>							



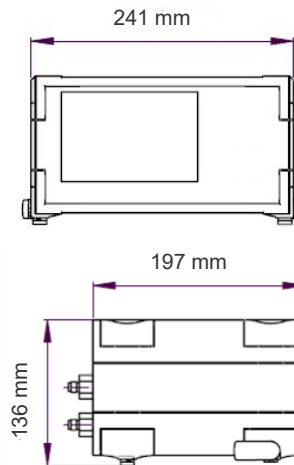
	and / or barometric reference optionally external installation of sensors with 1.5 m cable
<b>Pressure connections</b>	G 1/8" female optional: 6 mm tube fitting or connection adapter
<b>Power supply</b>	auxiliary energy 88 – 264 V AC, 47 – 63 Hz
<b>Medium</b>	clean, dry, non-corrosive, non-combustible and non-oxidising gases
<b>Overage protection</b>	150 % of the largest pressure range optional: external pressure relief valves
<b>Interfaces</b>	RS-232, Ethernet
<b>Compensated temperature range</b>	+15 to +35 °C (+59 to +95 °F)
<b>Operating temperature</b>	+10 to +40 °C (+50 to +104 °F)
<b>Relative humidity</b>	0 to 95 % r. h. (non-condensing)
<b>Storage temperature</b>	0 to +70 °C (32 to +158 °F)
<b>Analogue inputs</b>	4 – 20 mA or 0 – 10 V
<b>Instruction sets</b>	IKA 500, alternative instruction sets possible, alignment to existing HOST software upon request
<b>Approvals and Certificates</b>	EMC-Directive 2004 / 108 / EC, EN 61 326-1 emission (group 1, class A) and stability (industrial sector); calibration certificate 3.1, Optionally calibration certificate ENAC/ ISO 17025

### Optional

<b>Interface</b>	IEEE-488.2
<b>Analogue output</b>	0 – 1 V; 0 – 5 V; 0 – 10 V or 4 – 20 mA
<b>Switching outputs</b>	24 V DC PWM or TTL level
<b>Analogue inputs</b>	4 – 20 mA or 0 – 10 V, others upon request

### Further options

- Second integrated sensor (channel B)
- Barometric reference
- IEEE-488.2 interface
- Analogue output: 0 – 1 V; 0 – 5 V; 0 – 10 V or 4 – 20 mA
- Switching outputs: 24 V DC PWM or TTL level
- Analogue inputs: 4 – 20 mA or 0 – 10 V, others upon request
- Calibration software DCal
- Calibration certificate ENAC/ ISO 17025
- 19" rack mounting
- Portable case
- Pressure connections:
  - 6 mm tube fitting
  - connection adapter
- External pressure relief valves



### Scope of delivery

Precision pressure controller  
Mains cable 1.5 m  
Operating instructions  
Calibration certificate 3.1

