

# LPG 800

Pneumatic precision pressure controller LPG 800. This modular instrument (up to 3 sensors) offers the maximum flexibility in terms of configuration to customer's requirements. It stands out due to its pressure sensors, which are based on the MEMS technology, and that combine maximum precision with highest long-term stability.

The LPG 800 achieves a control stability of 0.003 % FS of the currently active pressure range. The instrument is operated intuitively via a touch screen. All extended functions are accessible via submenus. 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 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

Up to 3 precision sensors  
 Completely mobile/ stationary test equipment  
 Analogue output 4 - 20 mA  
 Modular design  
 Very high measuring rate (up to 250 bar)



### Technical data

<b>Gauge pressure</b>	(bar rel.)	-1 ... 1 0 ... 20	0 ... 2 -1 ... 30	-1 ... 3 0 ... 60	0 ... 5 -1 ... 100 / 250	-1 ... 10
<b>Absolute pressure</b>	(bar abs.)	0 – 1	0 – 3	0 – 10	0 – 30	0 – 100
<b>Differential pressure</b>	(mbar)	± 30	± 100	± 300		
<b>Function</b>		barometric reference is required for the change of absolute pressure <=> gauge pressure. A pressure controller with relative reference sensors requires compound ranges for full functionality				
<b>Pressure range</b>		800 mbar to 1,200 mbar abs.				
<b>Accuracy</b>		0,01 % FS (Optional 0.008 % FS)				
<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. 7.0 kg (15.43 lb)				
<b>Display resolution</b>		6 digits				
<b>Screen division</b>		actual value, reference value, steps				
<b>Keyboard</b>		colour touch screen				
<b>Response time</b>		approx. 10 ms				
<b>Pressure ranges</b>		max. 3 pressure ranges and barometric reference				

<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>	LPG 800, 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 (16 bit)
<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

### Scope of delivery

Precision pressure controller  
Mains cable 1.5 m  
Operating instructions Calibration  
Certificate ISO 17025

### Further options

The LPG 800 has 4 switching outputs that can be used for options. Furthermore, up to four precision sensors can be actuated

#### Option M

The following features were integrated:

- On and off switch for a vacuum pump
- Internal separation of regulator and test item
- An additional ventilation valve for the test item side

This option is suited, for example, for pressure gauge adjustment

#### Option StdBy

A valve uncouples the regulator and the precision sensors from the test item connection  
This option is required, in order to operate several LPG pressure controllers in parallel

#### Option Rack (only in combination with Option StdBy)

With this option, several LPG pressure controllers can be combined in one controller unit. Sensors, e.g. barometers, can also be mirrored to connected LPG pressure controllers

#### Option Vac

With this option, a 24 V signal can be actuated, in order to switch a vacuum pump on or off, for example

