

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

Gauge pressure	(bar rel.)	-1 ... 1 0 ... 20	0 ... 2 -1 ... 30	-1 ... 3 0 ... 60	0 ... 5 -1 ... 100 / 250	-1 ... 10
Absolute pressure	(bar abs.)	0 – 1	0 – 3	0 – 10	0 – 30	0 – 100
Differential pressure	(mbar)	± 30	± 100	± 300		
Function		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				
Pressure range		800 mbar to 1,200 mbar abs.				
Accuracy		0,01 % FS (Optional 0.008 % FS)				
Pressure units		23 and 1 freely programmable				
Instrument version		desktop case optional: 19" rack mounting with side panels incl. mounting kit				
Weight		approx. 7.0 kg (15.43 lb)				
Display resolution		6 digits				
Screen division		actual value, reference value, steps				
Keyboard		colour touch screen				
Response time		approx. 10 ms				
Pressure ranges		max. 3 pressure ranges and barometric reference				



Pressure connections	G 1/8" female optional: 6 mm tube fitting or connection adapter
Power supply	auxiliary energy 88 – 264 V AC, 47 – 63 Hz
Medium	clean, dry, non-corrosive, non-combustible and non-oxidising gases
Overage protection	150 % of the largest pressure range optional: external pressure relief valves
Interfaces	RS-232, Ethernet
Compensated temperature range	+15 to +35 °C (+59 to +95 °F)
Operating temperature	+10 to +40 °C (+50 to +104 °F)
Relative humidity	0 to 95 % r. h. (non-condensing)
Storage temperature	0 to +70 °C (32 to +158 °F)
Analogue inputs	4 – 20 mA or 0 – 10 V
Instruction sets	LPG 800, alternative instruction sets possible, alignment to existing HOST software upon request
Approvals and Certificates	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

Interface	IEEE-488.2
Analogue output	0 – 1 V; 0 – 5 V; 0 – 10 V or 4 – 20 mA (16 bit)
Switching outputs	24 V DC PWM or TTL level
Analogue inputs	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

