

Digital Precision Pressure Indicator

High pressure up to 5000 bar

DPG 3600 HD

Applications

- Laboratories for factory calibration
- Service industries and calibration services
- Laboratories for research and development
- Pressure gauge, pressure switch and sensor production resp. transmitter calibration and creation of certificates
- Long-term measurement

Specialties

Pressure Ranges

Gauge pressure: 0 – 1,600 bar to 0 – 5,000 bar
(0 – 20,000 psi to 0 – 70,000 psi)

Measurement uncertainty (k = 2): better than 0.04 % FS
from 2500 bar onwards 0.1 % FS

- Up to two separate, internal precision sensors possible
- Modular construction
- Fully digital measuring instrument
- Automatic creation of test certificates via optional calibration software DynaCal

Description

Application

The modular pressure indicator DPG 3600 HD is equipped with up to two precision sensors (in two separate channels) and an optional barometric reference. Due to an optionally certified measurement inaccuracy of 0.04 % FS, from 2500 bar onwards 0.1 % FS of the entire measuring chain, it is primarily used as transfer / working standard for the testing resp. calibration of diverse high pressure measuring instruments.

Functionality

A colour touchscreen 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.

Software

Besides the optionally available calibration software DynaCal, which allows for comfortable calibration of pressure measuring instruments, including automatic creation of test certificates, the user is able to create own software programmes, e.g. via LabVIEW®.

Communication

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.

Complete Testing and Calibration Systems

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



Technical Data

Pressure Ranges		
Gauge pressure	0 – 1,600 bar	0 – 20,000 psi
	0 – 2,500 bar	0 – 35,000 psi
	0 – 4,000 bar	0 – 60,000 psi
	0 – 5,000 bar	0 – 70,000 psi

other pressure range combinations from data sheet 10261 available upon request

Pressure Units 23 and 1 freely programmable

Instrument Version Desktop case
optional: 19" rack mounting with side panels
incl. mounting kit

Dimensional Data see back of page

Weight approx. 2.0 kg (4.41 lb)

Display

Screen division: 1 line per sensor
Resolution: 6 digits
Keyboard: colour touch screen
Warm up time: < 10 minutes
Response time: approx. 10 ms

Connections (see also back of page)
- external installation of sensors with 1.5 m cable

Pressure Connections M16 x 1.5 female high pressure connection

Medium

clean, dry, non-corrosive, non-combustible and non-oxidising gases (> 1 bar fluids possible)

Overrange Protection 150 %
optional: external pressure relief valves

Power supply
Auxiliary energy 88 – 264 V AC, 47 – 63 Hz

Permissible Ambient Conditions

Operating temperature: +10 °C to +40 °C (+50 °F to +104 °F)
Storage temperature: 0 °C to +70 °C (+32 °F to +158 °F)
Relative humidity: 0 to 95 % r. h. (non-condensing)
Compensated temperature range: +15 °C to +35 °C (+59 °F to +95 °F)



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Technical Data (continued from page 1)

Communication

Interfaces: RS-232, Ethernet

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

Instruction Sets

DPG 3600 HD, alternative instruction sets possible, alignment to existing HOST software upon request

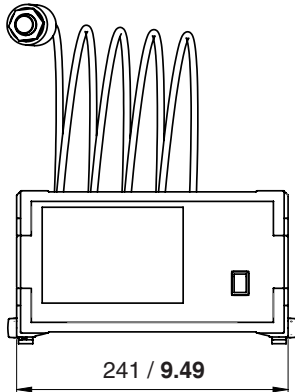
Approvals and Certificates

EMC-Directive 2004 / 108 / EC, DIN EN 61 326-1 emission (group 1, class A) and stability (industrial sector);

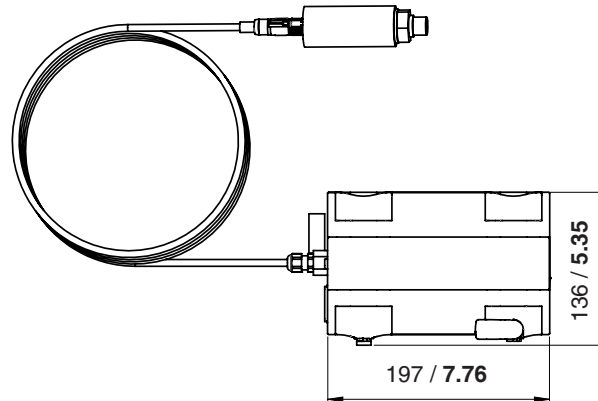
calibration certificate 3.1 according to DIN EN 10204, optionally internationally traceable calibration certificate

Dimensional Data in mm / inch

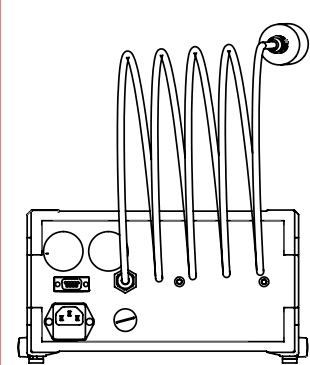
Front view



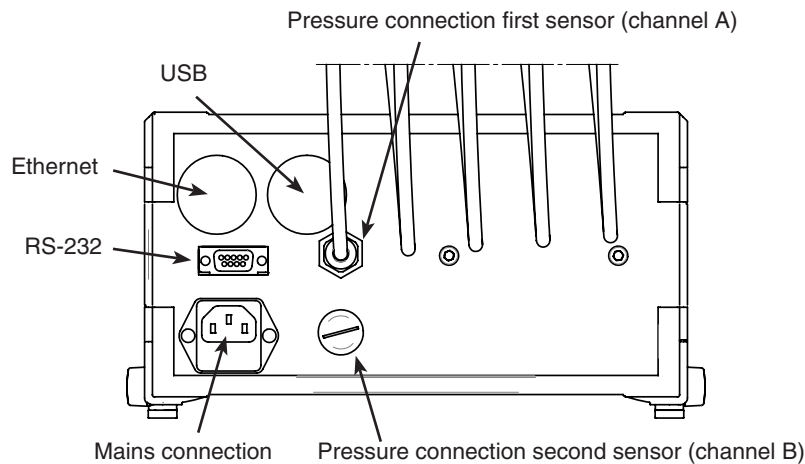
Lateral view



Back view



Electrical connections and pressure connections - back



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
- Instruction sets DPI or DPG
- Calibration software DynaCal
- Internationally traceable calibration certificate
- 19" rack mounting
- Portable case
- Pressure connections:
 - 6 mm Swagelok® tube fitting
 - connection adapter
- External pressure relief valves

Scope of Delivery

- Digital precision pressure indicator
- Mains cable 1.5 m
- Operating instruction
- Calibration certificate 3.1 according to DIN EN 10204

Ordering Information

Model DPG 3600 HD, pressure range 1st pressure sensor (channel A), options upon request