

GE Sensing

Features

- Pressure measurement range to 10,000 psi (700 bar)
- 0.025% full scale (FS) accuracy
- Voltage and current measurement with sourcing
- Pressure to current or voltage conversion
- Current or voltage to pressure conversion
- Two-wire transmitter simulation
- Simultaneous display of pressure and selected function
- Timed/Event data storage with date & time stamping
- Upload/download Calibration procedures via RS232 interface
- Alternative languages available: French, German, Italian, Spanish
- Expandable ranges with EPM-IDOS sensors
- Pressure switch test
- Leak rate measurement one second to 999 days
- Tare, Maximum and Minimum pressure values
- Display hold facility
- 10 and 24 VDC power supply
- Pressure module temperature measurement
- Adjustable resolution
- Windows based software 'SiCal PRO' for remote control operation and data transfer into many applications (Optional)
- CE marked

PC6-IDOS

Druck Pressure Calibrator

PC6-IDOS is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



GE Sensing

The PC6-IDOS combines the latest developments in pressure instrumentation with advanced sensor and component technology, resulting in an extremely versatile calibration instrument.

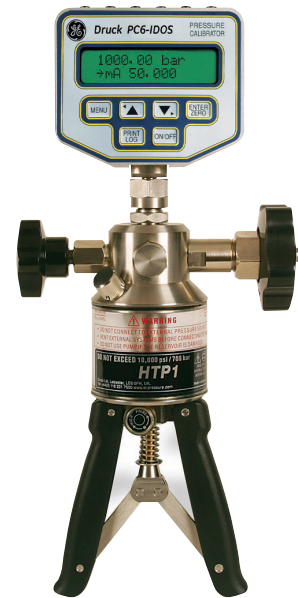
The PC6-IDOS is designed for accurately testing and calibrating the following types of instruments:

- Pressure transducers/transmitters
- Pressure switches/relief valves
- Pressure indicators (analog/digital)
- Process indicators
- Current/voltage to pressure converters

The PC6-IDOS head can be supplied by itself or as a complete kit with our pneumatic or hydraulic hand pumps, fittings, pressure hose and carrying case.

For expanded pressure ranges, external pressure modules (EPM-IDOS) can be connected with ranges to 10,000 psi (700 bar). Premium grade EPM-IDOS sensors are available offering accuracies to 0.01% FS. See, EPM-IDOS data sheet for details.

The compact size of the PC6-IDOS does not compromise functionality. It can simultaneously show pressure versus voltage or current, date & time, percentage of pressure, pressure switch status, temperature, maximum or minimum pressure values. Data can be logged and stored with time and date stamping for future reference. The PC6-IDOS can source current and voltage using various options, e.g. continuous, step or square root functions.



PC6-IDOS Specifications

Overload Pressure

15% FS

Resolution

6 Digits

Pressure units

bar, mbar, MPa, kPa, psi, kg/cm², atm,
inH₂O, mH₂O, mmH₂O, inHg, mmHg, Unit 1, Unit 2
(user-defined)

Overload Warning

Flashing display and audible tone at 115% of full scale (FS)

Temperature Display

Temperature of pressure sensor (Accuracy: ± 1°C)

Voltage Output

- Regulated DC supply 10 V ± 0.1% maximum current
10 mA
- Unregulated DC supply 24 V ± 10% maximum current
50 mA

Pressure Switch Test

Status open/closed

Operating Temperature

32°F to 122°F (0°C to 50°C)

Calibrated Temperature

68°F (20°C), ±5.6°F (±2°C)

Calibrated Temperature Range

41°F to 113°F (5°C to 45°C)

Storage Temperature

-4°F to 158°F (-20°C to 70°C)

Temperature Effects

Temperature effects are included in the accuracy

Measurement	Range	Resolution	Accuracy	Input Resistance
Voltage* (Auto Range)	0 to 100 mV	1 mV	0.025% FS	1 MΩ
	0 to 5 V	0.1 mV	0.025% FS	1 MΩ
	0 to 5 V	1 mV	0.025% FS	1 MΩ
Current* (Auto Range)	0 to 50 mA	1 μA	0.025% FS	6 MΩ
	0 to 25 mA	1 μA	0.025% FS	6 MΩ

Source	Maximum Load			
Voltage*	0 to 10 V	0.2 mV	0.025% FS	20 mA
Current*	0 to 50 mA	1 μA	0.025% FS	330 Ω

The PC6-IDOS Indicator version does not include the Voltage/Current input/output or EPM-IDOS. Substitute 'I' for 'C' in the part No. when ordering an indicator.

*Temperature coefficient ± 0.005% of reading /°C with respect to 68°F (20°C)

Model	Range psi (bar)	Accuracy (FS) up to
PC6-IDOS-0.07-C G	-1.0 to 1.0 (± 0.07)	0.05%*
PC6-IDOS-0.2-C G	-3.0 to 3.0 (± 0.2)	0.05%
PC6-IDOS-0.35-C G	-5.0 to 5.0 (± 0.35)	0.05%*
PC6-IDOS-0.7-C G	-10 to 10 (± 0.7)	0.05%*
PC6-IDOS-1-C G	--15 to 15 (1 to 1)	0.025%
PC6-IDOS-2-C G or A†	-15 to 30 (-1 to 2)	0.025%
PC6-IDOS-3.5-C G	-15 to 50 (-1 to 3.5)	0.025%
PC6-IDOS-7-C G or A†	-15 to 100 (-1 to 7)	0.025%
PC6-IDOS-10-C G	-15 to 150 (-1 to 10)	0.025%
PC6-IDOS-20-C G or A†	-15 to 300 (-1 to 20)	0.025%
PC6-IDOS-30-C G	-15 to 500 (-1 to 35)	0.025%
PC6-IDOS-70-C G	0 to 1000 (0 to 70)	0.025%
PC6-IDOS-100-C G	0 to 1,500 (0 to 100)	0.025%
PC6-IDOS-200-C G	0 to 3,000 (0 to 200)	0.025%
PC6-IDOS-350-C SG	0 to 5,000 (0 to 350)	0.025%
PC6-IDOS-700-C SG	0 to 10,000 (0 to 700)	0.025%

Other Pressure ranges are available to special order.

SG = Sealed Gauge, G = Vented Gauge, A = Absolute († 0.075% FS accuracy, 0 to 50°C). For EPM-IDOS pressure ranges and accuracies please refer to the EPM-IDOS data sheet.

RS232 Parameters

Baud rate 1200, 2400, 4800, 9600, 19200 & 38400, stop bits 1 or 2, status ON or OFF

Zero Reset

Manual - keyboard operation

Data Capacity

426 records into a maximum of 20 files, 32 k memory (additional 585 records, 32 k memory option available)

Display

Backlit LCD, 16 characters x two line alpha numeric

PC6-IDOS Specifications

Pressure Media

Water, oil, non-corrosive gases (for other media contact Druck)

Humidity

5 to 95% relative humidity non condensing

Resolution Select

Increase or decrease by a factor of 10

Power Supply

6 volt NiMH rechargeable battery/mains operation via charger (supplied)

Battery Life

Up to eight hours fully charged

Low Battery

Continuous check, audio and visual warning

Dimensions (l x w x h)

3.6 in x 4.3 in x 2.3 in (92 mm x 110 mm x 59 mm)
(calibrator head only)

Weight

32 oz (850 g) calibrator head only

Electrical Connections

- Ground, voltage/current input/output pressure switch: standard 2 mm sockets
- Battery charger: two-pole miniature round connector
- RS232: eight-pole miniature round connector
- EPM: five-pole miniature round connector

Pressure Connections

- 3/8 BSP male 'quick-fit' 1/4 BSP or 1/4 NPT male (Pneumatic)
- 3/8 BSP female 'quick-fit' 3/8 BSP or 3/8 NPT male (Hydraulic)

PC6-IDOS Indicator Version

The PC6-IDOS is available as an indicator only, which does not include the voltage/current input/output or the EPM-IDOS connection.

Software (optional)

'SiCal PRO' will allow users to control the PC6-IDOS Calibrator remotely through a virtual instrument panel on the computer screen. The calibration data can be logged, viewed and printed in graphical format or on a calibration certificate.

System Requirements

Minimum Intel Pentium® with Windows® 95 or higher.



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