

# PC6 PRESSURE CALIBRATOR



The PC6 Pressure Calibrator combines the latest developments in pressure instrumentation with advanced sensor and component technology to offer a versatile calibration instrument.

It is designed for accurately testing and calibrating the following types of pressure measuring instruments:

- Pressure Transducers
- Pressure Transmitters
- Pressure Switches
- Pressure Relief Valves
- Analogue Instrumentation ( Pressure Gauges )

The PC6 is supplied with our hand held test systems:  
TP1 Pneumatic pressure test system -1 to 25 bar  
HTP1 Hydraulic pressure test system to 1000 bar

The compact size of the PC6 does not compromise functionality. It can simultaneously show pressure versus voltage, 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 modular design of the PC6 allows for a customised calibrator to be created, giving minimal functions if a non-complex instrument is required (i.e. A simple pressure indicator). Alternatively, fully featured calibration systems can be supplied, accommodating

## Features

- Low cost, small and portable
- Pressure measurement range -1 to 1000 bar
- Voltage and current measurement
- Simultaneous display of pressure and selected function
- Timed / Event data storage with date & time stamping
- RS232 data communication link
- Pressure switch test
- Leak rate measurement 1 second to 999 days
- Maximum and minimum pressure measurement
- Display hold facility
- Supply output for transducer / transmitter
- Tare pressure offset values
- Pressure module temperature measurement
- Resolution variation facility
- External pressure module (EPM) interchangeability for required pressure ranges
- Windows based software 'SiCal' for remote control operation and data transfer into many applications. (Optional)
- ' CE ' marked



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CERTIFICATE No. FM 20157



# PC6 Specifications

Model	Range (bar)	Overload Pressure (FS)	Accuracy (FS)	Resolution (FS) Better than
PC6-2-C	-1 to 2	10%	0.05%	0.01%
PC6-10-C	-1 to 10	10%	0.05%	0.01%
PC6-20-C	-1 to 20	10%	0.05%	0.01%
PC6-350-C	0 to 350	10%	0.05%	0.01%
PC6-700-C	0 to 700	10%	0.05%	0.01%
PC6-1000-C	0 to 1000	10%	0.05%	0.01%

Other Pressure ranges are available to special order.

Contact **Si** for details and data sheet on EPM's.

(For Indicators, the suffix 'C' is replaced with an 'I'.

**Pressure units** bar, Mpa, kPa, lb/in<sup>2</sup>, kg/cm<sup>2</sup>, atm, inH<sub>2</sub>O, mH<sub>2</sub>O, mmH<sub>2</sub>O, inHg, mmHg, unit1, unit2 (user defined)  
**Overload Warning** Flashing display and audible tone at 110% of FS  
**Temperature Display** Temperature of pressure sensor module

DC	Input	Range	Resolution	Accuracy	Input resistance
Voltage measurement	mV	0 to 100mV	1uV	0.05%FS	>1 M
	V	0 to 5V	0.1mV	0.05%FS	>1 M
	Auto-range	0 to 50V	1mV	0.05%FS	>1 M
Current measurement	mA	0 to 50mA	1uA	0.05%FS	

The PC6 Indicator version does not include the Voltage/Current input/output or Switch functions.

**Voltage Output** Regulated DC supply 10V ± 0.1% max. current 30mA  
 Unregulated DC supply 24V ± 10% max. current 30mA

**Pressure Switch Test** Status OPEN / CLOSED

**Operating Temperature** 0 to 40°C

**Calibration Temperature** 20°C ± 2°C

**Calibrated Temp. Range** 10 to 40°C

**Storage Temperature** -20 to 70°C

**RS232 Parameters** Baud rate 110, 300, 1200, 2400, 4800, 9600, stop bits 1 or 2, status ON or OFF

**Zero Reset** Manual - keyboard operation

**Data Capacity** 176 records into a maximum of 20 files, 8k memory (additional 204 records, 8k memory option available)

**Display** Backlit LCD, 16 characters x 2 line alpha numeric

**Pressure Media** Water, Oil, Non-corrosive gases ( for other media contact **Si** )

**Humidity** 5 to 95% relative humidity non condensing

**Resolution Select** Increase or decrease by a factor of 10

**Power Supply** 6V rechargeable battery / mains operation via charger (supplied)

**Battery Life** 10 Hours fully charged

**Low Battery** Continuous check, audio and visual warning

**Dimensions** 92 x 110 x 59mm

**Weight** 1.2 kg

**Electrical Connections**

Ground	Standard 2mm socket
Voltage / Current Input	Standard 2mm sockets
Voltage Output	Standard 2mm sockets
Pressure Switch Input	Standard 2mm sockets
Battery Charger	2-pole miniature round connector
RS232	8-pole miniature round connector
EPM	14-pole miniature round connector

**Pressure Connection** 1/4" BSP male 'quick-fit' (Pneumatic)  
 3/8" BSP female 'quick-fit' (Hydraulic)

'SiCal' will allow users to control the PC6 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:** 486 with maths coprocessor.  
 Windows 3.1 or higher.

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