



Time Electronics

7091 Digital Pressure Gauge



- **-1bar vacuum to 40bar (-15 to 600psi)**
- **Accuracy 0.2% of full scale**
- **Easy to read display with 5 digit resolution**
- **Analogue dial for % pressure indication**
- **Unique self-protection capability technology**
- **3 times per second measure speed**
- **Suitable for field calibration applications**
- **Ideal for use with the 7090 and 7193 pumps**

DESCRIPTION

The 7091 is a high-performance digital pressure gauge for vacuum to 40bar (600psi) measurement. The robust design means that it can be used in critical environments where it is necessary to measure with accuracy, reproducibility, long-term stability and protection against dust. Accuracy is 0.2% of full scale, and features include easy to use controls and an RS-232 port situated on the rear of the unit. The 7091 can be used in various applications including field gauge calibration, safety valve testing, and pressure regulator checking. It can accompany the 7090 handheld pressure pump, making a compact field pressure calibration kit, or be used with the 7193 pneumatic benchtop pump in the lab for reference calibration. It covers the full range of both pumps.

SPECIFICATIONS

Range	-1 to 40bar (-15 to 600psi)
Accuracy	0.2% of fs (including non-linearity, hysteresis, repeatability & temperature effects for 20°C ± 3°C)
Pressure Units	Pa, kPa, Kg/cm ² , inHg, mmHg, PSI, mbar, bar, MPa
Over pressure warning	120%
Measure speed	0.2 - 10 Readings per second, user settable
Display	LCD with backlight, pressure values displayed up to 5 digits with 15mm character height and analogue dial graph 25mm wide
Resolution	5 digits
Analogue dial graphic	Includes pressure swing, % indication, low/high alarm
Peak detection	Maximum and minimum peak values can be displayed.
Ambient temperature measurement	Measurement of ambient temperature, range -10°C to 50°C, resolution 0.1°C.
RS-232 Interface	DB9. EasyCal software compatible (available from Time Electronics)
Pressure Port	1/4" G BSP male thread
Environment	Operating temperature: -10°C to 50°C (14°F to 122°F) Compensation temperature: -10°C to 50°C (14°F to 122°F) Storage Temperature: -20°C to 70°C (-4°F to 158°F) Relative humidity: < 95%
Power	Battery: one 9V alkaline battery (included). Battery life: 300 hours (10 readings/sec), 6000 hours (1 reading/10sec), Power auto-off: 60 minutes power auto-off, can be disabled by user, 9V 5.5 x 2.1mm External power socket
Materials	Case material: Aluminium alloy. Wetted parts: 316SS.
Dimensions/Weight	Display head only: 112mm x 40mm, Total height: 178mm. Weight: 580g.

ORDERING INFORMATION

7091	Digital Pressure Gauge (Vacuum to 40bar, 0.2% Accuracy)
C202	Factory Calibration Certificate (NPL traceable)
C203	UKAS Calibration Certificate (ISO 17025)

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.