Time Electronics
7066 Differential Pressure Calibrator Module

Description

The 7066 is a precision module designed for very stable measurement of differential pressures between its two output ports, enabling the calibration of differential pressure gauges, transducers, and transmitters. There are four standard versions of either 0.2, 2, 5, or 10 bar. Front panel features include a 4.5 digit LCD display with 5 selectable pressure units, zeroing switch, and two quick release connector ports (Hi and Lo for differential pressure input). Best accuracy is 0.04 % of full scale

The module is fitted as standard with an RS-232 interface with internal communication to a control centre (standard with 8060 or 7051 if ordered). This enables readback with EasyCal calibration software. With EasyCal the user can define and perform pressure calibration procedures as well as create and print traceable calibration certificates.

For input pressure Time Electronics have a range of pumps including the 7190 benchtop pneumatic pump for precison low pressure control (-0.4 bar to 0.4 bar), 7191 low range pneumatic pump (vacuum to 4 bar), and 7193 pump (vacuum to 40 bar). Each pump features a dual output manifold to enable connection to both the module and device under test. They can be used conveniently on the CalBench worktop to provide a precision pressure source to the 7066 and UUT, with a method that requires minimal user effort.

Features

- 0.2, 2, 5 and 10 bar versions available
- Best accuracy 0.04 % of full scale
- Pneumatic
- Calibrate differential transmitters, gauges and more
- 4.5 digit display
- 5 selectable pressure units
- Over-pressure alarm
- RS-232 serial interface
- EasyCal software compatible

Technical Specifications

Specifications are for 1 year at 23 ºC ±5 ºC. Accuracy includes linearity and long term effects.
All accuracies are ± 1 digit. For operation outside specified temperature range, apply 70 ppm per °C

Range (bar)	0 to ± 0.2	0 to ± 2	0 to ± 5	0 to ± 10
Accuracy (% FS)	0.1	0.04	0.04	0.04
Resolution (bar)	0.01mb	.0001	0.001	0.001

Units .... 0.2 bar: mbar, PSI, kPa, kg/cm2, cmWg
2, 5, 10 bar: bar, PSI, kPa, kg/cm2, cmWg.
Maximum line pressure .... 10 bar.
Sensor .... Piezo-resistive - stainless steel diaphragm.
Over-pressure warning .... 1.2 x range full scale - audio and visual (on LCD) warning.
Connections .... Quick release.
Interface .... RS-232 for readback (internal to control centre if ordered).
Module width .... 150 mm (primary or secondary console fitting).

Ordering information

7066 .... Differential Pressure Calibrator Module
(+ pressure range code – shown below)

Range (bar)	0.2	2	5	10
Option Code	7100	7101	7102	7103

ECFLA .... EasyCal Calibration Software.
See separate datasheet for further information.

C178 .... Traceable calibration certificate (Factory)

C190 .... Accredited calibration certificate (ISO 17025)