

Calibrator Comparison

Specification

CPH7600

65-2000-II

Range	-10 ... 300PSI (-0.8... +20bar)	-10 ... 100 PSI (-0.7 ... 7 bar)
Accuracy	“0.025% of reading $\pm$ 0.01% FS (includes linearity, hysteresis and temperature error)”	“0.02% of reading $\pm$ 3 digits (includes linearity, hysteresis and temperature error)”
Display Resolution	5 digits (0.01 PSI)	5 digits (0.01 PSI)
Temperature Compensation	15 ... 35°C (Temp Coefficient 0.002% of the span/°C beyond the 15... 35°C)	+10 °C up to + 40 °C (error in specified tolerance by temperature changes less than 6 °C/ hour)
Selectable Units	PSI, mbar, bar, kPa, Mpa, kg/cm2, cmH2O (4°C), cmH2O (20°C), mmHg (0°C), in.H2O (4°C), in.H2O (20°C), in.H2O (60°C), in.Hg(0°C)	PSI, mbar, bar, kPa, mmHg, IN.H2O (20°C), IN.Hg, and one programmable unit: default mH2O (20°C)
T90 - rise time (FS)		< 1 sec (16 conversions/sec) with additional display filter (3 samples/sec)
Static Pressure	Max. 300 PSI (20 bar) via connection “S”	Max. 100 PSI (7 bar) via connection “S”
Pressure overload safety	2 times	2 times
Pressure overload warning	Optical warning at 10% overload (OL in display)	Optical warning at 5% overload (blinking display) and acoustical warning at 10% overload
Pressure Generation	One internal regulator and one Electric pump	One internal regulator and one hand pump
mA Input Range	0 ... 24mA DC	0 ... $\pm$ 32 mA DC
mA Input Accuracy	0.015 % of reading $\pm$ 2 μ A; Resolution: 5 digits (0.001mA)	0.04 % FS $\pm$ 2 digits; Resolution: 5 digits (0.001mA)
Volts Input range	0 ... $\pm$ 30 V DC	0 ... $\pm$ 32 V DC
Volts Input Accuracy	0.015% of reading $\pm$ 2 mV (measurement); Resolution: 5 digits (0.001 V)	0.04 % FS $\pm$ 2 digits; Resolution: 32 000 digits (0.001V)
Temperature Error	n/a	current/voltage measurement max. 0.002%/K
Electrical input impedance		voltage input: $\geq$ 10 Mohm. current input: $\leq$ 1 Ohm
Sensor Supply	24 V DC	24 V DC $\pm$ 10%, galv. Isolated 500 V DC max. current 30 mA
Compensated temp range	+15 °C ... +35 °C	+ 10 °C ... + 40 °C
Storage temperature	- 20 °C ... + 60 °C	- 10 °C ... + 60 °C
Safety issue	CE 2004/108/EC, EN 61326 emission (group 1 class B) and interference immunity (portable equipment) IP67 (Case closed)	CE, MIL-4150H protection IP 67 (with closed case cover)
Pressure connections	4 x 1/8” NPT female thread	5 x 1/8” NPT female thread
Pressure Supply	Ext, pressure supply max. 120 PSI (only clean dry air)	Ext, pressure supply max. 100 PSI (only clean dry air)
Connection of external pressure sensors	Yes (CPT6600 or Mensor CPT6100)	
Switch test	Yes	
Display	“LCD display with backlight (switchable) 3 different measurement parameters can be displayed simultaneously”	LCD display, 2 x 16 character, 8 mm height, with backlight (switchable)
Communication	RS-232 interface (USB cable available)	Standard RS-232 serial interface
Optional Software	Not reported	Not reported
Optional Vacuum	External vacuum supply or via integrated electric pump	With external Vacuum supply
Size	l 390 x h 308 x d 178 mm	l 340 x h 290 x d 152 mm
Weight	7 Kg (15.5 Lbs)	ca. 5 kg
Power/Charge Life	“Battery type: 16V DC, NiMH Rechargeable Battery / Aprox 50 hours (only measurement or with external pressure supply) 125 pump cycles to 300psi 300pump cycles to 150psi, 1000 pump cycles to 30psi Power supply: AC 100 ... 240 V, 50/60 Hz”	Power Supply: 100 ... 240 V AC 50/60 Hz ($\pm$ 10%) for line and battery supply