

Digital Precision Handheld calibrator

Model PTE

with interchangeable measuring modules for pressure and temperature
 1 or 2 independent channels
 Accuracy 0,025 %, 0,05 % or 0,1 % F.S.
 Current and voltage measurements

Features

- Rigid ABS-housing
- 12 different engineering units
- Leak and flow measurements
- Min/max value and trip detection
- RS-232 interface
- Extensive data logging function optional

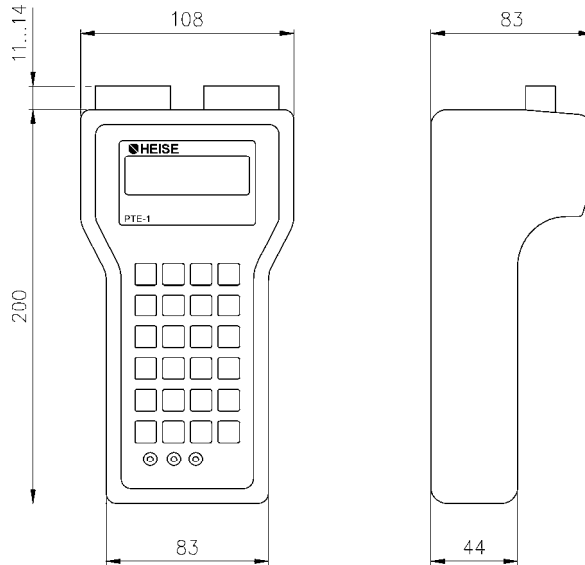
Ranges

0 ... 0,6 mbar to 0 ... 700 bar
 0 ... 0,25 in. H₂O to 0 ... 10.000 psi
 -250 °C to 1820 °C
 0 ... 30 VDC and 0 ... 50 mA



Technical specification	PTE
Indication LCD-Display	Alphanumeric, 2 lines a 16 characters
Functions Standard	Pressure, differential pressure and temperature measurements with interchangeable modules Tare, Engineering unit select, Damping, Min/max value, Battery check, Zero adjustment, Leak rate, Flow/Velocity measurement, Display hold, Trip detect/deadband for switches, Voltage and current measurement for transducer output signals, Calculation of relative error (%-function), Differential pressure between ports, Module calibration procedures and Owners name (both password protected)
Optional	Data logging and RS-232 output, Alarm switches (2)
Ranges (for specification see modules) Pressure Temperature	For modules see data sheet G6.modules 0,6 mbar to 700 bar -200 °C ... 850 °C, 0/400 Ω (HQS-RT1) or 0/4000 Ω (HQS-RT2); -250 °C ... 1820 °C, -10 ... 100 mV (HQS-TC1)
Voltage measurement	0 ... 10 VDC Accuracy ±0,025 % F.S. 0 ... 30 VDC Accuracy ±0,10 % F.S.
Current measurement	0 ... 20 mA Accuracy ±0,03 % F.S. 0 ... 50 mA Accuracy ±0,05 % F.S.
Temperature influence for current and voltage measurements	0,018 % / 10 K from -7 ... 49 °C (ref. 20 °C)
Repeatability	Ranges ≥ 2,5 mbar 0,01 % F.S., < 2,5 mbar 0,02 % F.S.
Resolution	±0,0016 % F.S.
Indication refresh rate	130 ms
Engineering units Pressure Temperature	mbar, bar, kPa, MPa, mmHg, cmH ₂ O, mmH ₂ O, kg/cm ² , psi, in. H ₂ O, in. Hg, ftSW, 1 user defined unit °C, °F, K, °R, Ω or mV
Damping	Floating average over 1 to 16 reading values
Output signals	RS-232; 9-Pin; 300, 1200, 2400 or 9600 Baud
Data logging Software Alarm contacts	Optional for 714 Data sets Upload of logged data with PTE-1S for Windows® Optional 2 free programmable potential free relay outputs, Max. 110 VDC/125 VAC, max. 30 W/62 VA max. 1 A
Operation temperature Extended operation temperature Storage temperature	0 ... 49 °C -20 ... 49 °C -20 ... 70 °C
Temperature influence (module)	0,07 % / 10 K from -0 ... 49 °C (ref. 20 °C)
Warm up time	5 minutes to rated accuracy, 30 minutes to complete stability
Material housing	ABS-plastic
Power supply	Internal two 9 VDC batteries, External AC adapter 9 VDC/500 mA - 110 VAC or 230 VAC/50 Hz
Power pack life	30 hours (with internal batteries, standard version)
CE-mark/EMC	Emission according EN 50011 (1995) Immunity according EN 50082-2 (1995)
Protection acc EN 60529/IEC 529	IP45, special protection cases available
Weight in kg	Base unit approx. 1,3, module approx. 0,3
Options	Connections accessories, for modules see data sheet G6.modules

General dimensions in mm



Order information

Rev. B

Handheld base unit

Type	Display	Temperature Range	Data logger, Alarm	Power supply	Options
(PTE) Base unit with basic accessories	(M) MODBUS Firmware (2 line display)	(X) Standard 0 ... 49 °C	(X) without	(X) No power supply	(X) None
(PTEF) Base unit with basic accessories, intrinsically safe, FM approved		(A) Extended -20 ... 49 °C (non FM)	(B) with (not FM) RS232-interface	(1) 110 VAC, 60 Hz	(1A) Soft case with 110 V adapter
(PTEC) Base unit with basic accessories, CE version		(B) Extended -20 ... 49 °C (with FM)	(C) with, (FM) no alarms RS232-interface	(2) 230 VAC, 50 Hz ¹⁾ (3) 100 VAC, 50 Hz ²⁾ (4) 230 VAC, 50 Hz, CE ¹⁾	(1B) Hard case with 110 V adapter (2A) Soft case with 230 V adapter (2B) Hard case with 230 V adapter (3A) Soft case with 100 V adapter (3B) Hard case with 100 V adapter (4A) Soft case with 230 V adapter (CE) (4B) Hard case with 230 V adapter (CE)

¹⁾ non UL
²⁾ non FM

Order example PTE

Type	Display	Temperature range	Data logger, Alarm	Power supply	Options
PTE	M	X	B	X	4A

Accessories

Model	Description
LTP1	Pneumatic precision test pump with fine adjustment, range from -800 mbar up to 2 bar
LPP-30	Pneumatic precision test pump with fine adjustment, range from -950 mbar up to 40 bar
HTP1	Hydraulic precision test pump with fine adjustment, range up to 700 bar
AS1	Set of adapters and hose AS-1 for HQS-1 (tubing connection)
AS2	Set of adapters and flex tubing AS-2 for HQS-2 (Minimess)
ADP	Set of adapters, 2x 1/4 NPT female, 2x 1/8 NPT male 2x 1/8" tubing, T-piece 1/8 NPT female, T-piece 1/8" tubing
ADU	Set of adapters 1/2-20 UNF/1/8 NPT female, 1/8 NPT male, 1/4 NPT female, 1/4 NPT male and 1/4" tubing connection
ELV	Vent valve (NPT)
FSL	Flexible tubing, 1,5 Meter long, connection 1/2-20 UNF
RSK	RS-232 cable with 9 Pin male/female connector

Order example accessories

Model
LPP-30=RSK=AS2

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