HEISE®
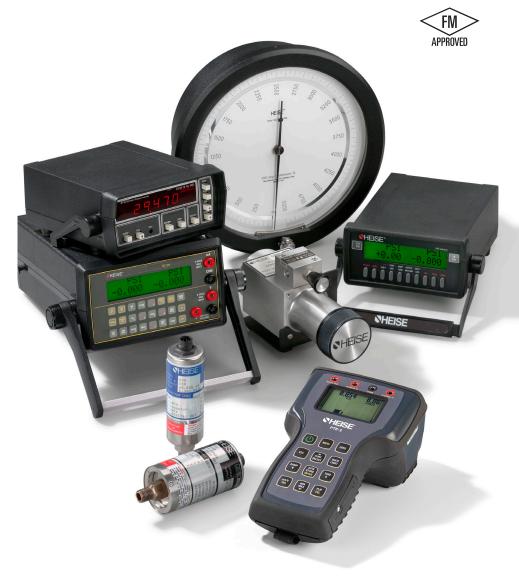
Precision Pressure Instrument Quick Guide

As the industry leader in *technology driven precision instrumentation,* the Heise® name has long been synonymous with high accuracy, quality and reliability.

Heise® precision products offer practical, state-of-the-art features specifically designed to meet the demands of today's customers. Innovations such as modular sensor design and digital output transducer technology continue to make Heise® the preferred instrument for critical pressure measurement applications.

Behind every Heise® product is a modern manufacturing facility certified to ISO 9001 with NIST traceable standards maintained in accordance with MIL-STD-45662A and ANSI/NCSL Z-540. In addition, a knowledgeable technical support staff is available to assist you, both before and after your purchase.

The following guide provides a simple overview of the Heise® product line. Visit our website at www.heise.com for detailed product information.

FM APPROVED

HEISE® Precision Pressure Instruments

Model CC 300° dial arc

PRECISION ANALOG PRESSURE TEST GAUGES

Model CM 350° dial arc

Model CMM 660° dial arc

PRESSURE MEASUREMENT ACCURACY
±0.1% of span
Model CC 300° dial arc
Model CM 350° dial arc
Model CMM 660° dial arc

PRESSURE RANGES
12 psi to 100,000 psi

FEATURES
- Single and dual revolution gauges
- Solid front aluminum case with stainless steel pressure relief back for operator safety
- Dial sizes available in 6˝, 8½˝, 12˝ and 16˝

OPTIONS
- Custom scales and ranges
- Peak load indication
- Automatic thermal compensation
- Slotted movement link

PRECISION DIGITAL PRESSURE TEST GAUGE

PRESSURE MEASUREMENT ACCURACY
3089 – ±0.05%;
3086 – ±0.10%
3084 – ±0.25%
Total Error Band from 0 °F to 150 °F

PRESSURE RANGES
5 psi to 7000 psi

PRESSURE TYPES
Gauge, compound, vacuum, absolute

FEATURES
- Dial size: 3˝,
- Display size: 0.66˝, 5 full digit
- Simple keypad layout,
- Push to zero, Min/Max
- Bar graph display, Multi-lingual display, 12 Engineering units
- Programmable damping
- Adjustable display contrast
- 100mS update rate
- Password protection

APPROVALS
FM

OPTIONS
- Panel mount,
- Carrying case,
- O$_2$ service cleaning,
- Non-standard ranges, consult factory

DXD DIGITAL PRESSURE TRANSDUCER

PRESSURE MEASUREMENT ACCURACY
±0.02% of span, including temperature effects within 50-86 °F

PRESSURE RANGES
5 psi to 10,000 psi*

PRESSURE TYPES
Gauge, vacuum, absolute and compound

OUTPUT
RS485 or RS 232

RESOLUTION
Up to one part in 50,000 (max.)

UPDATE RATE
Up to 15mS

POWER REQUIREMENTS
12 to 24 Vdc, 15mA maximum

FEATURES
- LabVIEW® powered operating software available
- Up to 99 transducers on single RS232 line
- 300 Series stainless steel wetted materials and housing
- Simple ASCII command structure
- Selectable baud rate
- Selectable port speeds up to 115.2k bps
- User zero and span

*10,000 psi: 0.1% accuracy

HPO SERIES PRECISION PRESSURE TRANSDUCER

PRESSURE MEASUREMENT ACCURACY
±0.05% of span

PRESSURE RANGES
5 psi to 10,000 psi

PRESSURE TYPES
Gauge, compound, vacuum, absolute

OUTPUTS
0/5 Vdc, 0/10 Vdc, −5/+5 Vdc and 4-20mA high-level output signals

WETTED MATERIALS
Inconel 718 & 300 series stainless steel. All-welded construction

REPEATABILITY
±0.005% fs

TEMPERATURE COMPENSATION
20 °F-120 °F

Response time of 3 ms

Externally accessible zero and span adjustments

3-foot pigtail electrical connector

OPTIONS
- Bendix PTO connector
- NEMA 4X sealed housing
- Atmospheric reference port
- Pipe or wall mounting bracket

HEISE®

PTE-2 MODULAR HANDHELD CALIBRATOR

PRESSURE MEASUREMENT ACCURACY*
±0.025, 0.05 and 0.1% of span

PRESSURE RANGES
0.25″ H_2O to 10,000 psi

PRESSURE TYPES
Gauge, compound, vacuum, absolute and differential

TEMPERATURE COMPENSATION
20 °F-120 °F

TEMPERATURE MEASUREMENT
Supports most common RTD-type temperature probes and thermocouples

STANDARD FEATURES
- Two sensor module bays for inter-changeable HM2 modules
- Can display two simultaneous pressure and one electronic reading
- Large LCD display (1.5″ x 2.5″) with backlite
- IP65/NEMA 4X enclosure; high impact PC-ABS case
- Data logging (manual/automatic); stores up to 16,000 records
- SD memory card
- USB serial interface
- On-board 24 Vdc loop power supply
- Trip detection for switches
- Percent error function
- Operates on four AA batteries or USB w/universal AC adapter
- NIST traceable certificate of calibration
- Agency Approvals (with modules): CE (EMI/RFI); FCC (CFR47); UL 61010-1
- Optional intrinsically safe approvals (FM, ATEX, CSA)

PHYSICAL CHARACTERISTICS
Power: (4) AA Batteries or USB
Battery Life: 40 hours
Weight: Base Unit: 4 lb; Sensors: 0.5 lb

*Consult specifications sheet for detailed accuracy information
  Resolution 1 part in 60,000

ST-2H MODULAR INDICATOR SYSTEM

PRESSURE MEASUREMENT ACCURACY*
±0.025, 0.05 and 0.1% of span

PRESSURE RANGES
0.25″ H_2O to 10,000 psi

PRESSURE TYPES
Gauge, compound, vacuum, absolute and differential

TEMPERATURE COMPENSATION
20 °F-120 °F

TEMPERATURE MEASUREMENT
Supports most common RTD-type temperature probes and thermocouples

STANDARD FEATURES
- Interchangeable Quick-Select™ modules for pressure and temp.
- Simultaneous dual-range measurement capability
- Measures:
- Current and voltage
- Temperature & pressure
- Airflow (velocity and volume)
- Leak (rate and decay)
- Trip, reset and deadband of pressure switches
- Min/max recall
- Tare function
- Unit select
- Display hold
- % error mode
- Programmable damping easily recal-ibrated in the field

PHYSICAL CHARACTERISTICS
Power: ac adapter, 110V/60Hz std.
Dimensions: 9.24″ x 6.74″ x 4.0″ (L x W x H)
Case: High impact ABS, black
Weight: Base Unit: 3.0 lb;
    Sensors: 0.5 lb

OPTIONS
- Data logging and high/low relays
- Backlit display
- Built-in rechargeable power pack
- Built-in 24 Vdc supply
- Carrying handle

*Consult specifications sheet for detailed accuracy information
  Resolution 1 part in 60,000

PM DIGITAL PRESSURE & TEMPERATURE INDICATOR

PRESSURE MEASUREMENT ACCURACY*
±0.025, 0.05 and 0.1% of span

PRESSURE RANGES
0.25″ H_2O to 10,000 psi

PRESSURE TYPES
Gauge, compound, vacuum, absolute and differential

TEMPERATURE MEASUREMENT
Supports most common RTD-type temperature probes

RESOLUTION
1 part in 60,000 (max.)

TEMPERATURE COMPENSATION
20 °F-120 °F

STANDARD FEATURES
- Simultaneous display of 2 pressure sensors, 1 pressure and 1 tempera-ture or 2 temperature sensors.
- 12 engineering units
- Min/max recall
- Tare
- Programmable damping
- Full function RS232
- Display hold
- Push to print

PHYSICAL CHARACTERISTICS
Weight: less than 4 lbs with 2 sensors installed
Dimensions:
7.72″ x 6.0″ x 2.95″ (L x W x H)
Case: High impact ABS, black

OPTIONS
- Second installed pressure sensor
- Built-in rechargeable power pack
- Display backlighting
- Panel mounting brackets
- Carrying handle

*Consult specifications sheet for detailed accuracy information

SERIES 9 DIGITAL PRESSURE INDICATOR

PRESSURE MEASUREMENT ACCURACY*
±0.035 and 0.07% of span

PRESSURE RANGES
50″ H_2O to 20,000 psi

PRESSURE TYPES
Gauge, compound, vacuum, absolute

TEMPERATURE COMPENSATION
45-95 °F (optional)
20-120 °F (optional)

REPEATABILITY
±0.005% (min)

WETTED MATERIALS
Inconel 718 & 300 series stainless steel all-welded construction

PHYSICAL CHARACTERISTICS
Power: 110 VAC, 60 Hz
Weight: 2.8 lb
Dimensions: 7.7″ x 6.0″ x 3.0″ (L x W x H)
Case: High impact ABS, black

OPTIONS
- Max/min function
- Tare function
- Temp. comp. range of 20-120°F
- Analog and digital output signals
- Unit select
- Hi/Lo setpoint relays
- Carrying handle
- Panel mounting brackets
- RTS remote sensor option

HEISE®

DPOV-PK KIT

APOV-PK KIT

XHOV KIT

HVC VOLUMETRIC PRESSURE CONTROLLER

CONTROL RESOLUTION
0.00025 psi for HVC-1000
0.0005 psi for HVC-3000

Generates moderate levels of positive pressure and vacuum

Sets pressure up to 1000 or 3000 psi

Extremely fine control of both pressure and vacuum

Built-in pressure balance valve for ease of operation

Panel or bench mountable

OPTIONS
- Bench mounting bracket

HAND OPERATED PUMPS

DPPV-KIT
Combination Pressure and Vacuum pump
  +125 psi to –23 InHg vacuum
  Convert from pneumatic pressure to vacuum by rotating a knob

APOV-KIT
Pneumatic Hand Pump
  0-300 psi

XHOV-KIT
Hydraulic Hand Pump 0-5000 psi
  Portable hand operated hydraulic pumps that easily generate up to 5000 psii

All kits include
  Pump, two 3´ pressure hoses, ⅛ NPT Male and ¼ NPT male adaptors