



Hazardous area  
pressure indicator

## Certified by SIMTARS with IECEx

*The Druck DPI705E-IS Manometer will be supplied with Certificate of Conformity for Explosion-Protected Electrical Equipment issued by SIMTARS suitable for use in Australian underground coal mines.*

# DPI705E-IS Series

## Druck Handheld Pressure Indicators

The Druck DPI 705E-IS Series of handheld pressure and optional temperature indicators combine tough and rugged design with accurate and reliable measurements.

Compact and robust, the DPI 705E-IS Series is designed for single handed operation and provides many essential features required for routine maintenance and system troubleshooting.

### Features

- 7 pressure ranges available from  $\pm 25$  mbar to 2 bar ( $\pm 10$  inH<sub>2</sub>O to 20,000 psi/2.5 kPa to 0.2 MPa)
- Total 1 year uncertainty down to 0.025% full scale (FS) over temperature range of  $-10^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$
- Integral calibration record with calibration due count-down display

- Rugged, handheld design with backlit high-contrast display
- Intrinsically Safe
- Compatible with our pneumatic and hydraulic hand pumps

### Contact us today

✉ [sales@pacdatasys.com.au](mailto:sales@pacdatasys.com.au)

☎ 07 3361 2000

## DPI705E-IS Improves test efficiency

- Power on and use. No warm up time required.
- 20 pressure measurement units (See below)
- 1, 3 or 5 minute leak test
- Impact resistant, sealed to IP54
- Large digit high-contrast LCD with backlight
- Includes carry case with belt loop
- Optional magnetic/loop hanging strap
- Long battery life
- Integral desk stand and hanger

## Special features

### Pressure units

mbar, bar, Pa, kPa, hPa, MPa, psi, lb/ft<sup>2</sup>, kgf/cm<sup>2</sup>, kgf/m<sup>2</sup>, mmHg(0°C), mHg(0°C), inHg 0, mmH<sub>2</sub>O, cmH<sub>2</sub>O, mH<sub>2</sub>O, inH<sub>2</sub>O (4°C, 20°C), ftH<sub>2</sub>O (4°C, 20°C)

### Calibration certificates

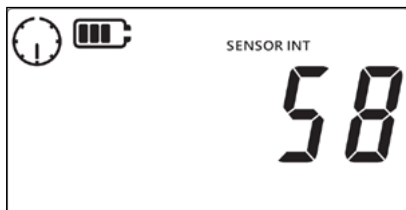
- Supplied as standard in bar, psi and kPa

### Leak test

Used to determine if there is a leak in the system by recording the pressure change over a fixed time.

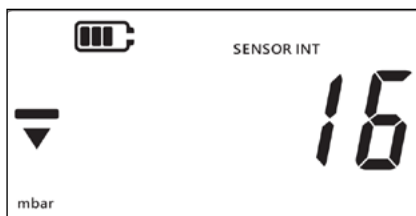
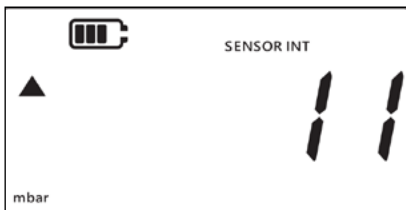
Leak test can also be used with the RTD sensor to record a temperature change over time.

User defined 1, 3 or 5 minute leak test with live countdown timer.



### Maximum/minimum

Captures both maximum and minimum readings in peak-hold mode.



### Zero

Zero pressure correction (gauge/differential sensors)

### Tare

0 to 100% FS temporary zero offset capability by subtracting the current reading from subsequent measurements.

### Filter

Enables a filtered pressure reading by showing a rolling average of the last 10 measurements. Providing a more stable reading in a noisy measurement.

### Alarm

User adjustable high and low pressure alarms with visual (Bell Icon, Pressure Reading and Backlight flash) and audible warning for 60 seconds.

### Calibration

NATA Accredited calibration available through [Pacific Data Systems Australia](#)



### Battery

- 4 x AA Alkaline/NiCd/NiMH cells
- Ultra power efficient design, can be used for 8 Hours per day, 6 days per week for up to a year using a single set of batteries.

### Display

16mm digital height LCD with ±99999 readout

### Hazardous area approvals

- Australian IECEx approval for use in underground mining

# Differential Pressure Ranges

## DPI705E-IS Internal pressure sensors

### Available ranges as per table:

#### Type

25 mbar / 10 inH<sub>2</sub>O / 2.5 kPa

70 mbar / 1 psi / 7 kPa

200 mbar / 3 psi / 20 kPa

350 mbar / 5 psi / 35 kPa

700 mbar / 10 psi / 70 kPa

1 bar / 15 psi / 100 kPa

2 bar / 30 psi / 200 kPa

### Accuracy

1-Standard ±0.1% FS Total accuracy over -10 to 50 degrees C including NLH&R, 1 year drift and calibration uncertainty

### Accuracy specification

Gauge/differential sensors	Standard accuracy	
	NLH&R	Total uncertainty
	(% FS)	(% FS)
25 mbar	0.3	0.348
70 mbar	0.1	0.121
200 mbar	0.08	0.1
350 mbar to 1 bar	0.08	0.1
2 bar to 200 bar	0.08	0.1

## Media compatibility

- Gauge/absolute sensors up to and including 200mbar (and all differential sensors) are exposed.
- 350mbar-1400bar sensors are diaphragm isolated.

Pressure FS	Media compatibility
0 to 200mbar	Non-condensing dry gases compatible with 316L Stainless Steel, Pyrex, Silicon, Gold, Aluminium, Glass, Silicon Dioxide and RTV Adhesive.
Differential sensor reference port	Non-condensing dry gases compatible with 316L and 304 Stainless Steel, Pyrex, Silicon, Glass, Silicon Dioxide and RTV Adhesive.

Note: Only fluids that are compatible as per above table should be used, to ensure the integrity of the pressure sensor.

DPI705E-IS General specifications	
Working pressure	110% FS (alarm active beyond this range)
Sealing	IP54
Operating temperature	-10 to 50°C (14 to 122°F)
Storage temperature	-20 to 70°C (-4 to 158°F)
Humidity	0 to 90% RH non condensing
Shock and vibration	MIL-PRF-28800F for Class II equipment. 1 m Drop Tested @ -20°C (-4°F)
EMC	BS EN 61326-1
Electrical safety	BS EN 61010-1 UL 61010-1
Pressure safety	Pressure equipment directive class SEP. UL61010 Safe to 2xFS
Approval	CE marked, RCM
Size and weight	L 200 mm, W 95 mm, D 43 mm 563 g maximum
RoHS	Compliant
Resolution	5 digits

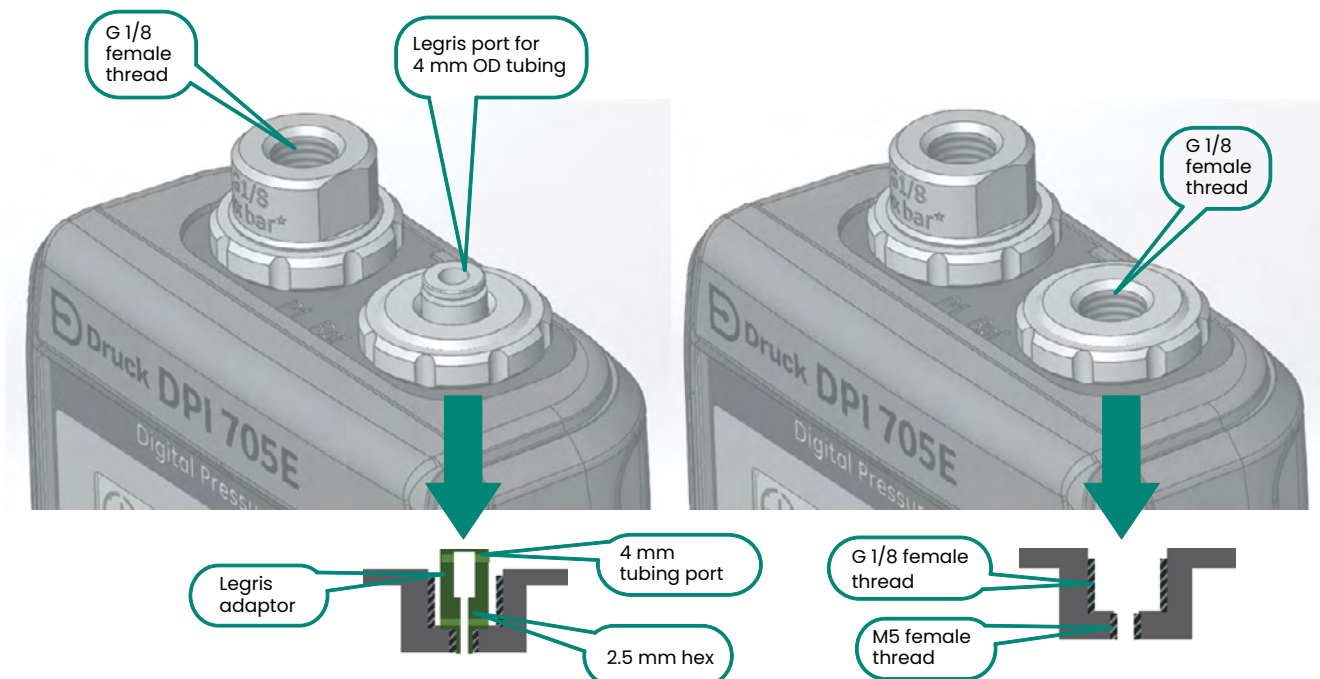
## Pressure fittings

Internal and remote sensors are fitted with pressure connectors as detailed below:

- P1 - G1/8 Female direct sensor connection of instrument, welded non-removable (for ranges 200 bar and below) with optional adaptor:
- Differential reference port: Legris 4 mm tubing adaptor.

## Adaptors

The Legris adaptor fitted to the reference port can be removed using a 2.5mm hex key leaving a G1/8 female thread and an M5 female thread.



The DPI705E-IS with SIMTARS IECEx certification for use in  
Australian mines is exclusively supplied by

**pacific data systems**  
Australia

[www.pacdatasys.com.au](http://www.pacdatasys.com.au)  
07 3361 2000  
[sales@pacdatasys.com.au](mailto:sales@pacdatasys.com.au)