# **IPSLU** series Low Range Industrial Pressure Sensor



The IPSLU is suitable for use in a wide range of applications. The probe uses a piezo-resistive silicon sensor, giving excellent media compatibility within an oil filled 316L stainless steel housing

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics, especially in high vibration/shock applications.

Each device is temperature compensated, calibrated and supplied with a traceable serial number and calibration certificate.

There is a choice of internal O ring seals to ensure that the device is compatible with a wide range of media.

Custom versions can be made for particular applications.

**Material Specifications** 

Housing

Piezo-resistive sensor	۴
------------------------	---

- Stainless steel body & diaphragm
- Accuracy <±0.25% FS BFSL
- Various outputs including Volts and mA.
- Pressure ranges from 1 psi to 15 psi
- Gauge or Absolute pressure reference

#### Options available on the IPSLU pressure transmitter.

Pressure range Pressure reference (G or Abs) Output type

#### Suitable applications

HVAC Pneumatics Rainwater harvesting Agricultural machinery Laboratory testing

### Mechanical engineering Environmental engineering Automotive testing Tank gauging IBC, IBC Tote or pallet tank

#### Performance

Accuracy (Non-Linearity & Hysteresis)<±0.25% / FS (BFSL) for gauge, <±0.5% for Absolute

Permissible Load

Setting Errors (offsets)

Influence Effects

2-wire 3-wire 2-wire 3-wire Supply Load

**Electrical Protection** 

Supply reverse polarity

**Mechanical Stability** 

Media Temperature

Ambient Temperature

Storage temperature

Thermal Span Shift

Thermal Zero Shift (TZS)

Shock

Vibration

Electromagnetic compatibility

**Temperatures & Thermal Effects** 

Compensated temperature range +20°C to +80°C

Zero & Full Scale, <±0.5% / FS Zero & Full Scale, <±0.5% / FS  $R_{max} = [(Supply-9min)/0.02]\Omega$  $R_{_{min}}=10k\Omega$ <0.005% FS / 1V 0.05% FSO / k $\Omega$ 

No damage/no function

10g RMS (20 - 2000Hz)

**CE** Compliant

100g / 11s

-40°C to +125°C

-20°C to +80°C

-40°C to +125°C

<±0.04% /FS/°C

<-0.015% /°C

#### 303 Stainless Steel "0" ring seals Viton 316L Stainless Steel Diaphragm Housing & connection, "O" ring seal, Media wetted parts diaphragm **Miscellaneous** Current consumption 2 -wire Limits at 28mA 3-wire Typical 6mA Approx 3.5oz (100g)

 $> 100 \times 10^{6}$  cycles

> 50M0hms at 50Vdc

90°

Weight Installation position

**Operational Life** Insulation resistance

Cynergy3 Components Ltd. 7 Cobham Road Ferndown Industrial Estate Wimborne, Dorset BH21 7PE Telephone +44 (0) 1202 897969

Email:sales@cynergy3.com

ISO9001 CERTIFIED

Any, small zero shift when tilted through

www.cynergy3.com

© 2015 Cynergy3 Components, All Rights Reserved. Specifications are subject to change without prior notice. Cynergy3 Components and the Cynergy3 Components logo are trademarks of Cynergy3 Components Limited.



# **IPSLU** series



www.cynergy3.com

## Low Range Industrial Pressure Sensor

Pressure Ranges and Passive mV/V Outputs							
Nominal Pressure, Gauge,	psi	0.75	1.5	3.75	7.5	11.25	15
Nominal Pressure, Absolute	psi				7.5	11.25	15
Permissible Overpressure	psi	30	30	30	75	75	75

<b>Output Signa</b>	als and Supply Voltages	DIN 43650		
Wire system	Output	Supply Volts	Connection	Pin No.
2-wire	4-20mA	9-32Vdc	+ve Supply -ve Supply Ground	Pin 1 Pin 2 Earth pin
3-wire	0.5 - 4.5Vdc (non-ratiometric) 0-10Vdc	9-32 Vdc 13-32Vdc	+ve Supply -ve Supply +ve Output Ground	Pin 1 Pin 2 Pin 3 Earth Pin

Part No	Pressure Range	Output	Part No	Pressure Range	Output
IPSLU-GP001-5	0-1 psi G	4-20mA	IPSLU-G0050-5	0 - 50mbar G	4-20mA
IPSLU-GP002-5	0-2 psi G	4-20mA	IPSLU-G0100-5	0 - 100mbar G	4-20mA
IPSLU-GP005-5	0-5 psi G	4-20mA	IPSLU-G0250-5	0 - 250mbar G	4-20mA
IPSLU-GP008-5	0-8 psi G	4-20mA	IPSLU-G0500-5	0 - 500mbar G	4-20mA
IPSLU-GP010-5	0-10 psi G	4-20mA	IPSLU-G0750-5	0 - 750mbar G	4-20mA
IPSLU-GP015-5	0-15 psi G	4-20mA	IPSLU-G1000-5	0 - 1000mbar G	4-20mA
IPSLU-GP001-D	0-1 psi G	0.5 to 4.5V 3Wire	IPSLU-G0050-D	0 - 50mbar G	0.5 to 4.5V 3Wire
IPSLU-GP002-D	0-2 psi G	0.5 to 4.5V 3Wire	IPSLU-G0100-D	0 - 100mbar G	0.5 to 4.5V 3Wire
IPSLU-GP005-D	0-5 psi G	0.5 to 4.5V 3Wire	IPSLU-G0250-D	0 - 250mbar G	0.5 to 4.5V 3Wire
IPSLU-GP008-D	0-8 psi G	0.5 to 4.5V 3Wire	IPSLU-G0500-D	0 - 500mbar G	0.5 to 4.5V 3Wire
IPSLU-GP010-D	0-10 psi G	0.5 to 4.5V 3Wire	IPSLU-G0750-D	0 - 750mbar G	0.5 to 4.5V 3Wire
IPSLU-GP015-D	0-15 psi G	0.5 to 4.5V 3Wire	IPSLU-G1000-D	0 - 1000mbar G	0.5 to 4.5V 3Wire
IPSLU-AP005-5	0-5 psi A	4-20mA	IPSLU-A0500-5	0 - 500mbar Abs	4-20mA
IPSLU-AP010-5	0-10 psi A	4-20mA	IPSLU-A0750-5	0 - 750mbar Abs	4-20mA
IPSLU-AP015-5	0-15 psi A	4-20mA	IPSLU-A1000-5	0 - 1000mbar Abs	4-20mA

(Custom ranges and outputs available on request)



### ISO9001 CERTIFIED

IPSLU 2015

© 2015 Cynergy3 Components, All Rights Reserved. Specifications are subject to change without prior notice. Cynergy3 Components and the Cynergy3 Components logo are trademarks of Cynergy3 Components Limited.