

I L S U S E R I E S

SUBMERSIBLE LEVEL TRANSMITTER



CE

The ILSU is designed for use in continuous submersion in liquids such as water, oil and other non-aggressive chemicals. The submersible uses the latest piezo-resistive media-isolated silicon sensing technology and a stainless steel diaphragm within a 316L stainless steel housing.

It offers excellent stability, repeatability and resolution, as required for use in rivers and reservoirs. This submersible level transmitter is the ideal product for reliable and repeatable hydrostatic level measurement.

The electronics incorporate a microprocessor based amplifier, requiring no adjusting and giving stable electronics.

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

*Calibration data is supplied as a sticker affixed to the product packaging - do not discard.
Custom versions can be made for particular applications.

Features

- Stainless steel, piezo-resistive sensor
- Accuracy: <0.1% FS BFSL
- Depth ranges from 0-48" (0-4ft) to 0-3600" (0-300ft) WG
- Various cable lengths

Suitable Applications

- River level
- Reservoir level
- Tank level
- Borehole level
- Aquifer level
- Environmental monitoring

SPECIFICATIONS

Performance

Accuracy (Non-linearity & Hysteresis)	<±0.1% / FS (BFSL)	
Setting Errors (Offsets)	Zero & Full Scale, <±0.5% / FS	
Permissible Load	$R_{max} = [(Voltage\ Supply-9)/0.02]Ohms$	
Influence Effects	Supply	<0.005% FS / 1V
	Load	0.05% FSO / kOhm

Electrical Protection

Supply Reverse Polarity Protection	No damage/no function
Lightning Protection	Internally fitted
Electromagnetic Compatibility	CE Compliant

Mechanical Stability

Shock	100g / 11ms
Vibration	10g RMS (20 - 2000 Hz)

Temperature & Thermal Effects

Media Temperature	-20°C (Non-freezing) to +60°C
Storage Temperature	-20°C to +70°C
Compensated Temperature Range	20°C ±25°C
Thermal Zero Shift (TZS)	<±0.02%/FS/°C
Thermal Span Shift (TSS)	<±0.01%/°C

Material

Housing	316L Stainless Steel
"O" Ring Seals	Viton
Diaphragm	316L Stainless Steel
Cable Sheath Material	PUR
Media Wetted Parts	Housing, "O" ring seal, diaphragm & cable sheath

Miscellaneous

Weight	Transmitter: approx 9oz (250g)
	Cable: 1.7oz (48g) per yard (meter)
Current Consumption	Limits at 28mA
Installation Position	Any, small zero shift when tilted through 90°
Operational Life	> 100x 10 ⁶ cycles

PRESSURE RANGES

Input Pressure Ranges

Nominal Pressure, Gauge	inchWG	48	120	240	360	720	1800	3600
Permissible Overpressure	inchWG	800	800	1000	1000	1000	2000	4000

Output Signal & Supply Voltage

Wire System	Output	Supply Voltage	Connection	PUR Sheath Wire Colors
2-wire	4 - 20mA	9 – 32V dc	+ve Supply	Red
			-ve Supply	Blue
			Ground	White
			Cable Screen	Green

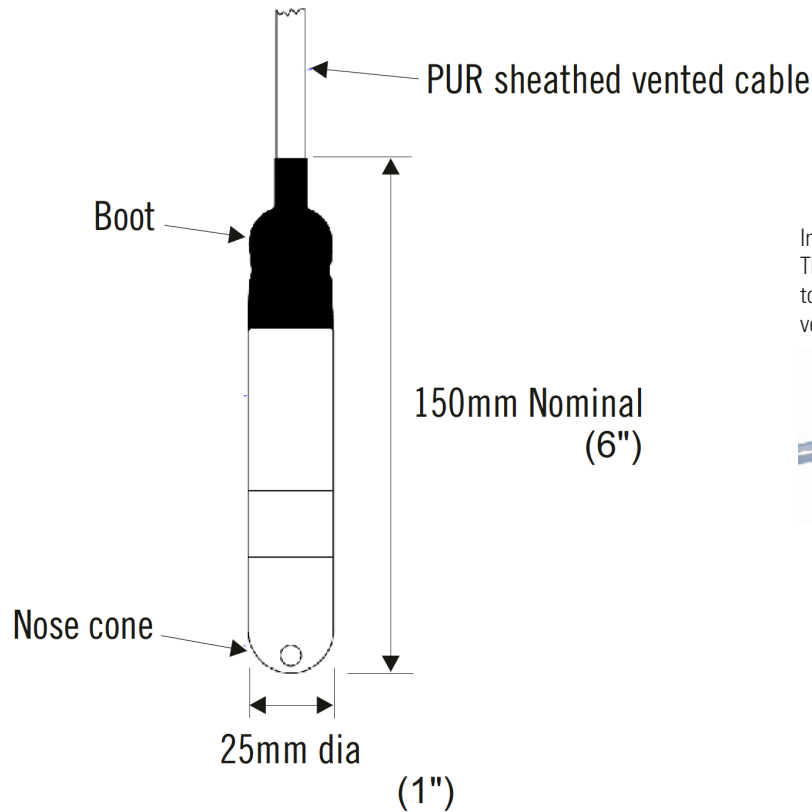
Part No	Pressure Range	Cable Length	Output
ILSU-Gi048-003	0-48" WG	10ft	4-20mA
ILSU-Gi120-005	0-120" WG	16ft	4-20mA
ILSU-Gi240-008	0-240" WG	26ft	4-20mA
ILSU-Gi360-016	0-360" WG	52ft	4-20mA
ILSU-Gi720-025	0-720" WG	82ft	4-20mA
ILSU-Gi1K8-060	0-1800" WG	196ft	4-20mA
ILSU-Gi3K6-110	0-3600" WG	360ft	4-20mA

(Custom ranges and outputs available on request)



DIMENSIONS

All dimensions are in millimeters.



Installation Note.
The vented cable is fitted with a filter (shown below) to prevent the entry of moisture. If removed, ensure vent tube is positioned in a clean, dry area.



Made in the UK

Page 3

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

+44 (0)1202 897969
c3w_sales@sensata.com
Cynergy3 Components Ltd.
7 Cobham Road,
Ferndown Industrial Estate,
Wimborne, Dorset,
BH21 7PE, United Kingdom