

General Purpose Level Ultrasonic Sensor

PRODUCT OVERVIEW

The SSI Technologies GPLUS sensor is a compact, competitively priced solution for continuous fluid level monitoring. Constructed of PPS plastic, GPLUS is compatible with a wide range of chemicals and temperatures. Ultrasonic technology, combined with an on-board thermistor for temperature compensation provides a more accurate sensor than alternative low-cost level sensing technologies. GPLUS comes with a simple analog output, diagnostics, a programmed fluid averaging filter, and a simple twist-lock installation making it the perfect solution for your fluid level measurement needs.









FEATURES & BENEFITS

- Continuous level output
- Compact, ultrasonic level sensor
- Standard Twist-lock mount with O-Ring
- Standard housing made of PPS, compatible with over 250 different chemicals
- Greater accuracy than other technologies

- Custom profiling available for your specific tank dimensions
- Level is compensated for changes in temperature using an on-board thermistor
- Input voltage: 5V
- Output: 0.5V to 4.0V
- Cost effective

TYPICAL APPLICATIONS

- Coolant level
- Fuel cells
- Chemical
- Water

- Pumps
- Small tank fluid handling
- · Food and Beverage

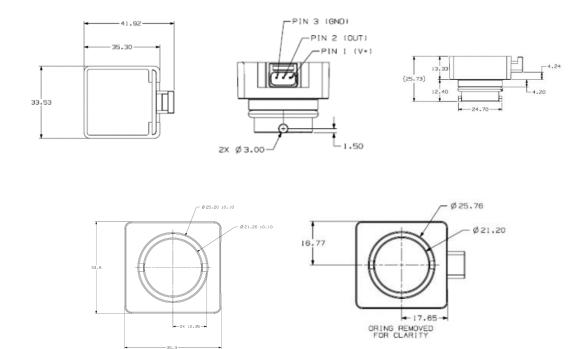
GPLUS PERFORMANCE SPECIFICATIONS

SPECIFICATIONS			
Part Number for Ordering	See PN Configurator		
Classification	General Purpose		
Fluid Compatibility	Liquids: water, coolant, transmission fluids, diesel, gas, fuel oils. Contact SSI for other fluid compatitbility.		
MATERIALS			
Housing	PPS		
Connector	Polyamide 66, 35% GF		
Adapter	Polyamide 66, 35% GF		
O-Ring	BUNA-N CONTACT SSI FOR OTHER OPTIONS.		
PERFORMANCE CHARACTERISTICS			
Level Range	15mm - 400mm (0.59 in - 15.75 in) of fluid height		
Level Resolution	<0.5mm		
Level Accuracy	±3mm from 15mm to 100mm ±3% of scale from 100mm to 400mm		
Dead Band (from surface of read face)	15mm		
Transfer function formula	$D_{Fluid} (mm) = \left(\frac{V_{out}^{-} 0.5}{3.5}\right) * \left(D_{Max}^{-} D_{Min}\right)$		
TEMPERATURES			
G.	-35°C to 121° C		
Storage	-35°C to 121° C		
Storage Operating	-35°C to 121° C -35°C to 121° C**		
Operating			
Operating ELECTRICAL CHARACTERISTICS	-35°C to 121° C**		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage	-35°C to 121° C** 4.9 - 5.1 Vdc		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current Max. In-rush Current	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA 325mA		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current Max. In-rush Current Output ENVIRONMENTAL Ingress (connector)	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA 325mA		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current Max. In-rush Current Output ENVIRONMENTAL	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA 325mA 0.5V to 4.0V		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current Max. In-rush Current Output ENVIRONMENTAL Ingress (connector)	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA 325mA 0.5V to 4.0V		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current Max. In-rush Current Output ENVIRONMENTAL Ingress (connector) MECHANICAL INTERFACE	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA 325mA 0.5V to 4.0V		
Operating ELECTRICAL CHARACTERISTICS Supply Voltage Max. Average Operating Current Max. Peak Operating Current Max. In-rush Current Output ENVIRONMENTAL Ingress (connector) MECHANICAL INTERFACE Sensor	-35°C to 121° C** 4.9 - 5.1 Vdc 20mA 30mA 325mA 0.5V to 4.0V IP67 Quarter turn twist-lock*		

^{*} Other options may be available. Contact SSI for technical assistance.

^{**} Valid fluid measurement when fluid is in a fully liquid state

DIMENSIONAL DRAWINGS



GPLUS ORDERING SYSTEM

PART #: LS-XX-XXX-P0-C-B-000

LS 	xx 	xxx 	P0	c 	B	000
FAMILY	MEDIA*	TANK DEPTH**	MATERIAL*	MOUNTING STYLE*	O-RING*	PACKAGING*
LS = Level Sensor	C0 = Coolant(50/50) W0 = Water	in mm	P0 = PPS	C = Cam Lock	B = Buna-N	000 = Standard

^{*} Other options may be available. Contact SSI for technical assistance.

^{**} Physical maximum read distance varies based on media type. Contact SSI for assistance.



SSI Technologies, LLC is a member of the Amphenol Sensor Technology Group (ASTG)

CONTACT

SSI Technologies, LLC 3200 Palmer Drive Janesville, WI 53546 ssi-sensors.com (608) 757-2000

WARRANTY

LIMITED WARRANTY: All SSI products are warranted against defective materials and workmanship for a period of one (1) year from the date of delivery to the original purchaser. Any product that is found to be defective within the one year period will be replaced at the discretion of SSI. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, PERFORMANCE, OR OTHERWISE. SSI is not an expert in the customer's technical field and therefore does not warrant the suitability of its products for the applications selected by the customer. SSI accepts no responsibility for misuse, misapplication or unauthorized modification of its products. LIMITATION OF LIABILITY: SSI's obligation under this limited warranty is strictly and exclusively limited to the repair or replacement free of charge of such articles as are found to be defective in material or workmanship on the condition that the purchaser gives prompt written notice to SSI of any claim to breach of warranty within the warranty period, and, if requested, returns the defective articles to SSI. SSI will not assume any expenses or liability for repairs made to its articles outside of its plant, without its prior written consent. SSI reserves the right to satisfy its warranty obligation in full, with respect to defective articles, by the payment to the purchaser of all sums paid by the purchaser to SSI for such articles. IN NO EVENT SHALL SSI BE LIABLE FOR CLAIMS (BASED UPON BREACH OF EXPRESS OR IMPLIED WARRANTY, NEGLIGENCE OR OTHERWISE) FOR ANY DAMAGES, WHETHER DIRECT, IMMEDIATE, INCIDENTAL, FORESEEABLE, CONSEQUENTIAL, OR SPECIAL.

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NOTE

Specs are subject to change without notice.

