

Series GT23XX

Hazardous Location Pressure Transmitters



Description

The GT23XX Series Transmitter incorporates a flameproof/explosion-proof housing which allows the use of both our analog & digital electronics. This versatility allows STI to utilize its years of electronic development to provide “Application- Solutions” for years of service in demanding environments.

STI utilizes rugged, reliable bonded foil strain gage technology providing both an accurate and stable unit. Our stainless steel construction provides these units with the capability of withstanding harsh environments yet providing high accuracy with low susceptibility to shock & vibration.

“Application-Solutions” we provide include the following:

- Inconel construction for H₂S or saltwater service
- Dual pressure and temperature outputs
- PC/PDA compatibilities

The brief specifications listed on the back are but a few of the more important parameters of interest; make sure to contact the sales office closest to you for further definition. In most cases, independent data sheets support these applications and provide additional information.

Standard Features

- ATEX Certified to EEx d IIC T5
- Rugged Strain Gage Technology
- Stainless Steel Construction
- Infinite Resolution
- Low Sensitivity to Shock and Vibration
- Secondary Containment

Optional Features

- Alternate Materials of Construction
- Digital Electronics
- Magnetic Zero
- Total Error Band Accuracy Including Temperature 0.1% FSO
- Battery Operation

GT23XX

Series GT23XX Specifications

Baseline Configuration Specs Represented.
Modifications Encouraged - See Below
Custom Designs Available

Performance

Static Accuracy

± 0.10% FSO by BFSL.

Total Error Band

± 0.5% FSO by BFSL.

Thermal Error

Less than ± 0.020% FSO/°F typical.

Less than ± 0.005% FSO/°F optional.

Resolution

Analog - Infinite

Digital - .025% FSO.

Insulation Resistance

> 100 megohms at 50 Vdc at 70°F.

Zero Balance

± 1% FSO at 70°F.

Zero Pot - Optional.

Span

± 1% FSO at 70°F.

Frequency Response

Consult Factory.

Mechanical Characteristics

Standard Ranges

500, 750, 1000, 1500, 2000, 3000, 5000
7500, 10000, 15000, 20000 PSIA / PSIG.

Proof Pressure

1.5X range.

Burst Pressure

2.0X range.

Operating Media

Fluids and gases compatible with stainless steel. Inconel and other materials optional.

Enclosure

Body of stainless steel.

Pressure Fitting

1/2" or 3/4" NPT Male or Female.
1502, 2202 Hammer Unions.

Weight

4 lbs.

Electrical Characteristics

ANALOG OUTPUTS

Excitation

4-20mA Current Loop:

9-36 Vdc for 2-wire.

9-36 Vdc for 3-wire.

Isolated Voltage Output (0-5 Vdc, 0-10 Vdc):

14-32 Vdc (standard).

8-18 Vdc (No charge option).

Non-Isolated Voltage Output:

8-40 Vdc for 1-5 Vdc, 3-wire (standard).

8-40 Vdc for 1-6 Vdc, 3-wire (No charge option).

8-40 Vdc for 0-5 Vdc, 4-wire (No charge option).

Additional outputs and related excitations available. Please consult factory.

DIGITAL OUTPUTS

Excitation

RS-232, RS-485

8-30 Vdc.

CANbus

4-18 Vdc (standard).

14-32 Vdc (optional).

Programming

PC.

DUAL OUTPUTS (Analog & Digital)

Excitation

3-wire Current plus Digital:

12-32 Vdc.

Isolated Voltage plus Digital:

14-32 Vdc.

Non-Isolated Voltage plus Digital:

8-30 Vdc.

COMMON

Insulation Resistance

> 100 megohms at 50 Vdc at 70°F.

Electrical Termination

1/2" NPT Female.

Electrical Protection

- EMI Protected.
(Optional for Isolated Voltage).
- Surge Protection to 500 Vdc.
(Optional for Isolated Voltage).
- Reverse polarity protected.
- Short circuit protected.

Environmental Characteristics

Compensated Temperature Range

+30°F to +130°F.

Options Available..

Operating Temperature Range

-40°F to +185°F.

Dimensions (inches)

Dimensional data not shown due to number of models available. Consult factory.

MODEL IDENTIFICATION

G	T	2	3	X	X
SERIES		ANALOG OUTPUT		DIGITAL OUTPUT	
		0 = Isolated Voltage		0 = None	
		1 = None		1 = RS-485	
		2 = Non-Isolated Voltage		2 = RS-232	
		5 = 4-20 mA 2-wire Loop (not available with Digital Output)		4 = CANbus	
		6 = 4-20 mA 3-wire			

Certification / Rating

European Directive Information

The EC declaration of conformity for all applicable European directives for this product may be obtained by contacting our local sales office.

ATEX Directive (94/9/EC)

Stellar Technology's Quality Management System complies with the Annex IV of the ATEX Directive.

Applied standards: EN 50014, EN 50018

European Pressure Equipment Directive (PED) (97/23/EC)

The series GT2350 is for use on well-control equipment used in the petroleum, gas or geothermal exploration and extraction industry and in underground storage which is intended to contain and/or control well pressure. In accordance with article 1 of the directive the product is exempt.

EMC Directive (89/336/EEC)

Applied standards: EN 61326,

EN 61000-4-2, EN 61000-4-3, EN 61000-4-4,

EN 61000-4-5, EN 61000-4-6

Hazardous Location Certifications



0359



IP66

ATEX Flameproof

Certificate No.: DNV-2003-OSL-ATEX-0258

Marking: II 2 G EEx d IIC T5

(Tamb -40°C to 85°C)

MODIFICATIONS: We realize transducer applications vary greatly and as such our designs are flexible. Choice of pressure port, electrical termination, material compatibility and performance characteristics are a few of the many options available. Specifications on this datasheet represent the standard configuration only. Product and company names listed are trademarks of their respective companies. Specifications subject to change without notice.

WARRANTY: Stellar Technology warrants that its product shall be free from defective workmanship and/or material for a twelve month period from the date of shipment, provided that Stellar Technology's obligation hereunder shall be limited to correcting any defective material FOB our factory. No allowance will be made for any expenses incurred for correcting any defective workmanship and/or material without written consent by Stellar Technology. This warranty is in lieu of all other warranties expressed or implied.

Find More Information at:
stellartech.com

Due to the nature of technology, changes are inevitable. For latest technical specifications, see our website.

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