

# Series GT25XX

## Hazardous Location Pressure Transmitters



### Description

The GT25XX 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 H<sub>2</sub>S or saltwater service
- Dual pressure and temperature outputs
- PC/PDA compatibilities
- OEM Customization

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

- Explosion Proof - USA/CAN  
CSA/US CLI Div 1&2, Groups A,B,C,D
- Rugged Strain Gage Technology
- Reliable Long Term Stability
- Stainless Steel Construction
- Low Sensitivity to Shock & Vibration
- Analog or Digital Electronics

### Optional Features

- Total Error Band Accuracy  
Including Temperature
- Customer Specified Pressure Port
- Alternate Materials of Construction
- Magnetic Zero
- Non-Incendive USA/CAN  
CSA CLI Div 2 Groups A,B,C,D
- Intrinsically Safe - USA/CAN  
CSA CLI Div 1&2, Groups A,B,C,D

# Series GT25XX

## Specifications

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

### Performance

#### Static Accuracy

± 0.25% FSO by BFSL or  
± 0.1% FSO by BFSL (optional).

#### Resolution

Analog - Infinite.  
Digital - .025% FSO.

#### Thermal Shift

< ± 0.020% FSO/°F typical.  
< ± 0.005% FSO/°F optional.

#### Insulation Resistance

> 100 megohms at 50 Vdc at 70°F.

#### Zero Balance

± 1% FSO at 70°F.

#### Span

± 1% FSO at 70°F.

#### Frequency Response

Consult Factory.

### Mechanical Characteristics

#### Standard Ranges

0 - 5, 10, 25, 30, 50, 75, 100, 200, 500,  
750, 1000, 1500, 2000, 3000, 5000,  
7500, 10000, 15000, 20000, 25000 and  
30000 PSIA / PSIG / PSID.

#### Proof Pressure

1.5 times FSO range minimum.  
1500 PSI for differential units.

#### Burst Pressure

2.0 times FSO range minimum.  
3000 PSI for differential.

#### Operating Media

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

#### Enclosure

Body of stainless steel.

#### Pressure Fitting

1/4" NPT Male (standard) or Female.  
7/16"-20 per MS33649-4 (Female).  
7/16"-20 per MS33656-4 (Male).  
AE F250-C, 9/16-18 UNF for  
ranges 15,000 PSI & up.  
1502, 2202 hammer union.

#### Weight

Approx. 16 ounces for gage units.  
Approx. 60 ounces for differential units.

### Electrical Characteristics

#### ANALOG OUTPUTS

##### Excitation

4-20mA Current Loop:  
2-wire 9-36 Vdc unregulated.  
3-wire 14-40 Vdc unregulated.  
Isolated Voltage Output:  
8-18 Vdc or 14-32 Vdc unregulated.  
Non-Isolated Voltage Output:  
8-40 Vdc unregulated.  
3 or 4 wire available.

#### DIGITAL OUTPUTS

##### Excitation

RS-232, RS-485, CANbus  
8-30 Vdc unregulated.

##### Programming

PC.

#### COMMON

##### Electrical Connection

1/2" NPT Male (standard) or Female  
conduit fitting with Teflon cable (standard),  
vented polyurethane or rubber cable  
(optional). 2 ft. of cable supplied as  
standard. Longer lengths available  
upon request.

##### Electrical Protection

- EMI/RFI protected.
- Surge protection to 500 Vdc.
- 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	5	X	X
	SERIES		ANALOG OUTPUT	DIGITAL OUTPUT	
			0 = Volts	0 = None	
			5 = 2-wire Loop	1 = RS-485	
			6 = 3-wire Loop	2 = RS-232	
			1 = None	4 = CANbus	

### Certification / Rating

#### Hazardous Location Certification

CSA Rated  
Explosion Proof Class I, Division 1,  
Groups A,B,C,D  
Non-Incendive Class I, Division 2,  
Groups A,B,C,D  
(Non-Incendive devices require  
conduit termination)

Applied Standards  
CSA STD C22.2 NO. 142M1987  
CSA STD C22.2 NO. 30M1986  
UL STD - 1203  
UL STD - 1604



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 For More Information at:  
[stellartech.com](http://stellartech.com)

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

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