



SOLID STATE ELECTRONICS CENTER
MINNEAPOLIS, MINNESOTA 55441

**SUPPLIER DRAWING (SD)
SPECIFICATION**

	Federal Cage Code No. 3 4 1 6 8	22024846
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TITLE: PPTR, CE SUPPLEMENT, EN 61326-1

PREPARED BY G. Monzo ORIGINATOR		DATE 4/24/02									
APPROVED BY J. Dcamp ENG. AREA APPROVER		DATE 05-01-02		APPROVED BY T. Stratton AFFECTED AREA APPROVER		DATE 04-30-02		APPROVED BY L. Chamas SUPPLIER REVIEW BORAD APPROVAL		DATE 04-30-02	
REV. LTR.	CHANGE DESCRIPTION, SHEETS REVISED			ECN NUMBER	ENGINEER IN CHARGE			EFFECTIVITY DATE			
Rev. -	New release			02-0652	G. Monzo/kas			05-28-02			

Template Rev. Date: 8-5-96

Cage Code 34168	22024846	Rev. -	Sheet 1 of 3
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Precision Pressure Transducer, Ruggedized (PPT-R)

Models PPTRxxxxxx2xx-x-Rxxx

Models PPTRxxxxxx5xx-x-Rxxx

CE Conformity Supplement

22024846, Revision A, April 2002

Page 1 of 2

CE CONFORMITY: This product is in conformity with the requirements of the following European Electromagnetic Directive 89/336/EEC as amended by 92/31/EEC, 93/68/EEC and 98/13/EEC. Conformity of this product with any other CE-Mark Directive(s) shall not be assumed.

Directive/Standard	PC	Conformity	Notes
ELECTROMAGNETIC COMPATIBILITY: 89/336/EEC, as amended by 92/31/EEC, 93/68/EEC and 98/13/EEC			
EN 61326:1997, A1:1998, Electrical Equipment for Measurement, Control and Laboratory Use, EMC Requirements			
EMISSIONS			1
(Emission limits for class A equipment)			
CISPR 16-1: 1987, CISPR Specification for radio interference measuring apparatus and measurement methods – Part 1: Radio disturbance and immunity measuring apparatus.		<p style="text-align: center;"><u>Mains</u></p> <p>79 dB(μV/m) Quasi-peak, 66 dB(μV/m) Avg. 0.15 to 0.50 MHz</p> <p>73 dB(μV/m) Quasi-peak, 60 dB(μV/m) Avg. 0.50 to 30 MHz</p>	
CISPR 16-2: 1993, CISPR Specification for radio interference measuring apparatus and measurement methods – Part 2: Methods of measurement of disturbances and immunity.		<p style="text-align: center;"><u>Enclosure</u></p> <p>40 dB(μV/m) quasi peak, measured at 10m, 30 to 230 MHz 47 dB(μV/m) quasi peak, measured at 10m, 230 to 1000 MHz</p>	
IMMUNITY			
EN 61000-4-2: 1995, Part 4: Testing and measurement techniques – Section 2: Electrostatic discharge immunity test – Basic EMC publication	B	4 kV Contact	
EN 61000-4-3: 1996, Section 3: Radiated, radio-frequency, electromagnetic field immunity test.	A	10 V/m, 80 to 1000 MHz, 80% amplitude modulated, 1 kHz	2,3
EN 61000-4-4: 1995, Section 4: Electrical fast transient/burst immunity test .	B	2 kV DC power ports 1 kV I/O signal/control ports 5/50 Tr/Th ns, 5 kHz rep frequency	4
EN 61000-4-5: 1995, Section 5: Surge immunity test	B	1 kV DC power ports (line-to-line) 2 kV DC power ports (line-to-earth) 1 kV I/O signal/control ports (line-to-earth)	4
IEC 1000-4-6: 1996, Conducted RF Fields, 150 KHz - 80 MHz	A	3 V/m, 80% AM (1 kHz), 150 Ohm Source Impedance	2,3

NOTES:

PC = Performance Criteria

1. Qualified by similarity to the PPT product. PPT meets the more restrictive emission limits for class B equipment.
2. Shielded twisted pair cables required for all signal and power lines.
3. Typical EMI-related digital and analog shifts of less than 0.1% of Full Scale Reading. Maximum digital and analog shifts of 0.4% of Full Scale Reading, dependent upon factory characterized range-down.
4. The PPTR meets these burst and surge requirements when tested with a P.S. of 10 to 24 VDC

EMISSIONS: This equipment complies with the emission limits for Class A equipment as per the following reference standards found in EN 61326-1: 1997, Table 3 – *Emission limits for Class A equipment*:

- CISPR 16-1: 1987, CISPR Specification for radio interference measuring apparatus and measurement methods – Part 1: Radio disturbance and immunity measuring apparatus
- CISPR 16-2: 1993, CISPR Specification for radio interference measuring apparatus and measurement methods – Part 2: Methods of measurement of disturbances and immunity

IMMUNITY: This equipment complies with the limits as specified in the above table.

Performance Criteria: Immunity includes the tests and severity levels specified in EN 61326:1997, A1:1998, Table A.1 – *Immunity test requirements for equipment intended for use in industrial locations*. This equipment was evaluated for “Continuous Unmonitored Operation” as specified in EN 61326-1: 1997, Table 2 – *Example of evaluation of immunity test results*. The following is a functional description and definition of product performance, during or as a consequence of the EMC testing:

Performance Criterion A

- **(EN 61000-4-3: 1996, IEC 1000-4-6: 1996, Radiated and Conducted RF Immunity):** During testing, normal performance within the specification limits.

Performance Criterion B

- **(EN 61000-4-2: 1995, EN 61000-4-4: 1995, EN 61000-4-5: 1995, ESD, Transients & Surge):** During testing, temporary degradation, or loss of function or performance which is self-recovering.

Note: If the PPTR is installed in an environment with frequent transients or surges, and is used in a continuous transmit mode (P2 or P4 command), the transients and/or surges may infrequently be interpreted incorrectly as valid ASCII characters causing the PPTR to enter a paused state. This paused state can be prevented by periodically sending a carriage return ASCII character to the PPTR or by using the P4 continuous transmit mode with the Noise Protection feature (DO=P) enabled.