

Intelligent Transmitters

Series 1000, 6000 & 9000



Paroscientific Intelligent Transmitters consist of a Digiquartz® Pressure Transducer and a digital interface board in an integral package. Commands and data requests are sent via two-way RS-232 or RS-485 serial interfaces. Direct digital outputs in engineering units are provided with parts-per-billion resolution using the built-in, anti-aliasing IIR filter mode. Typical accuracy is 0.01% even under harsh environmental conditions. All intelligent transmitters are preprogrammed with calibration coefficients for full plug-in interchangeability.

Intelligent transmitters are available in 20 absolute pressure ranges from 15 psia (0.10 MPa) to 40,000 psia (276 MPa), and 7 gauge pressure ranges from ± 2 psig (± 0.015 MPa) to 200 psig (0.15 MPa). Dual RS-232 and RS-485 interfaces allow complete remote configuration and control of all operating parameters, including resolution, sample rate, choice of engineering units, integration time, and sampling requests. Commands include: Single sample and send, synchronized sample and hold, continuous sample and send, and special burst sampling modes.

Features include support for both serial loop and multi-drop networking, high-speed continuous pressure measurements, selectable baud rates up to 115,200 baud, synchronization of measurements with time-based integration, 2 or 4 wire RS-485 transmission distances greater than 1 kilometer, a power management "sleep" mode, data formatting features, and unit identification commands.

Free software is included for setup, configuration, sampling, display, data logging, and plotting.

All Digiquartz® Transducers come with a limited 5-year warranty with the first 2 years covered at 100%.

ABSOLUTE RANGES

| | |
|---------------------------|--------------------------|
| 7-16 psia (0.05-0.11 MPa) | 0-1000 psia (6.89 MPa) |
| 0-15 psia (0.10 MPa) | 0-2000 psia (13.8 MPa) |
| 0-23 psia (0.16 MPa) | 0-3000 psia (20.7 MPa) |
| 0-30 psia (0.21 MPa) | 0-4400 psia (30.3 MPa) |
| 0-45 psia (0.31 MPa) | 0-6000 psia (41.4 MPa) |
| 0-100 psia (0.69 MPa) | 0-10,000 psia (68.9 MPa) |
| 0-200 psia (1.38 MPa) | 0-15,000 psia (103 MPa) |
| 0-300 psia (2.07 MPa) | 0-20,000 psia (138 MPa) |
| 0-400 psia (2.76 MPa) | 0-30,000 psia (207 MPa) |
| 0-500 psia (3.65 MPa) | 0-40,000 psia (276 MPa) |

GAUGE RANGES

| | |
|----------------------|-----------------------|
| 0-15 psig (0.10 MPa) | 0-100 psig (0.69 MPa) |
| 0-22 psig (0.15 MPa) | 0-150 psig (1.03 MPa) |
| 0-30 psig (0.21 MPa) | 0-200 psig (1.38 MPa) |

FEATURES & PERFORMANCE*

- 0.01% Typical Accuracy
- Parts-per-billion Resolution
- High Stability and Reliability
- Dual RS-232 and RS-485 Interfaces
- Fully Calibrated and Characterized
- NIST Traceable - CE Compliant

APPLICATION AREAS

- Metrology
- Oceanography
- Hydrology
- Process Control
- Aerospace
- Energy Exploration
- Meteorology
- Wind Tunnel Instrumentation

*Products defined by specification control drawing

The Model 715 displays pressure and temperature data from all Paroscientific Intelligent transmitters that have Dual RS-232 and RS-485 interfaces. The two-line, 16 character, alphanumeric, backlit, liquid crystal display is user configurable with included software. Display functions include pressure and temperature values with engineering units, overpressure warning, tare indicator, user defined text messages, and a horizontal analog bar graph showing percentage of full-scale pressure.

The Model 715 Display will respond to display commands from the transmitter, a computer, or other serial host on either the RS-232 or RS-485 port. For stand-alone operation, it displays data whenever power is applied to the transmitter.



Paroscientific, Inc.
Digiquartz® Pressure Instrumentation