



DIGITAL TRUE PRESSURE SERIES WITH TEMPERATURE

Introducing Paine Electronics new **Digital True Pressure Series** transducer. Microprocessor based **pressure** and **temperature measurement**, the **Digital True Pressure Series** incorporates Paine's proprietary sensor technology with innovative sensor design to produce the next generation of high pressure and high temperature transducers. **True - Digital - Pressure and Temperature Output!**

The **Digital True Pressure Series** is designed for pressure ranges of **0-5,000** to **0-30,000 PSIA** and temperature measurement from **-40°F** to **+350°F** (-40°C to +176°C). With the added benefit of its small size, true pressure and temperature measurements and the ability to perform in highly corrosive environments, the new **Digital True Pressure Series** is just what Design Engineers have needed for years!

- **Digital True Pressure Output:** Regardless of temperature.
- **Memory Based User Access:** (Instantaneous Temperature Values, Manufacturer, Serial Number, Model Number, Full Scale Pressure, Calibrated Units, Original Calibration Date, Last Calibration Date)
- **Programmable Temperature Output:** °K, °F or °C.
- **Digital Pressure & Temperature Output:** With end user requests or programmed timing. Request digital formats in TEXT, ASCII or HEX.
- All welded Inconel® Construction.

Specifications:

Typical Performance: The following parameters are established from production units.

Calibration Data: Calibration Certificates are supplied with each unit.

Performance: *

Pressure Output In PSI: Fully corrected for temperature, non-linearity, zero offset and full scale output.

Total Error of Digital Pressure Output: <0.1% full scale over calibrated temperature range.

Pressure Resolution: 16 Bits minimum. 0.31 - 0.46 PSI (depending on part option).

Operating Temperature Range: -40°F to +350°F (-40°C to +176°C).

Calibrated Temperature Range: -0°F to +350°F (-17°C to +176°C).

Digital Output: RS-232, RS-485, I2C (Inter-IC) or SPI (Serial Peripheral Interface).

Temperature Output: °K, °F or °C.

Temperature Measurement: -0°F to +350°F (-17°C to +176°C).

Temperature Resolution: 10 Bits minimum. Better than 0.5°F.

Mechanical: *

Pressure Range: 0-5,000 to 0-30,000 PSIA.

Pressure Media: Any compatible with alloy UNS N07718 solution annealed and aged to a maximum hardness of 40 HRC.

Pressure Fitting: AS4395-E04.

Electrical Connection: 6 Pin bayonet locking electrical connector.

Electrical: *

Excitation: 5.00 VDC ± 0.25 VDC or 7.00 to 12 VDC.

Input Current: 25 mA maximum @ 5 VDC.

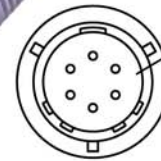
Insulation Resistance: All conductors together to case, 10GΩ minimum at 50 VDC.

Electrical Connections: A=PWR IN, B= TxD (data to PC), C=RxD (data from PC),

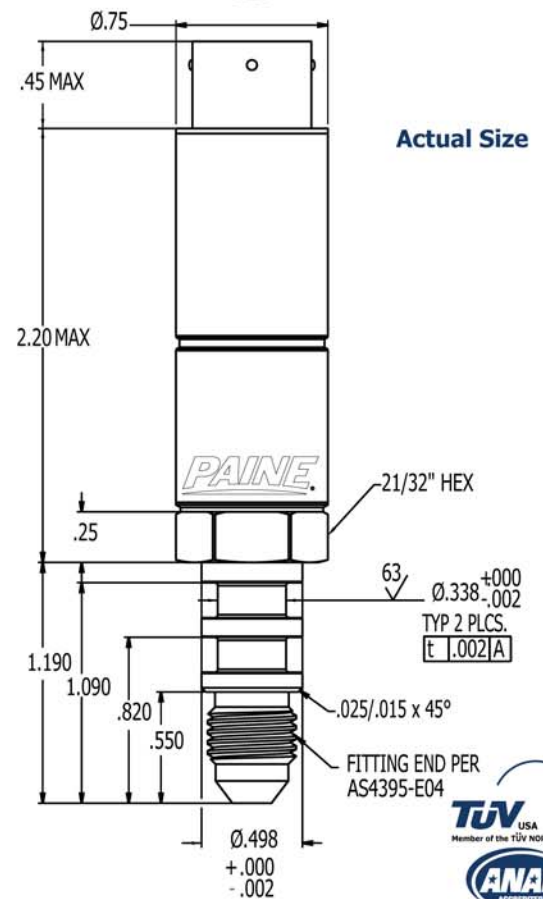
D=PWR RETURN, E=SIGNAL RETURN, F=NC



220-RS-010-XX
0-5,000 to 0-30,000 PSIA



6 BAYONET LOCK
ELECTRICAL RECEPTACLE
MATES WITH MS3116-10-6S



Actual Size



Paine Electronics, LLC is a
ISO-9001:2000/AS9100
Registered Company

Datasheet P/N: 220-RS-010-DS_REV-C

* Contact us or your authorized Paine Electronics representative for many more standard and/or custom configurations or options.

All specifications are subject to change or modification without notice.
P A I N E ® is a registered trademark of Paine Electronics, LLC.
Copyright © Paine Electronics, LLC | All Rights Reserved

Call or email us today for more information!

509-881-2100
moreinfo@paineelectronics.com

Paine Electronics, LLC
5545 Nelpar Drive, East Wenatchee WA 98802
Tel: (509) 881-2100 | Fax: (509) 881-2115

Visit us on the web at:
www.paineelectronics.com