



JT400 MULTIVARIABLE TRANSMITTER

Ultra-Low Power Platform with Integrated I/O

SALES SHEET

The industry's first ultra-low power, Multivariable Transmitter (MVT) that provides best-in-class measurement accuracy, USB & I/O.

DESIGNED FOR EASE OF USE

A free Graphical User Interface (GUI) offers intuitive menu operation, live trending, and allows for ease of install, start up and configuration.

BROAD COMPATIBILITY

A variety of interfaces (USB, RS-232, RS-485) and protocols allow the JT400 to readily drop-in to practically any SCADA or natural gas measurement network.

ULTRA LOW POWER

The JT400 incorporates the latest advances in low power technology, resulting in the industry's lowest current draw: <1 mA at 4.0 VDC

HIGH ACCURACY FOR CUSTODY TRANSFER

- Industry-leading, 0.05% DP measurement accuracy is standard.
- Best-in-class static pressure (0.035%) and temperature (0.1°C) measurements.
- Best-in-class pressure (0.1%) and temperature (0.125%) effects on DP.

COMMUNICATION PROTOCOLS

- Standard Mapping Via:
 - BSAP
 - ENRON MODBUS
 - ROC
- Automatic Protocol Detection
- Supports communication speeds up to 38400 baud.

CERTIFICATIONS

- Class I, Division 1, Groups C, D Explosion-proof UL/CUL
- Single-Seal Certified
- Canadian Registration Number (CRN)

PRESSURE SENSOR RANGES

MULTIVARIABLE SENSOR IS AVAILABLE IN:
DIFFERENTIAL PRESSURE/STATIC PRESSURE

- 150 inH₂O / 1000 PSI_s
- 150 inH₂O / 2000 PSI_s
- 300 inH₂O / 1000 PSI_s
- 300 inH₂O / 2000 PSI_s
- 400 inH₂O / 2000 PSI_s
- 700 inH₂O / 2000 PSI_s (Available 2021)

SINGLE VARIABLE STATIC PRESSURE SENSOR

IS AVAILABLE IN:

- 25 PSI_G
- 100 PSI_G
- 500 PSI_G
- 1000 PSI_s
- 2000 PSI_s
- 3000 PSI_s
- 5000 PSI_s

DUAL SINGLE VARIABLE STATIC PRESSURE SENSORS

- Available in all static pressure sensor ranges.

OVER RANGE CAPABILITY

- All sensors remain accurate to $\pm 0.1\%$ while over-pressured up to 133% of URL.
- Proof Pressure: $1\frac{1}{2}$ x URL without recalibration.

LIQUID CRYSTAL DISPLAY (LCD) PROVIDED AT NO ADDITIONAL COST

- The LCD is configurable for units, variable display sequence and period.
- Writable display allows for viewing of user defined system data.

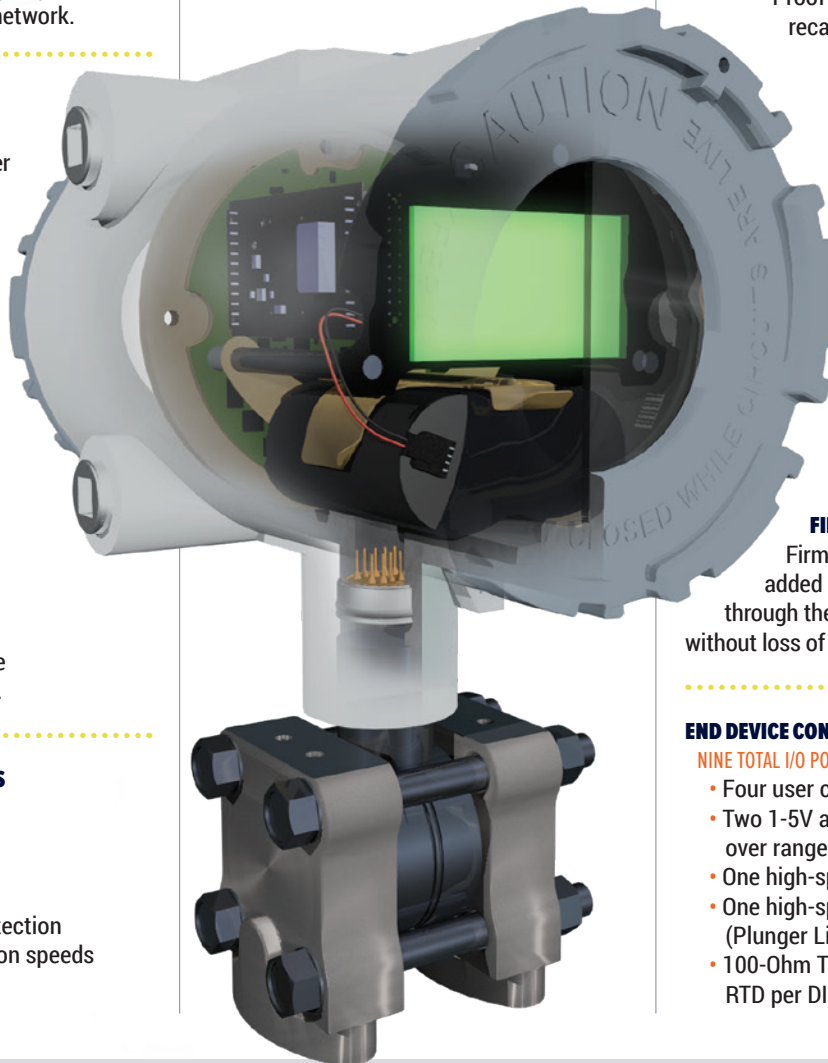
FIELD UPGRADEABLE FIRMWARE

Firmware factory updates and added options may be added through the USB port in the field without loss of calibration.

END DEVICE CONNECTIVITY

NINE TOTAL I/O POINTS

- Four user configurable DI/DOs
- Two 1-5V analog inputs with 10% over range capability
- One high-speed counter
- One high-speed switch (Plunger Lift Arrival Sensor)
- 100-Ohm Three-wire platinum RTD per DIN 43760





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PHYSICAL OVERVIEW

The JT400 is designed specifically for remote measurement of Differential Pressure, Static Pressure and Temperature with external RTD.

DIAPHRAGM MATERIAL: 316SS or Hastelloy C

FLANGE MATERIAL: 316SS or Hastelloy C

FILL MEDIUM: DC 200 Silicone Oil

PROCESS CONNECTIONS: ¼" NPT on flanges or manifold mount

ELECTRICAL CONNECTIONS: Two ½" NPT and two ¾" NPT conduit connections

EXPLOSION-PROOF HOUSING: Low copper aluminum, polyester paint

LOCAL INDICATION: 6- ½ - Digit LCD display selectable engineering units

USER CONNECTIONS: Pluggable terminal blocks

POWER SUPPLY INFORMATION

OPERATING VOLTAGE RANGE:

- 4.0 to 30.0 VDC

AVAILABLE BATTERY OPTIONS:

- 25 AH Lithium Battery
- 2.5 AH Lead-Acid Battery w/internal Solar Array

TURN-ON TIME

Measured input variables will be within specifications less than two seconds after power is applied to the JT400.

MOUNTING EFFECTS

MOUNTING TORQUE EFFECTS:

None

FLOW DIRECTION

CHANGE EFFECTS:

No "oil
canning"

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE

LIMITS:

SENSOR BODY:
-40 to +85°C

ELECTRONICS:
-40 to +85°C

WITH DISPLAY:

-30 to +70°C

** The LCD will recover if exposed to temperatures outside the listed range, once the ambient temperature returns to a value within the allowable range.*

STORAGE:

-40 to +100°C

HUMIDITY LIMITS:

When covers are properly installed, unit will withstand 0 to 100% RH (Type 4 enclosure)

UL CERTIFICATION IS APPLICABLE TO A TEMPERATURE RANGE OF -40 TO 60°C.

