



JT500 FLOW COMPUTER & MEASUREMENT PLATFORM

Optimized For Gas Flow Measurement

SALES SHEET

The industry's first ultra-low power buildable measurement platform that provides best-in-class measurement accuracy, integrated I/O and fully wireless capabilities.

DESIGNED FOR LOW-COST INSTALLATION AND EASE OF USE

- Wireless technology eliminates need for power/signal cable trenching, expensive solar arrays, & battery banks.
- Free Graphical User Interface (GUI) offers intuitive operation, live trending and easy start up and configuration.

AVAILABLE GAS FLOW COMPUTING

API CHAPTER 21 COMPLIANT FLOW CALCULATIONS IN ACCORDANCE WITH AMERICAN GAS ASSOCIATION REPORTS:

- AGA-3
- AGA-5
- AGA-7
- AGA-8

UTILIZES BUILT-IN DATA LOGGING FEATURE TO IDENTIFY:

- Time interval averaging
- Event & Alarm Time Stamping

ULTRA-LOW POWER

The JT500 incorporates the latest advances in low power technology, resulting in the industry's lowest current draw:
<600 μ A 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

WIRELESS COMMUNICATION CAPABILITIES:

- Cellular Modem – MQTT Spark Plug B Protocol
- Radio Communications – 2.4GHz ISM Band Hardware
 - CONNECTIVITY TO OPTIONAL GATEWAY

CERTIFICATIONS

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

PRESSURE SENSOR RANGES

MULTIVARIABLE

TRANSMITTER (MTV):

- 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

SINGLE VARIABLE STATIC

PRESSURE SENSOR:

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

DUAL SINGLE VARIABLE STATIC PRESSURE SENSORS

- Available in all static pressure sensor ranges.

OVER RANGE CAPABILITY

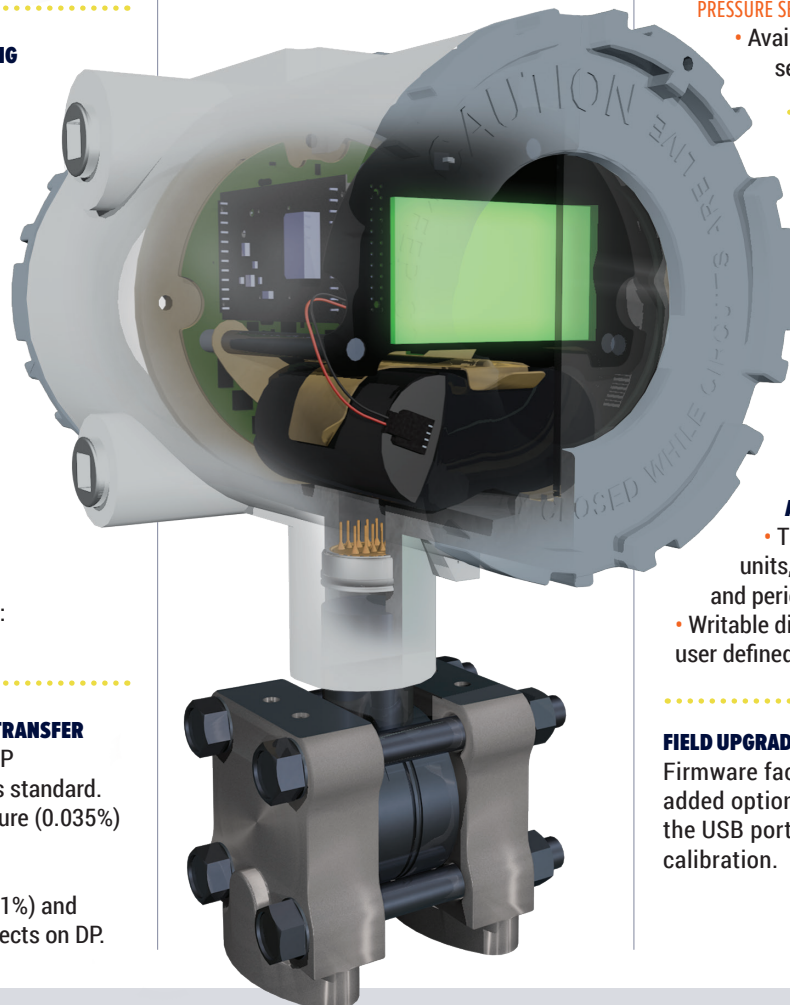
- All sensors remain accurate to $\pm 0.1\%$ while over-pressured up to 133% of URL.
- Proof Pressure: 1½ x URL without recalibration.

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.





FLOWWORX

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END DEVICE CONNECTIVITY

ELEVEN TOTAL I/O POINTS

- Four user configurable DI/DOs
- Two dedicated DIs
- 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

PHYSICAL OVERVIEW

The JT500 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 WIRELESS POWER OPTIONS:

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

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)

