

- 32-bit CMOS microprocessor and DSP, ¼ VGA color LCD daylight viewable with LED backlighting
- Armored glass touch screen
- User configurable screens

Analog Channels

- 2 – Dedicated 16-bit, 4-20 mA
 - Isolation: 500 Volts
 - High frequency analog filtering
- 6 – 12-bit non-isolated with full scale of 0-25 VDC (shared on digital I/O channels)
 - Analog bandwidth: 10 Hz
 - Input impedance: 100 kΩ

Analog Sensor Channel

- 1 – 16-bit (non-isolated) RTD
 - Pt 100 or 500 Ω DIN, IEC
 - Measurement range: -200 to +850 °C
 - Error: (operating range: -40 to +70 °C)
 - 100 Ω:
 - 200 to 400 °C: Typ.: 0.3 °C, Max.: 0.55 °C
 - 400 to 850 °C: Typ.: 1.0 °C, Max.: 1.4 °C
 - 500 Ω:
 - 200 to 850 °C: Typ.: 0.85 °C, Max.: 1.12 °C



- Weatherproof design
- Power and I/O connections by removable screw terminal blocks
- Up to 6 digital inputs
- Up to 9 analog inputs
- Up to 5 counters (2 tachometers and 3 hardware counters - two of which can be configured as quadrature counters)
- Display up to 4 points at one time
- Up to 12 outputs: 4 analog, 6 digital, 2 frequency (50% duty cycle, up to 6250 Hz)
- Ethernet for data acquisition
- Field upgradeable via USB 2.0

Future

- Support for 16-bit (isolated) Thermocouple (J, K, T), or Thermistor
- CANbus/J1939, Modbus
- Serial (RS-232 & RS-485)
- USB 2.0 for configuration and data transfer
- Data logging

Analog Outputs

- 2 – 14-bit linear (isolated) analog outputs
 - 4-20 mA up to 33 V max., or output for PID control
- 2 – 14-bit voltage outputs
 - 0 – 10 V at 100 Ω output impedance
 - Maximum current of 10 mA

Digital Input Channels

- 5 – Hardware counters (Tachs: 80,000 counts/sec, Counters: 300,000 counts/sec):
 - 2 tach + 3 counters (two of which can be configured as quadrature counters),
- 6 – 0-30 VDC max. inputs (shared with digital outputs)
 - Adjustable input switching threshold between 0 and 30 V (~0.01 V resolution)

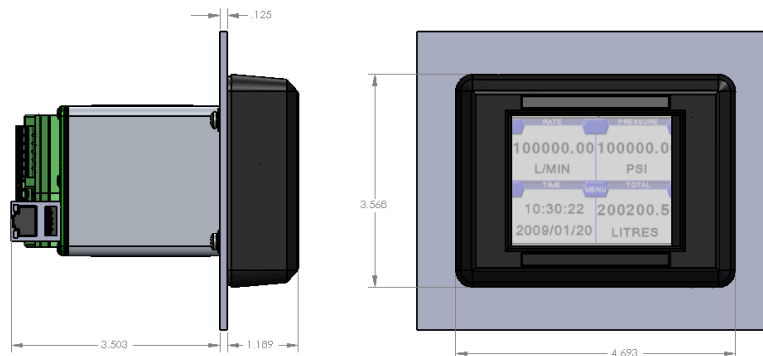
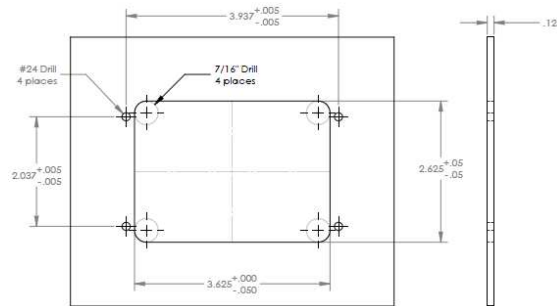
Digital Output Channels

- 6 – Output channels used for max/min threshold limit signaling for the two dedicated analog input channels
- 6 – 0-30 VDC (shared with digital inputs),
 - Open collector
 - Output rating:
 - 70 mA max. (hold), 140 mA trip, 1 A peak
 - Impedance: 50 Ω

Physical and Environmental Specifications

- Case color: Black
- Dimensions: 3.5" (90 mm) High x 4.7" (119 mm) Wide x 4.8" (123 mm) Deep
- Weight: 1.04 lbs (580 g)
- Input Power Range 10 - 30 VDC, reverse polarity protected (external fuse recommended)
- Power Consumption (no load): < 1 A
- Power Consumption (max load): < 1.5 A
- Operating Temperature Range: -40°C to +70°C
- Storage Temperature Range: -40°C to +80°C
- Relative Humidity: 0 to 95%, non-condensing
- Vibration: 4.4 G, 3 axis, frequency swept 5-2000 Hz
- Emissions Compliance: FCC part 15 Class A, Industry Canada
- Enclosure protection (when properly mounted in a rated enclosure): NEMA4 compatible

Panel Mounting



- Rugged ABS/Polycarbonate bezel with Aluminum extrusion
- RAM memory: 32 MB

Data Storage

Equipped with 512 MB Industrial SD Card

Future: Real Time Clock

Accuracy: ± 2 min/year over -40 to +70 °C

Warranty

1 Year parts and labor (FOB) factory

Accessories Included

Mounting Kit: Pan head Phillips screws for panel mounting (for various panel thicknesses):
6/32 x 1/2" (4), 6/32 x 5/8" (4), 6/32 x 3/4" (4)