

# EAGLE E-SERIES® - EFC ELECTRONIC FLOW CORRECTOR



## HIGHLIGHTS

- Universal Meter Mounting Plate
- Uni & Bi Directional Flow Accumulation
- Live Pressure & Temperature
- Multi-Meter Run Capable
- Battery, Solar, and UPS Options
- Live, Min/Max, and Historical Archiving
- Measurement based on AGA & API standards
- Flexible Configuration & Ease of Operation
- Simple Start-up for Fast ROI



## APPLICATIONS

- Custody Transfer Integrity
- Commercial & Industrial Metering
- Flow, Pressure, and Sequencing Control
- Complete Gate Station Automation
- System Alarming for Pressure, Flow, Volume
- Fully Programmable Process Library Support



**Field to Front Office Solutions™**

# TECHNICAL SPECIFICATIONS

## Features

- Enclosure: Rugged, UV Resistant Polycarbonate, Hinged & Lockable
- Mounting: Pole, Wall
- Integrated Static Pressure Transducer (PSIA or PSIG)
- Integrated Temperature Probe (Various Lengths)

## Display Options

- Single Line Alphanumeric Static
- Four Line Alphanumeric Scrolling
- Mag Scroll or Optional Push Button

## Operating Temperature

- -40°C to +70°C (-40°F to +160°F)

## Power

- Input Power: 7 to 30 VDC
- Integrated Solar Charger: up to 20W

## Performance

- Processor: ARM-Dual Core 32 Bit at 48 MHz
- SRAM Memory: 4MB (Mega Bytes)
- SPI Flash Memory: 4MB (Mega Bytes)
- Support for Months / Years of Data Storage, Dependent on Configuration
- A/D: 16-Bit Analog to Digital Conv. with Optional HART Filtering
- Serial Speeds up to 921600 BPS may be Limited by Field Hardware

## Accuracy (over -20 °F to 140 °F including linearity, hysteresis and repeatability)

- Pressure Measurement  $\pm 0.25\%$  of Full Scale
- Temperature Measurement  $\pm 1.0^\circ\text{F}$
- Computation (At reference conditions)  $\pm 0.3\%$  of Corrected Volume Reading
- Combined (Pressure, Temperature & Computation)  $\pm 0.42\%$

## Long Term Stability

- Press. Measurement  $\pm 0.5\%$  of Full Scale per Year
- Temp. Measurement  $\pm 0.5^\circ\text{F}$  per Year
- Combined (Pressure, Temperature & Computation)  $\pm 0.36\%$  per Year

# AVAILABLE INPUT & OUTPUT (I/O)

## Available On-Board

- Optional USB Host & USB Device Ports
- Optional Ethernet Port (8 - Simultaneous)
- (2) Serial Ports (RS232 / RS485) with On-Board Power Control for Communications Devices
- (4) Analog Inputs (4-20mA / 1-5VDC) with optional HART filtering
- (1) RTD (Temperature Probe)
- (2) Form A / Form C Pulse Input
  - High and Low Speed Operation

- (2) Form C Solid State Relays

- (2) Digital Outputs
- (2) Digital Inputs

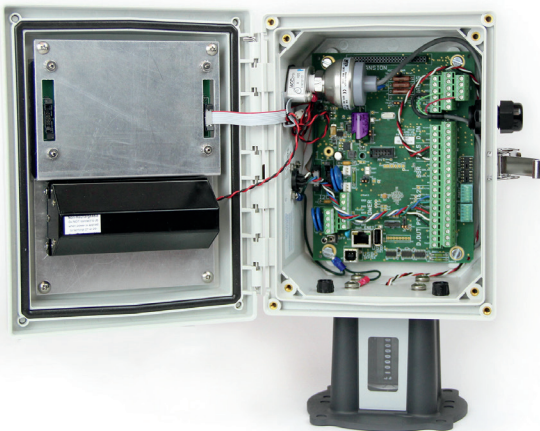
## Optional Expansion Modules

- Serial Port (RS232 / RS485) with On-Board Power Control for Comm Devices (9010552)
- 3 Channel Analog Output Module (9010551)
- 8 Channel Optically Isolated Digital I/O Module (9010534)

## Optional Extender Board (9010499)

- (2) Serial Ports (RS232 / RS485)
- (4) Analog Inputs (4-20ma / 1-5VDC)
- (1) RTD (Temperature Probe)
- (2) Form A / Form C Pulse Input
  - High and Low Speed Operation
- (3) Digital Outputs
- (3) Digital Inputs
- (2) OPTO 22 G4 Package Slots
  - IAC, IDC, OAC, & ODC
- (1) Analog Output (4-20ma/1-5VDC)

# COMMUNICATIONS & DATA COLLECTION



- USB & Serial Field Laptop Interface
- Ethernet TCP-IP (Supports Simultaneous Connects)
- Land Line Telecom Modem
- Cellular
- Satellite (LEO & GEO)
- Radio (Spread Spectrum & Licensed Frequency)
- AMI-AMR Interface Support
  
- Protocols: ERC-HexASCII (Native), MODBUS, & MODBUS TCP