

# EAGLE E-SERIES™ - EFM ELECTRONIC FLOW METER (ORIFICE)



## HIGHLIGHTS

- Full AGA & API Compliance & Support
- Integrated Multi-Variable Transmitter (Uni & Bi-Directional Flow Ready)
- Multi-Meter Run Capable
- Connectivity to GC's, Analyzers via Serial or Ethernet Connectivity
- Flexible Configuration & Ease of Operation
- Programmable for wide range of applications
- MODBUS Protocol Ready



## APPLICATIONS

- Custody Transfer Integrity
- Circular Chart Replacement
- Complete Well Pad Automation
  - Measurement
  - Emergency Shutdown
  - Flow Sequencing
  - Tank Battery Levels
  - Compliance Alarming
- Plunger Lift
- Storage Well Automation



## 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
- SPI Flash Memory: 4MB
- 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** (Flow Temperature Range: -40 to 160°F, Accuracy: +/- 1°F)

### Honeywell MVX800 Series MVT

- Static Pressure (SP):
  - MXG870 (4500 PSIG)
  - MXA845 (1500 PSIA)
- Differential Pressure (DP): +/- 400" H2O
- Reference Accuracy: (SP) 0.0375%, (DP) 0.04%

### Honeywell MVX700 Series MVT

- Static Pressure (SP):
  - MXA745 (1500 PSIA)
- Differential Pressure (DP): +/- 400" H2O
- Reference Accuracy: (SP) 0.0550%, (DP) 0.0525%

*Note: Please refer to transmitter manufacturer documentation for full transmitter accuracy specifications. Available upon request.*

## 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 (9010449)

- (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)
- Protocols: ERC-HexASCII (Native), MODBUS, & MODBUS TCP