

# ModQ SENTRY

C1D2 Non-Incendive Modbus Flow Totalizer

ENHANCE EXISTING TURBINE METERS WITH DIGITAL READOUT & MODBUS CONNECTIVITY

QUICK SETUP FROM LOCAL LCD AND PUSH BUTTONS

BATTERY POWERED FOR STANDALONE OPERATIONS

DAILY MANAGEMENT FOR FLOW & TOTALS



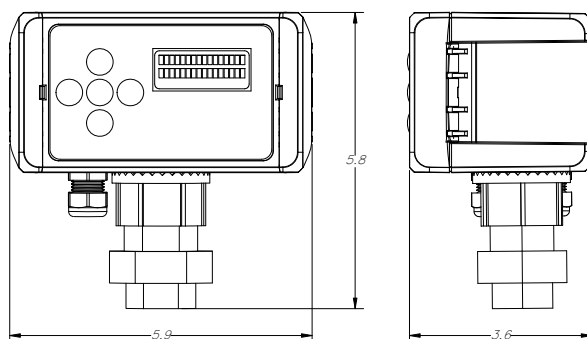
## FEATURES

- Local display with, flow rate, totalizer and modbus settings
- Integrates with industry standard turbine meters
- Hazardous location classified for Class1 Div2 Non-Incendive (pending)
- Local pushbuttons for configuration
- Modbus serial (RS485) output to integrate with PLC/SCADA/DCS
- Externally and/or battery powered with auto switch over
- Real-Time-Clock with battery backup
- 1" female NPT standard swivel coupling with 2 pin connector inductive type turbine meters
- Configurable contract hour with real-time clock & battery backup
- 32 day built-in local data historian/backup storage
- Settable K Factor from local interface
- Weathertight rugged enclosure for outdoor operation
- Easy to install and maintain
- Configurable volume and time units

## INDUSTRIES

- |                      |                     |
|----------------------|---------------------|
| • Oil and Gas        | • Food & Beverage   |
| • Water & Wastewater | • Aerospace         |
| • Gas Utility        | • Pharmaceutical    |
| • Chemical           | • Metals and Mining |
| • Power              | • Pulp & Paper      |

## DIMENSIONAL DRAWING



## ELECTRICAL CONNECTIONS



# ModQ SENTRY

C1D2 Non-Incendive Modbus Flow Totalizer



## TECHNICAL SPECIFICATIONS

### Operating Temp

-40°C to 80°C (-40°F to 176°F)

### LCD Display:

-20°C to 70°C (-4°F to 158°F)

### Input

Magnetic pickup, pulsed input

Sensitivity selector for magnetic pickup

2kHz response high gain mode (5mV sensitivity)

4kHz response low gain mode (20mV sensitivity)

Dry contact pulsed input

### LCD & Pushbuttons

32 character display with pushbuttons

Settable K factor, contract hour, etc.

Displays totals, flow rate, and status information

### Output

Modbus RTU RS485 serial 2 wires

Pulse output (open collector/pull down)

### Real Time Clock

Battery backed up real time clock with coin size battery model 2032

### Mechanical Specifications

Connection Fitting:

316SS, 1" NPT Swivel Union

Mating union for direct mount to turbine meter

Enclosure:

High strength & flame retardant Polycarbonate

Magnetic pickup connector:

Standard 2-pin circular connector

### Humidity

0% – 100% condensing

### Power

Battery: "D" cell lithium battery

Field replaceable Class 1 Div 2

OR

External: 6-36Vdc, 1mA current draw

### Battery Life

(standalone operations w/o Modbus)

LCD ON: 4 years

LCD OFF: 6.5 years

### Modbus Mapping

Flow totals (today, yesterday, 32 day log)

Instantaneous flow rate

### Weight

2lbs (0.9kg) - Without a turbine

### Non-Incendive Approval (pending)

Class 1 Division 2, Temp Code T3, Groups C&D. Conforms to UL Std. 913, Certified to Can/CSA Std C22.2 No. 157

### Internal Diagnostics

Battery voltage, error conditions

### 2 Pin Military Connector



## STANDARD CONFIGURATION ORDER CODES

ORDER CODE	DESCRIPTION
ModQ-1BIS-CABLE:	Modbus flow meter with battery, 2 pin connector, RS485 serial & pulse output