



## ADVANCED ELECTRONIC MODULE

# Adem<sup>®</sup> - s

## AdEM<sup>®</sup>-S – ADVANCED ELECTRONIC MODULE

AdEM<sup>®</sup>-S Advanced Electronic Module is a new generation of Electronic Module (digital counter) that can be mounted directly onto Romet or other manufacturers' pressure body. This new compact design module offers up to 20 years of battery life, it is service-free and weather resistant. AdEM<sup>®</sup>-S provides upgraded functions, such as: Full Audit Trail by communication reading including Interval, Daily Logger, Event Logger, Alarm Logger, live battery capacity calculation, and flash memory for easy update.

## AdEM<sup>®</sup>-S – FEATURES

- **Large, easy to read LCD**, 8 digits/characters, 14 segments semi alpha-numeric
- **Multiple level of security** ensure the integrity of the gas measurement
  - Password protection
  - Sealable program access jumper
  - Enclosure seal screws
- **Non-volatile EEPROM memory** protects the integrity of the gas registration by storing parameters, alarms, audit trail data, set-up configuration
- **Serial communication port:** RS232
- **Communication software:** Romet and/or third party software (contact Romet)
- **Communication protocol:** by Romet
- **Most of parameters** configurable by software
- **Single scroll button** to view key parameters quickly
- **Optional portable keyboard**
- **Hayes compatible modem communication** implementation
- **Full audit trail:**
  - Interval records storage is 100 days of hourly readings
  - Daily Logger (672 records)
  - Alarm Logger (102 records stamped with the time and date)
  - Event Logger (200 records) stores any changes to the set-up or calibration

## PERFORMANCE DATA

### Compensation

- Low flow compensation (Romet meters only) expands meter rangeability to 200:1

### Accuracy (electronic module)

- Combined error  $\pm 0.5\%$  typical

### Electrical

- Powered by lithium battery (up to 20 years)
- Circuitry: 3.3V surface mount technology

### Alarms

- Low battery & Battery malfunctions
- Remaining months of battery life based on usage
- Battery capacity left (%)
- Uncorrected flow rate under/over range
- Memory error

### Data Storage

- Last hourly uncorrected volume indexes
- Previous day, daily uncorrected volumes
- Backup Displacement value and Uncorrected Proving volume
- Calibration data
- Set-up parameters
- Malfunctions and alarms together with date and time
- Uncorrected Peak flow value together with date and time

### Output pulses

- Uncorrected Volume and Alarm
- Opto-isolated, form "A" (25V DC maximum, 2mA)
- Standard pulse width: changeable from 5 to 50 ms by 5ms step with selectable pulse spacing 50ms, 100ms, 150ms, 200ms, 250ms, 350ms, 500ms or 750ms.
- Output pulses can be shut off by select pulse spacing OFF

### Input pulses

- High frequency solid state sensor
- Bi-directional flow detection (anti-tampering)

### Approvals

- Metrology by Measurement Canada, AG-0593
- Intrinsically safe by CSA, LR59221

### Mounting

- Romet or other type of pressure body
- Horizontal mounting option available on specified models

### Physical characteristics

- Dimensions: 5.25" x 6.1" x 4.06" (133 mm x 156 mm x 103 mm)
- AdEM<sup>®</sup>-S module weight: 1.6 lb. (0.73 kg)



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