A D V A N C E D E L E C T R O N I C M O D U L E
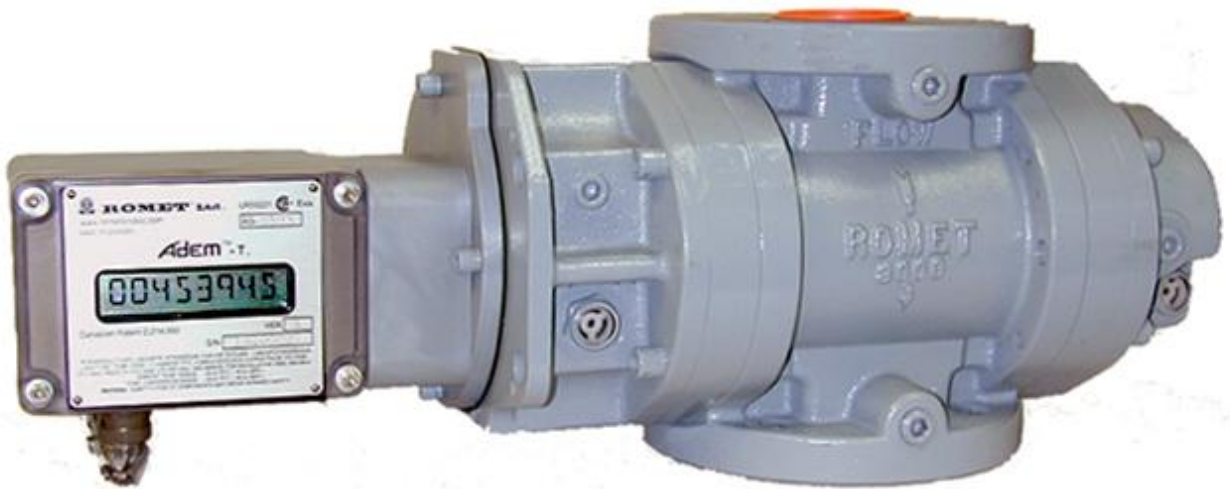
Adem™

AdEM™ – ADVANCED ELECTRONIC MODULE

AdEM™- Advanced Electronic Module is a new generation of Electronic Module 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™ 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™ 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
- **RS 232 Serial communication port**

- **Software is supported by Windows XP** or higher
- **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

Correction
- Temperature
- Fixed Pressure factor
- Low flow compensation (Romet meters only) expands meter rangeability to 200:1

Accuracy
- Combined error ± 0.5% typical

Electrical
- Powered by lithium battery (up to 20 years)
- Circuitry: 3.3V surface mount technology
- Intrinsically safe (CSA LR59221)

Temperature Sensor
- Flowing gas temperature: -40°F to 158°F (-40°C to 70°C)
- Standard ambient operating temperature: -40°F to 158°F (-40°C to 70°C)
- Resolution: 0.2°F (0.1°C)
- Three points of calibration
- Error: ± 0.5°F (0.3°C) typical; ± 0.9°F (0.5°C) maximum

Pressure
- Fixed Pressure factor: 1.0000 to 19.9999

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

Data Storage
- Last hourly corrected and uncorrected volume indexes
- Previous day, daily corrected and 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
- Max/min Temperature together with date and time

Output pulses
- Uncorrected, Corrected 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

Mounting
- Romet or other type of pressure body
- Option to mount to Romet standard pressure body using an external temperature probe
- End mounting option available on specified models
- 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 module weight: 2.7 lb. (1.3 kg)

IMAC Systems, Inc.
90 Main Street, PO Box 1605
Tullytown, PA 19007

1-800-955-4GAS
Phone: (215) 946-2200
Fax: (215) 943-2984

sales@imacsystems.com