

Integrated Rotary Meter Measurement in Economy-Size

An economic solution for precise gas volume correction with various rotary meters-backed by Mercury quality, service and 4-year warranty!



Mercury Instruments – a name synonymous with quality and reliability in the natural gas industry now offers its affordable MINI-MAX[®] and MINI-MAX[®]-AT correctors for various rotary meter measurement requirements.

Get maximum performance value with compact electronic precision and reliability. Use the MINI-MAX[®] or MINI-MAX[®]-AT to reduce your costs of gas measurement and enhance the efficiency of your rotary meter operations.

Features of integrated performance:

- **Small size** – 8” x 8 3/8” x 4-5/8”
- **Low power requirements** – 4 years+ on four D-cell alkaline batteries
- **Continuous LCD display** of corrected volume, updated on meter rotation
- **Programmable pulse lengths** – 2 Form-A volume and 1 Form-A alarm
- **Audit trail memory** – 40 days of daily (or 41 days of hourly if Mini-Max - AT) corrected volume, uncorrected volume, average pressure and average temperature
- **Complete volume correction** for pressure, temperature and supercompressibility (NX-19 OR AGA-8), selectable for live or fixed
- **Field programmable firmware** through serial port (flash memory)
- **Membrane pushbutton** and alphanumeric LCD for display of: test, uncorrected volume, corrected volume, live pressure, live temperature, battery voltage, and live flow-however, the display list is user configurable.
- **Programmable call-in** – scheduled and on alarms
- **Integrated pulse and temperature**
- **AMR mounting**



Mercury Instruments, Inc.

Specifications

Input volume

- Dual rotary sensor input
- Uncorrected volume displayed on LCD
- Uncorrected volume pulse counting continues for half hour with main battery removed
- Case sealed and electrically isolated from meter

Input pressure

- Precision strain gauge pressure transducer compensated to minimize ambient temperature effects
- Live LCD display of input pressure
- Standard transducer ranges:

Pressure Ranges (PSI)	(BAR)	Transducer Type
0-1	0.07	Gauge only
0-3	0.20	Gauge only
0-6	0.40	Gauge only
0-15	1.00	Gauge only
0-30	2.00	Gauge or Absolute
0-60	4.00	Gauge or Absolute
0-100	7.00	Gauge or Absolute
0-300	20.00	Gauge or Absolute
0-600	41.00	Gauge or Absolute
0-1000	70.00	Gauge or Absolute

Input temperature

- Highly stable solid-state temperature sensor in a sealed 3/16-in. diameter 6-in. long stainless steel probe directly into meter thermowell.
- Range: - 40 to 150 F (-40 to 65.5 C)
- Live LCD display of input temperature

Corrected volume

- Corrected to desired base pressure and base temperature
- Corrected for supercompressibility: NX-19 or AFA-8
- Selectable (metric and imperial) volume units
- Displayed continuously on 8-character x 1/2-in. LCD

Power

- 3.8 to 15.0 VDC
- Battery life: 4 years+ (with alkaline batteries)
- Half hour operation after batteries removed
- 2-month low battery warning (LCD displays HELP)
- LCD display of main battery voltage and alarms

Output volume

For data collection systems

- 2 Form-A for volume and 1 Form-A for alarms
- Software selectable pulse width (default = 62.5 msec)

Memory

- Audit Trail: Mini-Max: 40 days of daily data
Mini-Max-AT: 41 days of hourly data
- Flash: Resident firmware (serially upgradable)
- E²PROM: Resident pressure compensation coefficients, audit trail and critical calibration/configuration items values

Accuracy

Maximum error at reference conditions including linearity, repeatability and hysteresis

- Computation: ± 0.3% of corrected volume reading
- Pressure transducer: ± 0.4% of full scale
- Temperature sensor: ± 1.0 F
- Combined computation: ± 0.5% of full scale (pressure & temperature)

Ambient temperature effects

From - 40 to 150 F (- 40 to 65.5 C)

- Computation: ± 0.1% of corrected volume per 100 F

Long term stability

- Pressure transducer: ± 0.5% of full scale per year


Environmental conditions

- Ambient temperature: - 40 to 150 F (- 40 to 65.5 C)
- Ambient humidity: 0 to 100% noncondensing

Enclosure

- Aluminum case with reversable door
- Mounts left, right, horizontal or vertical
- White powder-coat paint
- Clear LCD viewing window
- Integral pushbutton for display list
- Mounting plate with gasket and bolts to interfrate with end of rotary meter
- Built in haep for lock

Certifications

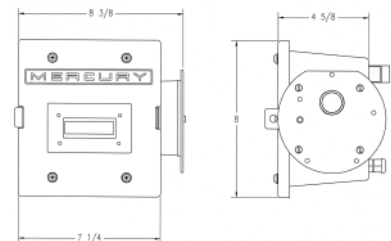
-  Class I, Zone 0, Group IIA or Class I, Zone 2, Group IIA
- Class I, Division 1, Group D or Class I, Division 2, Group D

Warranty

- 4 years

Weight and Dimensions

- 4 lbs. (1.8 kg) meter amount



Mercury Instruments, Inc.

3940 Virginia Ave. • Cincinnati, Ohio 45227 USA

Phone 513-272-1111 • Fax 513-272-0211

Web www.mercuryinstruments.com • e-mail info@mercuryinstruments.com

Quality precision instruments for the natural gas industry