

The Standard In Gas Volume Correction

A full-featured gas volume corrector with the ability to accept upgrades for future needs.



The MINI-AT electronic corrector offers you the standard for value and reliability that you have come to expect from Mercury plus new features with room to grow.

With the MINI-AT you get ...

- The same quality, durability, accuracy and service you get with all Mercury products
- Durable case, index, mounting bracket and measurement components that provide years of trouble-free service
- Great software your technicians already know or can easily learn
- 4-year warranty

Plus you get a state-of-the-art main board offering features gas companies have requested; for example:

- 140+ days of 10-item audit trail memory
- Flash memory upgrades (software file transfers to upgrade firmware)
- 38.4K BPS maximum data transfer rate
- Choice of built-in modems
- 3+ years battery life
- Alarm and scheduled call-in capability

And the MINI-AT gives you room to grow and adapt as your needs change. Some of the expansion capabilities include:

- Second pressure transducer (for monitoring pressure)
- Modbus protocol (optional add-on board)
- 4-to-20 mA output (optional add-on board)
- High Frequency Input (HFI) for turbine and ultrasonic meters



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Input volume

- Dual dry-reed switches—one pulse per each meter revolution
- Uncorrected volume totaled on the mechanical index and displayed on LCD

Input pressure

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

Pressure Ranges Transducer Type

(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
0-1500	100.00	Gauge or Absolute

Input temperature

- Highly stable solid-state temperature sensor in a sealed 1/4-in. diameter 9-in. long stainless steel probe with 6-ft armored conductor and 1/2-in. NPT slip-along fitting to match thermowell
- Range: - 40 to 170 F (-40 to 76.6 C)
- Live LCD display of input temperature

Corrected volume

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

Power

- 5.5 to 9.0 VDC
- Battery life: 3 years+ (with standard alkaline battery pack)
- On-board backup battery (3 AA alkaline cells)
- Lithium, AC or solar (optional)
- LCD display of main battery voltage, backup battery voltage and alarms

Output volume

For data collection systems

- Jumper selectable two Form-A or one Form-C pulse output
- Jumper selectable pulse width
- Uncorrected mechanical switch



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Quality precision instruments for the natural gas industry

Memory

- Audit Trail: 140+ days or hourly
- Event Log: 500+ records
- Alarm Log: 200+ records
- Flash: Resident firmware (serially upgradable)
- E²PROM: Resident pressure compensation coefficients and critical calibration/configuration values

Accuracy

Maximum error at reference conditions including linearity, repeatability and hysteresis

- Computation: ± 0.1% of corrected volume reading
- Pressure transducer: ± 0.25% of full scale
- Temperature sensor: ± 0.5 F
- Combined computation: ± 0.25% of full scale (pressure & temperature)

Ambient temperature effects

From - 40 to 170 F (- 40 to 76.6 C)

- Computation: ± 0.1% of corrected volume per 100 F
- Pressure transducer: ± 0.3% of full scale per 100 F
- Temperature sensor: No effect

Long term stability

- Computation: ± 0.1% of corrected volume per year
- Pressure transducer: ± 0.3% of full scale per year
- Temperature sensor: ± 0.2% per year

Environmental conditions

- Ambient temperature: - 40 to 170 F (- 40 to 76.6 C)
- Ambient humidity: 0 to 100% noncondensing

Enclosure

- Cast aluminum alloy, surface treated, baked enamel paint
- Lexan viewing window for uncorrected mechanical index and corrected volume LCD index
- Stainless steel door latch with padlock hasp
- Mounting plate with gasket and bolts to accommodate most meters

Certifications

- UL_{us} UL certified for Class I, Divisions 1 & 2, Group D
- CSA certified for Class I, Divisions 1 & 2, Group C & D

Warranty

- 4 years

