



M201 Enhanced Rotary Gas Meter Tester

Meriam's M201 has new features to make drop testing Rotary (Natural) Gas Meters even easier! New hardware options protect the M201 from one sided overpressure. Options include a 1/4 turn valve manifold and an integral push-to-read cartridge valve in addition to the traditional push-to-read valve manifold. More importantly, new operating features provide users with a live pressure display and more automation to make field use easier than ever before.

The new Measure Mode lets the M201 be used as a conventional differential pressure measurement device. Users will appreciate the live pressure display as they check the handheld's zero or observe DP across rotary gas meters. And when a drop test is made, the M201 uses an internal stop watch to measure the test length. The user only has to start and stop the test; the M201 reports both the test time and the average differential pressure measured during the test. Toggle the Min/Max key to see the minimum and maximum DP measured during the test.

With hundreds of original M201s at work in the field, Meriam recognizes that some customers will want to continue using the

legacy software to stay consistent within their company. The new M201 includes a Mode Selection menu option for Legacy or Enhanced modes – the users chooses which mode is best for them!

Accuracy

DN0028: $\pm 0.05\%$ FS 0-28" H₂O

DN0200: $\pm 0.05\%$ FS 0-200" H₂O

No temperature effect over the operating temperature range.

Engineering Units

Inches of H₂O (select 4° C, 20° C, or 60° F), PSI, mm of Hg, inches of Hg, mBars, Bars, kPa, kg/cm², cm of H₂O and user selectable scaling.

Media Compatibility

DN: Non-isolated differential sensor for clean, dry, non-corrosive gases.

Field Re-cal

The M201 can be recalibrated in the field for zero, span, and linearity. The user has the option to select a 1 point or 5 point calibration procedure. Users with accurate primary standards can calibrate their devices locally if desired.

Pressure Limits

Twice range on Differential (DN) units when pressurized on high side only and 150 PSI (10.5 Kg/cm²) static when applied to both sides of the sensor simultaneously.

Min/Max Capture

Capture speed is 10X per second.

Operation

A push-to-read or 1/4 valve assembly keeps HI and LO sides equalized during connection across meter. Turn M201 "ON" to get message "Press Hold to Acquire Data." Press "Hold" key to start test. User determines test time, ending test by pressing the "Hold" key again. Display will show the test time and averaged differential pressure across the meter during the test. Press the "Hold" key again to start a new test.

Auto Shut-Off

User selectable shut-off. Programmable at 10, 20, 30, 45, 60 minutes and disable.



Measure Mode has
Live DP Display



Test Mode Includes Live
DP Readings



Test Results Display –
Test Time over Average DP



Test Results Min/Max –
Min/Max over Average DP

Technical Specifications

Base Unit

14 ounce (6.9" X 3.8" X 2.3") polycarbonate, permanently dissipative, ESD protection.

Keypad

Sealed membrane type with 5 dome contact style buttons.

Display

5 significant digit LCD (0.25" high) 2 line x 16 alphanumeric characters with contrast adjustment. Backlight included.

Power

4 each AA batteries providing over 100 hours of continuous use.

Wetted Parts

DN: 316L SS, brass, viton

Connections

1/8" female NPT, 316L SS

NIST Traceable Accuracy

DN0028: $\pm 0.05\%$ FS 0-28" H₂O

DN0200: $\pm 0.05\%$ FS 0-200" H₂O.

Ordering Information

Model No & Description

ZM201 - (specify pressure range) - Rotary Gas Meter
Tester (available with DN0028 or DN0200 sensor range)

All Models Include

- Protective Red Boot
- 4 AA Alkaline batteries
- Hard copy user's manual

Temperature Specifications

Storage: -40° F to 140° F (-40° C to 60° C)

Operating: 23° F to 122° F (-5° C to 50° C) I.S. Models
-4° F to 122° F (-20° C to 50° C) G.P. Models

Pressure Sensor Ranges

0-28.000" H₂O Differential

0-200.00" H₂O Differential

Order Options

Intrinsic Safety Certification (ATEX and cULus)

Z9P000107	Hard Carrying Case
ZA36853	Push-to-Read Valve Manifold
Z9A000001	Integral Push-to-Read Valve
Z9A156	1/4 Turn Valve Manifold
A900016-90727	Pete's Plug Adapter Kit Y8" Needle

A900016-90733 Pete's Plug Adapter Kit Y16" Needle

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Certifications



Optional ATEX I.S.

Ex ia IIC T4

DEMKO 06 ATEX 0615699 IP 40

Class I, Div.1 Groups A,B,C,D, T4

Intrinsically Safe, Exia

Class I, Zone 0, AEx ia IIC T4

Class I, Zone 0, Ex ia IIC T4

-5 C < Ta < +50 C

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