

230-M202 Handheld Barometer-Altitude



- Easy to use
- Rugged and sensitive
- Highly accurate
- Ideal portable pressure reference for weather station site certification and production process monitoring
- Displays station or sea level pressure
- Altitude in feet or meters
- NIST certificate included
- CE compliant

The **230-M202 Handheld Digital Barometer-Altitude** combines accurate pressure sensing with the power of microprocessor-based computations to provide instantaneous pressure and altitude readings. A combination of small size, digital display, versatility, and high accuracy make it ideal for field measurements or as a portable pressure reference.

Keypad controls provide access to the operating functions. Pressure or altitude may be displayed in a variety of units. The LCD display shows the data output and operating mode. Data logging mode stores up to 240 readings for future recall. The unit is powered by four AA alkaline batteries (included) which provide approximately 100 hours of continuous use.

The 230-M202 includes features for minimum and maximum (Min/Max) value capture, tare readings, and user selectable engineering units. A selectable altitude function allows users to enter site altitude above sea level in order to display local barometric pressure or barometric pressure corrected to sea level. User referenced altitude (referenced to map or trig markers) or altitude based on US Standard Atmosphere of 1962 can be selected for display. Using the altitude function with the Min/Max and Tare features makes the 230-M202 very useful for accurately measuring changes in altitude.

This instrument measures atmospheric pressure very accurately, to within 0.015" Hg. The 316 stainless steel pressure sensor has extremely low sensitivity to shock, vibration, acceleration, and changes in orientation or temperature, yet features high sensitivity to pressure variations. The device is temperature compensated over its operating temperature range. Each unit comes with a certificate of calibration traceable to NIST.

Specifications

Units	Full Scale	Accuracy	Resolution
Pressure			
mm Hg	1000	± .15	.1
in Hg	39.37	± .01	.001
mb	1333	± .2	.1
kPa	133	± .02	.01
psi	19.33	± .01	.001
Altitude			
feet	36,000	± 9	1.0
meters	10,973	± 3	1.0

Approvals: CE compliant
 Display: 5 significant digit LCD (0.25" high)
 2 line x 16 alphanumeric characters
 NIST traceability: NIST certificate supplied
 Power: 4 AA alkaline batteries (included) with user enabled automatic shut-off
 Temperature:
 Storage: -40° to +140° F (-40° to +60° C)
 Operating: 23° to +122° F (-5° to +50° C)
 Process connections: 1.8" female NPT, 316SS
 Enclosure: 14 ounce (6.5" x 3.6" x 2.25") ABS plastic case
 Media compatibility: Isolated AI sensor for fluids compatible with 316SS
 Pressure limits: 77 PSIA (4,000 mm Hg Abs)
 Tare: Nulls applied pressure to allow measurement of vacuum, gauge pressure, or change in pressure or altitude from a reference point
 Min/Max capture: Capture speed is equal to the selected damping rate
 Damping rates: User selectable from 0.1 to 25 seconds
 Backlight: Green, changes to Red for over pressure
 Engineering unit selection: mm Hg, PSI, in Hg, mbar, bar, kPa, Torr
 Altitude: Displayed in feet or meters. Can be set by user based on map or trig marker information or standard altitude uses U.S. Standard Atmosphere of 1962 data
 Contrast Adjustment: Adjusts display for best viewing
 Accuracy: (Full Scale = 38.674 PSIA or 2,000 mm Hg Abs)
 ± 0.015% F.S. from 0-1,000 mm HgA
 ± 0.025% F.S. 0-1,000 - 2,000 mm HgA
 Field recalibration: Supported through firmware feature
 Weight/shipping: 1.6 lb/3 lbs

Ordering Information

230-M202 Handheld Digital Barometer-Altitude includes NIST certificate and protective boot