

# NEO



## Photo Ionization Detectors



The NEO is one of the most advanced handheld VOC (Volatile Organic Compound) monitors available for ppb (parts per billion) detection. The NEO offers several models from the most sensitive 1ppb to a high range up to 20000 ppm for different applications and user selections. A novel design of Photo Ionization Detector (PID) and Ultra Violet (UV) lamp significantly reduces interferences due to humidity. Options include real-time data monitoring with a built-in wireless modem at mPower Suite application software.

### Features

- Size: 9.06 x 3.15 x 2.36 in (230 x 80 x 60 mm), Weight: 24.69 oz (700 g)
- 1ppb to 20000 ppm ranges of VOC
- Reduced interference due to humidity
- 3 seconds response time for 90% change
- Large and intuitive display
- Integrated correction factors list of more than 200 compounds
- Built-in pump achieving up to 30 meters sampling distance
- Man Down Alarm with real-time remote wireless notification
- ISM wireless connection option
- Easy for service and maintenance
- Micro-USB charge port

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# NEO Specifications

## Detector Specifications

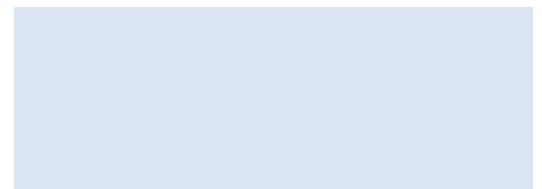
Size	9.06 x 3.15 x 2.36 in (230 x 80 x 60 mm)
Weight	24.69 oz (700 g)
Sensor	Photoionization sensor with standard 10.6 eV lamp
Battery	Rechargeable Lithium-Ion battery
Keypad	4 operation keys
Sampling	Built-in pump
Display	128 x 128 graphical LCD, 1.77 x 1.73 in (45 x 44 mm), with LED backlight for enhanced display readability
Direct Readout	Real-time reading of gas concentration (ppb, ppm, mg/m3, µg/m3) PID measurement gas and correction factor, lamp on/off, Man Down Alarm on/ off, battery status, pump status, datalogging on/off, wireless on/off, temperature and time
Alarms	Wireless remote alarm notification, audible (90dB@30cm), visual (flashing bright red LEDs), and on-screen indication of alarm conditions Man Down Alarm with pre-alarm and real-time remote wireless notification High, Low, STEL, TWA alarms Over range alarm, battery low alarms
EMI/RFI	Highly resistant to EMI/RFI Compliant with EMC Directive 89/336/EEC
IP Rating	IP66/67
Operating Hours	24 hours typical
Datalogging	Standard 12 months at one-minute intervals Storage interval: 1~3600 seconds (adjustable)
Calibration	Two/three-point calibration
Sampling Pump	Internal, integrated flow rate at 250 cc/min Sample from 100 ft (30 m) horizontally and vertically
Low Flow Alarm	Auto pump shutoff at low-flow condition
Charging and Communication	Charging, data download, instrument setup and firmware upgrades on PC or laptop via Micro USB Wireless data and alarm status transmission via built-in RF modem
Correction Factors	Integrated Correction Factors list of more than 200 compounds
Wireless Range	1000 ft or 300 m typical
Safety Certifications	UL/cUL: Class I, Div 1, Group A, B, C, D T4, -20° C ≤ Tamb ≤ +50° C (pending)
Temperature	-4° to 113° F (-20° to 50° C)
Humidity	0% to 95% relative humidity (non-condensing)
Attachments	Durable rubber boot, color coded for different models
Warranty	2-year warranty including lamp and sensor

## Sensor Specifications

Lamp	10.6 eV
Accuracy	±3% (at calibration point)
Response Time t90	3 seconds

Model Numbers	VOC Range	Resolution
MP186	200ppm	1ppb
MP181	5000ppm	10ppb
MP184	15000ppm	1ppb
MP182	15000ppm	10ppb

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