

Ozone Monitor Models 106-L, 106-M and 106-H



Standard Enclosure



NEMA Enclosure



OEM Version

For industrial ozone applications, 2B Tech offers the Model 106-L, 106-M and 106-H Ozone Monitors, where L, M and H refer to Low (0-100 ppm), Medium (0-1000 ppm) and High (0-20 wt%) ozone concentrations, respectively. These instruments have different optical path lengths in order to accommodate this extremely wide range of ozone concentrations, spanning more than eight orders of magnitude. Additionally, the Model 106-H was designed with a flow through path that can be pressurized to up to 50 psi for in-line measurements with ozone generators. All three models are available in either a standard enclosure or NEMA enclosure.

The Model 106 series was designed as an "ozone monitor on a board" in which nearly all of the components are mounted directly to the printed circuit board. Thus, the Model 106 may be purchased without the enclosure for OEM applications. See: [Model OEM-106](#).

Specifications for Different Optical Benches

Model	Range	Resolution	Precision & Accuracy
OEM-106-L	0-100 ppm	0.0001 ppm (0.1 ppb)	Higher of 2 ppb or 2% of reading
OEM-106-M	0-1000 ppm	0.01 ppm	Higher of 0.01 ppm or 2% of reading
OEM-106-H	0-20 wt%	0.01 wt%	Higher of 0.01 wt% or 2% of reading

General Specifications

Measurement Principle	UV Absorption at 254 nm
Measurement Interval	10 s for Models 106-L & 106-M, 2 s for Model 106-H
Data Averaging Options	10 s, 1 min, 5 min, 1 hr
Flow Rate	~1 Liter/min; Up to 20 L/min for Model 106-H
Data Storage	32,736 lines (10 s avg. = 3.7 days; 5 min avg = 113 days)
Choice of Units	ppb, ppm, pphm, $\mu\text{g m}^{-3}$, mg m^{-3} (vol%, wt% air, wt% O ₂ for Model 106H)
Data Outputs	USB, RS232, 0-2.5 V Analog, 4-20 mA, LCD Display
Power Requirements	12 V, 500 mA, 6 watt
Size	3.75 x 8.5 x 8.5 inches (9.5 x 21.6 x 21.6 cm)
Weight	4.5 lb (2.0 kg)

Features

- Measurement based on UV absorption
- Low power consumption; can be battery operated
- Internal data logger with real time clock
- On-board microprocessor with interactive menus includes data averaging options of 10 s, 1 m, 5 m and 1 hr
- USB and RS-232 output of time/date, O₃ concentration, internal temperature and pressure
- Analog output (0-2.5 V and 4-20 mA) of ozone concentration in user selected units
- Two level relay for control purposes (e.g., control of ozone source or turn warning light on and off)
- Long-life pump (15,000 hr) for Models 106-L and 106-M