

Ozone Primary Standard Model 6030PS



Overview

The Model 6030 Ozone Primary Standard is NIST traceable and provides an accurate and convenient means of measuring low levels of ozone in ambient air.

Using the Beer-Lambert law, ozone is measured in a single photometric cell by detecting the absorption of ultraviolet (UV) radiation from ozone molecules at a wavelength of 254 nm.

Real-time comparison of the UV light intensity for the sample gas to the reference gas yields a precise concentration of ozone.

The single cell design reduces the complexity of the ozone measurement and automatically eliminates zero drift.

Advanced, easy to use, menu-driven software allows access to sample conditions and diagnostics and the strip chart feature allows the user to view a time series plot for ozone readings.

The 6030 Ozone Primary Standard offers a bright color display, data logging capability and advanced communications via Ethernet, USB and RS-232/485

Standard Features

- ▶ Ranges: 0-50 ppb to 0-10 ppm
- ▶ Minimum output concentration 5 ppb
- ▶ 8 second cycle time for fast response
- ▶ Large color TFT LCD display
- ▶ Various user interface options including touch screen, front panel keypad, external keyboard and mouse
- ▶ Menu driven software
- ▶ Ethernet, USB and RS-232/485 ports
- ▶ Front panel USB connections for peripheral devices and firmware updates
- ▶ Four independent analog outputs with flexible ranges
- ▶ 8 digital input/outputs (I/Os)
- ▶ Automatic temperature and pressure compensation
- ▶ Comprehensive internal data logging
- ▶ Modbus protocol

Optional Features

- ▶ Internal Ozone Generator
- ▶ Zero/Span ports

SPECIFICATIONS

Specifications subject to change without notice

EPA Approved Ranges	0-50 ppb, 0-500 ppb or 0-1 ppm
Noise	< 0.3 ppb
Lower Detectable Limit	< 0.4 ppb
Zero Drift	< 1.0 ppb per month
Span Drift	< 1% per month
Cycle Time	8 seconds (4 sec. each half-cycle)
Precision	< 0.5% of Reading
Linearity	< 1% of Full Scale
Sample Flow Rate	0.5 to 1 Liter per Minute (LPM)
Operating Temperature	5° to 45°C (with EPA Equivalency)
Operating Humidity	0 to 90% (Non-condensing)
Power Requirements	Universal Power Supply, 90-264 VAC, 100 VA, 50/60 Hz
Voltage Output Ranges	0.1V, 1V, 2V, 5V, 10V, user selectable
Input/Output Ports	Rear Panel: Ethernet, USB Device, USB Host (2), RS-232/485 (2)
Physical Dimensions (H x W x D)	5.25 in. x 17 in. x 22.5 in. (133 x 432 x 571.5 mm)
Weight	23 lbs. (10.3 kg)