

Model 49i-PS Ozone Primary Standard

UV Photometric Primary Standard with enhanced communication capabilities for Calibration of Ozone analyzers and transfer standards.



A change is in the air

The industry's new best-of-breed. Our customers told us exactly what they're looking for in a gas monitoring solution: reliability, simplicity, ease of use. The new *i*Series platform delivers on all counts - and then goes a step farther.

One of the critical calibration accessories in Thermo's new *i*Series product line is the Model 49i-PS O₃ primary standard.

Using UV Photometric technology, the Model 49i-PS is able to produce ozone at a rate of up to 5000 ppb. The Model 49i-PS is a dual cell photometer, the concept adopted by the NIST for the national ozone standard.

The Model 49i-PS can operate with ozonator flow rates of up to 6 liters a minute. Because the instrument has both sample and reference flowing at the same time a response time of 20 seconds can be achieved.

Temperature and pressure correction are standard features. User settable alarm levels for concentration and for a wide variety of internal diagnostics are available from an easy to follow menu structure.

This state-of-the-art gas analyzer offers features such as an ethernet port as well as flash memory for increased data storage and field upgradability.

Ethernet connectivity provides efficient remote access, allowing the user to download measurement information directly from the instrument without having to be on-site.

You can easily program soft-keys to allow you to jump directly to frequently accessed functions, menus or screens. The larger interface screen can display measurement information and status, while viewing menu and operational screens.

Key Features

- ◆ Ethernet connectivity for efficient remote access
- ◆ Enhanced user interface with one button programming and large display screen
- ◆ Flash memory for increased data storage and user downloadable software
- ◆ Enhanced electronics design optimizes product commonality
- ◆ Improved layout for easier accessibility to components

To maintain optimal product performance, you need immediate access to experts worldwide, as well as priority status when your air quality equipment needs repair or replacement. Thermo Scientific offers comprehensive, flexible support solutions for all phases of the product lifecycle. Through predictable, fixed-cost pricing, Thermo services help protect the return on investment and total cost of ownership of your Thermo Scientific air quality products.

Product Specifications

Preset Photometer Ranges	0-0.05, 0.1, 0.2, 0.5, 1.0, 0.2, 0.5, 1.0, 2.0, 5.0 ppm 0-0.1, 0.2, 0.5, 1.0, 2.0, 5.0, 10.0 µg/m ³
Custom Ranges	0-0.05 to 5 ppm 0-0.1 to 10 µg/m ³
Zero Noise	0.25 ppb RMS (60 second averaging time)
Lower Detectable Limit	0.50 ppb
Response Time	20 seconds (10 second lag time)
Precision	1.0 ppb
Linearity	+/-1% full scale
Sample Flow Rate	1-3 liters/min.
Operating Temperature	0°C - 45°C
Power Requirements	100 vac, 115 vac, 220-240 vac +/-10% @ 150W
Size and Weight	16.75"(W) x 8.62"(H) x 23"(D), 55 lbs. 425 mm (W) x 219 mm (H) x 584 mm (D), 25 kg
Outputs	Selectable Voltage, RS232/RS485, TCP/IP, 10 Status Relays, and Power Fail Indication (standard). 0-20 or 4-20 mA Isolated Current Outout (optional)
Inputs	16 Digital Inputs (standard), 8 0-10vdc Analog Inputs (optional)
Ozonator Output	.025 - 1.000 ppm @ 3-4 LPM
Ozonator Response	1 minute to 98% or 5 ppb of final value, whichever is greater
Stability	+/- 4 ppb or +/- 1% or reading, whichever is greater

Ordering Information

Model 49i -PS O₃ Primary Standard

Choose from the following configurations/options to customize your own Model 49i-PS

Voltage options:

A = 120 Vac 50/60 Hz (standard)
B = 220 Vac 50/60 Hz
J = 100 Vac 50/60 Hz

Zero Air Source

N = No Zero Air Source (standard)
Z = Zero Air Source (External Pump)

Optional I/O:

A = None (standard)
C = I/O expansion board
(4-20mA outputs - 6 channels, 0-10v inputs - 8 channels)

Mounting Hardware:

A = Bench mounting (standard)
B = Ears & handles, EIA
C = Ears & handles, Retrofit

Your Order Code: 49iPS - _ _ _ _



Lit_49iPSEID_9/05

Other options:

- Teflon particulate filter
- Rack mounts
- Rear extender
- Terminal Block Kit & Cable 37 pin
- Terminal Block Kit & Cable 25 pin
- Cable, DB37M to open end, 6' LG.
- Cable, DB37F to open end, 6' LG.
- Cable, DB25M to open end, 6' LG.
- Cable, RS232 Null Modem

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