

# Thermo Scientific Model 49i-PS Ozone Primary Standard

UV Photometric Primary Standard for the calibration of ozone analyzers and transfer standards

The Thermo Scientific™ Model 49i-PS Ozone Primary Standard utilizes UV Photometric technology to produce ozone at a rate of up to 5000 ppb.

- 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



The Thermo Scientific Model 49i-PS analyzer is a dual cell photometer, the concept adopted by the NIST for the national ozone standard.

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

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

This state-of-the-art gas analyzer offers features such as an Ethernet port and a 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 short-cut 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.



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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, 10.0µg/m <sup>3</sup>
Custom Ranges	0-0.05 to 5 ppm 0-0.1 to 10µg/m <sup>3</sup>
Zero Noise	0.25 ppb RMS (60 second averaging time)
Lower Detectable Limit	1.0 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	32° F to 113° F (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 Output (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 Ozone Primary Standard

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

#### 1. Voltage options:

A = 120 VAC 50/60 Hz (standard)  
B = 220/240 VAC 50/60 Hz  
J = 100 VAC 50/60 Hz

#### 2. Zero Air Source

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

#### 3. Optional I/O:

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

#### 4. Mounting Hardware:

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

#### Other options:

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

Your Order Code: Model 49i-PS - \_ \_ \_ \_

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. We offer comprehensive, flexible support solutions for all phases of the product life cycle. Through predictable, fixed-cost pricing, our services help protect the return on investment and total cost of ownership of your Thermo Scientific products.

For more information, visit our website at [thermoscientific.com/ambient](http://thermoscientific.com/ambient)

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This product is manufactured in a plant whose quality management system is ISO 9001 certified.

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