

MODEL 465H

# Process Ozone Monitor



- >> Standard one year warranty
- **UV** Absorption Method
- Microprocessor controlled
- Menu driven software
- Ranges 0-5 to 0-25% w/w
- Built-in diagnostics
- >> Self-check warning alarms
- Fast response times
- Minimal zero drift
- >> Programmable auto-zero function included
- Programmable concentration alarms
- Temperature and pressure compensation (standard)
- Optional Ethernet

The Model 465H is a microprocessor based high concentration ozone monitor for measuring ozone in process gas streams in water treatment, food processing, and research applications. The 465H has been designed to give accurate and stable readings over long time periods with little or no maintenance or calibration. The Model 465H is available in a 19" rack mount or NEMA 4X wall mount enclosure.

The sensor module contained in the Model 465H uses detectors which have a very narrow band of spectral sensitivity, eliminating the need for UV band pass filters which are subject to deterioration by UV or humidity. Two detectors are used: one for the ozone measurement, and the other to compensate for changes in UV lamp intensity. This unique design provides a sensor which will operate for extended periods without calibration or maintenance.

Built-in diagnostics provide warning signals in case operating parameters are out of range. Test values can be viewed while the Model 465H is operating. These displays, warnings, and self-diagnostics, along with the modular design, allow maximum uptime. In addition, any function that can be set or monitored from the front panel can be remotely set or viewed through the bidirectional RS-232 port.

FREE Customer Support by telephone and email for the life of the instrument



## MODEL 465H Process Ozone Monitor

## Specifications

Measurement Principle: UV Absorption (Beer Lambert Law)

0-5% w/w to 0-25% w/w Ranges:

0-100g/Nm3 to 0-400g/Nm3

Measurement Units: % w/w, g/Nm<sup>3</sup> ± 1% of Full Scale Accuracy: Precision/Repeatability: ± 0.5% of Full Scale Display Resolution: 0.01 % w/w, 0.1 g/Nm3 Response Time: <30 seconds to 95%

Compensation: Pressure, Temperature (NTP = 273.15K,

760mmHg)

Gas Inlet Pressure Range: 3.0 - 30.0 psig Gas Flow Rate: 0.2 - 2.0 LPM 5-45°C Temperature Range:

Rack Mount - 5.22" (133 mm) x Dimensions (H x W x D):

19" (483 mm) x 18.6" (473 mm)

NEMA 4X - 19.5" (495 mm) x 15.59" (396 mm) x 6.90" (175 mm)

Weight: Rack Mount - 13.3 lbs (6.0 kg)

NEMA 4X - 15.0 lbs (6.8 kg) 110-240V~, 50/60Hz, 74W Max

0-5V or 4-20mA isolated output Analog Output:

Status Outputs: System OK, Invalid Reading, UV Lamp

**Additional Options:** 

☐ Rack Mount

☐ NEMA 4X Enclosure

☐ Ethernet (MODBUS TCP/IP)

RS-232

Power:

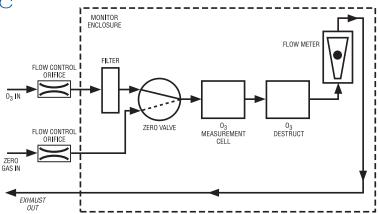
(Optional RS-485): 57.6 Kbaud, DB-9 connector

Approvals:

IP65 (NEMA 4X) Degree of Protection:

(NEMA)

## Schematic



## How to Order

#### Model 465H includes:

- Standard one year warranty
- Flow control orifices
- Temperature and pressure compensation
- Analog output
- Status outputs
- RS232 (MODBUS RTU)
- Flowmeter
- Ozone Destructor
- Auto-Zero Valve

#### Specify range:

- □ 0-5% w/w ☐ 0-100 g/Nm<sup>3</sup>
- ☐ 0-200 g/Nm³ □ 0-10% w/w
- □ 0-15% w/w
- - ☐ 0-300 g/Nm<sup>3</sup> ☐ 0-400 g/Nm<sup>3</sup>
- □ 0-20% w/w
- □ 0-25% w/w

#### Specify output voltage:

□4-20mA

#### □ 0-5V

Specifications subject to change without notice. Printed documents are uncontrolled. SAL000020 B (DCN 5244) M465H/12/08/08.



### TELEDYNE INSTRUMENTS Advanced Pollution Instrumentation

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