

OMD

Optical Methane Detector - Increase Speed, Accuracy and Productivity

The Optical Methane Detector (OMD™) was specifically designed for the mobile inspection of buried natural gas distribution, transmission and gathering pipelines. This field proven technology combines sensitivity, selectivity and speed through the use of optics and electronics.

Field experience has proven that given adequate survey and meteorological conditions the OMD increases productivity 50% or more over current mobile survey. A contributing factor to the increased productivity is the instantaneous response to leak indications versus the time delay present with current flame-ionization technologies. Much of the maintenance associated with flame-ionization units, including moving parts, external fuel gases, outside sources of dust, dirt, moisture and water ingress, is eliminated with the OMD.

The OMD is mounted on the front of a survey vehicle. It employs an infrared (IR) light beam that shines across the front of the vehicle. An optical filter in front of the detector transmits methane IR wavelengths from the light source. In the absence of methane, these wavelengths are unaffected and produce a steady output signal from the detector. The presence of methane causes a signal, audio and visual, which is transmitted to the display in analog and digital form inside the vehicle. The OMD can detect leak indications in concentrations of less than 1 part per million (ppm) at 10,000 measurements per second.





The OMD operates reliably under a variety of environmental conditions including inclement weather, wind and temperatures from -20° F to +110° F. The OMD's sensitivity is not affected by small fluctuations in the light beam caused by reasonable amounts of dust, dirt, water or snow. An internal calibration check cell is included so the operator can verify proper operation from the vehicle cab at any time before, during or after the survey, as well as alerting the operator if conditions are not optimal.

Installation on various types of survey vehicles is very simple and can normally be accomplished in a matter of hours. All cables are provided with the OMD including the power cable to operate the unit from the survey vehicle's 12 volt battery. An RS232 port is available whereby a personal computer may be connected to acquire and save survey data.

The OMD was designed and tested in a Gas Technology Institute (GTI) program.

Visit our website at www.heathus.com for customer testimonials and comparison documentation.



Configuration:

Sensitivity: 1 PPM / meter CH₄ at 25

MPH

Double ended

Measurement Range: 1 to 200 PPM

Display Ranges: 10, 30 and 90 PPM

Self Test: During boot up

Calibration Test: Via operator, self contained

Calibration: Via RS-232 through

software

Base Line Compensation: Via RS-232 through

software

Display: Backlit 1.5" x 5.125" graph-

ics LCD

Operator Interface: Sealed membrane switch

overlay

Operator Alarms: Audible with adjustable set

point

Signal: High pitch increases with

concentration

Error: Low pitch for Warm up, Low

Light, Failure & Battery Low

System Power: 60 watts @ 12 VDC

System Voltage: 10-16 VDC

System Weight:

External Sub-Systems: 17 pounds
Power Box: 6 pounds
Cables 4 pounds
Internal Display: 3 pounds

Mechanical Mounting: Strut bracket mount Installation Time: 2 hours (typical)

External Housing Rating: NEMA 35 and IP 54

Display Housing Rating: Spill proof

External Sub-System Materials: Aluminum and plastic

Environmental PCB Control: Conformal PCB

coating

Operating Temperature Range: -22 °F to 122 °F
Operating Humidity Range: 5 to 100% RH

HOW TO ORDER

Part No. 2500100 - OMD, Complete, 32" Crossbar (plus 6")
Part No. 2500300 - OMD, Complete, 51" Crossbar (plus 6")
Part No. 2500400 - OMD, Complete, 63" Crossbar (plus 6")

Heath Consultants Incorporated operates under a continual product improvement program and reserves the right to make improvements and/or changes without prior notification.



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