

The Mercury Vapor Indicator (MVI) is a revolutionary instrument accurately detecting hazardous mercury vapors in just 3 seconds. The instrument's unique advantage is its dual beam UV absorption technology and ability to measure high concentrations of mercury without saturating; requiring no regeneration between readings, eliminating downtime. MVI provides continuous readings and offers two detection ranges: 0.1 to 200 and 1.0 to 1999 microgram/cubic meter, ideal for time weighted average (TWA) monitoring.



#### ITEM | MERCURY VAPOR MVI | INDICATOR



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### **KEY FEATURES & BENEFITS**

FEATURES	BENEFITS
Fast Indication	Responds in as little as 3 seconds
Highly Accurate	Reads within +/- 5 micrograms
No Saturation/Regeneration	Eliminates downtime
Powerful Battery	Runs continuously for over 5 hours on one charge
Ergonomic	Portable simple one-handed operation
Durable	Robust and withstands harsh environments
Low Cost Operation	Inexpensive consumables and parts
Digital Display	Clearly indicates level of Mercury present
Intuitive	Easy to use - minimal training required

## **APPLICATIONS INCLUDE**

- Manufacturing
- Recycling
- Fluorescent lamp reprocessing plants
- Mining
- Petroleum
- Hydrocarbon
- Refining
- Bioremediation

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#### **TECHNICAL SPECIFICATIONS**

SPEC NAME	SPECIFICATION DETAIL
Detector	Dual Beam Ultraviolet Absorption Module
Accuracy	+/- 5 micrograms or +/- 10% reading
Operation	Gives real-time mercury vapor concentrations
Sample Type	Extractive pump pulls sample to the device
Alarm	Audible Alarm (preset to 20 microgram/cubic meter)
Instrument Range	0.1 to 200 and 1.0 to 1999 microgram/cubic meter
Operating Temp.	50°F - 122°F   10°C - 50°C
Dimensions	5.7"H x 11.6"W x 3.1"D
Shipping Weight	7 lbs.
Repeatability	+/-5% FSD @ 1 gram/cubic meter
Batteries	NiMH - lasts up to 5 ½ hours from full charge
Power	NiMH
Response	3 Seconds

### **CROSS SENSITIVITIES**

The MVI detector operates on the principle of UV light absorption. There are additional substances, other than Mercury, which will also cause light absorption. These substances are known as cross-sensitive vapors.

Some of the cross-sensitive vapors are various hydrocarbons, Sulphur compounds, and particulates such as smoke. There is no measurable crosssensitivity from Carbon Monoxide, Carbon Dioxide, and Ammonia. High concentrations of water vapor will give readings between 5-10 micrograms/cubic meter. However, if the MVI is zeroed at a similar humidity, this will not be seen under normal variations in the ambient atmosphere.

Table of cross-sensitive substances at 100 ppm:

<u>Compound</u>	<u>Readings in µg/m³</u>
Benzene	20
Toluene	3.5
Acetone	3.0
Ethyl Alcohol	6.0
Ethyl Acetate	3.0

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### **REALIBILITY & SUPPORT**

DOD Technologies is the leader in low level gas detection. We understand the value of your production, and we know that false alarms can cost millions of dollars in lost productivity. That's why we've partnered with other high-quality manufacturers to offer a product line with an enhanced standard of accuracy and reliability. We have a worldwide network of service engineers who are knowledgeable and passionate about gas detection. Our portfolio includes fixed systems, portable gas detectors, controllers, systems integration and onsite field services.



Distributed by: DOD Technologies 675 Industrial Drive Cary, IL 60013



(815) 205-1590



solutions @dodtec.com