

# Advanced Environmental Instrumentation

## Harnessing the Power of Mobile Computing



✓ Surveyed

✓ Documented

✓ Reported



**Example screens**

**Live Graph**

Logging: LEED Flush-Out Test

Min 474; Max 1003 µg/m3

Options Select

TVOC µg/m3

**Realtime**

File	Log	Probe	View
TVOC		462	ppb
Ozone		0.49	ppm
Ammonia		1.2	ppm
Hydrogen Sulfide		0.40	ppm
Temperature		24.4	°C
Relative Humidity		29.3	%RH
Toluene		245	ppb

probe calibration history

**VOC Compound Details**

Toluene

Chemical Formula: C7H8  
 Alternate name(s): Methylbenzene, Phenylmethane  
 Calibration Correction Factor: 0.53  
 OSHA PEL: 200ppm

Common Source(s): IAQ: (very common)  
 Nail polish, paints, paint thinners, lacquers, adhesives, rubber cement, inks, fabric dyes, cosmetics, auto exhaust, gasoline, kerosene, heating oil, cigarette smoke, Industrial: rubber mfg, leather tanning, printing processes

Add to Display Cancel

attached video note

attached field (template) note

attached text note

**Audio Notes**

File	Log	Probe	View
Barometric		0.992	atm
TVOC		1532	µg/m3
Chlorine		3.14	mg/m3
Nitrogen Dioxide		0.70	mg/m3
Sulfur Dioxide		3.2	mg/m3
Temperature		72.2	°F
Relative Humidity		20.2	%RH

Audio Note

FRASE

Live: Welding Shop

**AdvancedSense Environmental Test Meter**

File	Log	Probe	View
TVOC		50.3	ppm
CO2		5.49	ppm
HCl		1.3	ppm
HCN		0.6	ppm
Temp		21.6	°C
RH		18.9	%RH

Live: Mfg Floor

**On-board Video Help**

Allow gas to flow 2-3 minutes

# ADVANCEDSENSE<sup>®</sup> TVOC

# DIRECTSENSE<sup>®</sup>

Multi-Gas PID Meters



**GRAYWOLF<sup>®</sup> SENSING SOLUTIONS**  
 PH. 1-203-402-0477  
 FAX: 1-203-402-0478

EMAIL: SALESTEAM@GRAYWOLFSENSING.COM

WEBSITE: WWW.GRAYWOLFSENSING.COM

GrayWolf is transforming how to Measure, Data-Log and Report on worker and general environmental exposure levels. The AdvancedSense TVOC is a powerful data collection tool, packed with on-board application information and advanced documentation features; highly intuitive and Easy-To-Use.

- VOCs, %RH, °F/°C and up to 3 specific gas sensors per probe
- Choice of PID sensors optimized for ppb or ppm VOC concentrations
- On-board list of 250+ compounds detected by the PID sensor
- On-screen info about common VOCs including typical indoor air sources, worker exposure limits and much more...
- Response factors for common compounds; corrected specific VOC values may be displayed and logged
- Productivity tools: voice notes, text notes, data file linked photos and more...
- WolfSense PC desktop data transfer & analysis software included
- Optional WolfSense ARG software for easy, efficient, detailed, professional reports



# ADVANCEDSENSE® DIRECTSENSE® TVOC

Multi-Gas PID Meters

TG-502, TG-503 VOC Probes

**SPECIFICATIONS:**

- VOCs (SEN-A-VOC-PPM PID sensor, 10.6eV lamp) Range: 0.1 to 10,000ppm  
10.6 eV PIDs do not respond to VOCs with ionization potentials >10.6, such as methane (which at ~2ppm background is typically preferable *not* to measure), ethane or formaldehyde. However, they do respond to the vast majority of VOCs. Standard calibration is to Isobutylene. Users may calibrate to alternative VOCs.
- VOCs (SEN-B-VOC-PPB PID sensor, 10.6eV lamp) Range: 5 to 20,000ppb  
(user selectable units: ppb, ppm, µg/m3, mg/m3)
- Carbon Dioxide (TG-503 only) Range 0 to 50,000ppm, 0 to 5%  
Accuracy ±3%rdg ±150ppm (alt 0-10,000ppm range; Acc ±3%rdg ±50ppm)
- Relative Humidity: Range: 0.0 to 100.0 %RH  
Accuracy: ±2%RH <80%RH (±3%RH>80%RH)
- Temperature: Range: 5.0° to 160.0°F (-15° to +70°C)  
Accuracy: ±0.3°C
- Response Time: VOC, %RH, CO2 and °F/°C sensors  
All exhibit 90% response <1 minute
- Probe Dimensions: 2in. (5cm) dia. x 12.5in. (30cm) lgth.  
Weight (probe): w/batteries 1lb. 10oz. (0.7kg)
- Probe Power: 2 x D cells; typical battery life 120+ hrs (60+ hrs for TG-503)  
Alternatively, power the sensors continuously from the meter/mobile PC or auto-switch when probe batteries are <20%
- Operating Range: 0 to 90 %RH (non-condensing), -15°C to 60°C  
Specific gas sensors may have a reduced operating range
- PC Software Req's: Windows 8/7/Vista/XP

GRAYWOLF SOFTWARE IS 21 CFR PART 11 COMPLIANT  
ALL SPECIFICATIONS ARE TO SUBJECT TO CHANGE WITHOUT FURTHER NOTICE

- Specify low (ppb) or high (ppm) range PID sensor. Add up to 3 electrochemical gas sensors per TG-502 probe, 2 per TG-503. Choose from:  

$$\begin{matrix} O_3 & NH_3 & Cl_2 & EtO & HCl & O_2 & CO \\ SO_2 & NO & NO_2 & HCN & AsH_3 & H_2S \\ F_2 & ClO_2 & COCl_2 & SiH_4 & PH_3 & HF \end{matrix}$$
- Note 1: A CO/H<sub>2</sub>S combo sensor is also available (both gases from a single sensor)
- Note 2: HCl, EtO or NO cannot be installed in combination into a single probe
- Note 3: Specialty mid-range VOC & 9.8eV lamp PID sensors are available on special order
- Order AS/DS TVOC kits with an AdvancedSense, WIN 8 tablet, Pocket PC, or WolfPack **included**. Or order with software and connectors to operate with your own WIN 8/7/XP computer.
- Advanced Report Generator software for automated, enhanced reports, %RH calibration kits, and other accessories are available from GrayWolf. Visit our website at [accessories.graywolvesensing.com](http://accessories.graywolvesensing.com).

MEASURE SMART

REPORT EFFICIENTLY

PCC-10 Hard-shell Security/Carry Case



Connect probes to AdvancedSense meters, Pocket PCs, WolfPacks or to XP/WIN7/WIN8 PCs and WIN8 tablets ▼

WIN8 tablet platforms are available from GrayWolf with security case foam cuts, pouches, etc. ▼



▲ Optional WolfPack® Modular Area Monitor

ACC-FIL6 Probe Filters for dirty environments ▼



CA-GS25 ▼ PID/VOC Calibration Kit (zero & isobutylene)



CA-HD2 Cal Hood

May alternatively be used with air pump to draw sample across sensors



**GRAYWOLF®  
SENSING SOLUTIONS**  
6 RESEARCH DRIVE  
SHELTON, CT 06484 USA  
PH. (1)203-402-0477  
800-218-7997  
FAX: (1)203-402-0478

EMAIL: [SALESTEAM@GRAYWOLFSENSING.COM](mailto:SALESTEAM@GRAYWOLFSENSING.COM)  
[WWW.GRAYWOLFSENSING.COM](http://WWW.GRAYWOLFSENSING.COM)

**GRAYWOLF  
SENSING SOLUTIONS**  
TUAMGRANEY INDUSTRIAL ESTATE,  
UNIT 8  
TUAMGRANEY, CO CLARE, IRELAND  
PH. (353)61921736  
FAX: (353)61921528