

# Harnessing the Power of Mobile Computing for Advanced Environmental Measurements

✓ Surveyed

✓ Documented

✓ Reported



Example screens

Trend Log Mode

Trend Log					
Logging to: C:\Data Room					
Log update: 10 seconds					
TVOC ppb	475	486	500	487	482
Ozone ppm	0.15	0.46	0.83	0.83	0.83
SO2 ppm	2.0	2.0	1.9	1.9	1.8
Temp °C	18.8	18.8	19.2	19.3	19.8
RH %RH	38.3	37.7	36.7	36.4	37.1

data-log in progress

text note attached

event note  
photo attached  
Word field form

Realtime

WolfSense	
Live Mode	Selected: ... Storage Room
TVOC	349ppb
Ozone	0.55ppm
Sulfur Dioxide	0.9ppm
Temperature	22.4°C
Relative Humidity	67.0%RH
Dew Point	16.0°C
Toluene	174.5ppb

File View Probe Log  
calibration info  
custom note  
drawing attached  
audio note

VOC Compound Details

WolfSense	
Lookup VOC specific compound	
Compound	chlorine
Chemical Formula:	Cl <sub>2</sub>
Alternate name(s):	Methylbenzene, Phenylmethane
Calibration Correction Factor:	0.53
OSHA PEL:	200ppm
Common Source(s): (AQ) (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	
<input type="button" value="Add to Display"/> <input type="button" value="Cancel"/>	

Calibration Hand-holding

Ready to start TVOC low point (0.00 ppb) calibration. Probe must be powered on for at least 20 minutes before starting calibration. Place hood over probe and start gas flow. Allow the gas to flow until the reading below stabilizes, which is normally within 3-5 minutes.	
Measure	10 ppb
When readings stabilize, press the MEASURE button.	
<input type="button" value="Tap Here"/> if sensor doesn't stabilize within suggested stabilization time.	
<input type="button" value="Video"/> <input type="button" value="BACK"/> <input type="button" value="NEXT"/>	

Video Help



# DIRECTSENSE™ TVOC

Multi-Gas PID Monitor

GrayWolf empowers Windows™ Mobile PCs to Measure, Data-log and Report on worker and occupant exposure levels. The DirectSense TVOC is a powerful environmental data collection tool, packed with on-board application information; 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
- Background information about common VOCs including typical indoor air sources
- “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



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# DIRECT SENSE<sup>®</sup> TVOC

## Multi-Gas PID Monitor

### 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 often 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: 0.005 to 20.000ppm

(user selectable units: ppb, ppm, µg/m<sup>3</sup>, mg/m<sup>3</sup>)

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: 15.0° to 160.0°F (-10° to +70°C)

Accuracy: ±0.3°C

Response Time: VOC, %RH, CO<sub>2</sub> 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)

Probes auto-switch to draw power from the mobile PC when probe battery power drops below 20%

PC Software Req's: WIN 2000/XP (w/.NET 2.0+ installed), Vista, WIN7 or higher

Operating Range: 0 to 90 %RH (non-condensing), 0°C to 40°C

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<sup>†</sup>. Add up to 3 electrochemical gas sensors per TG-502 probe, 2 per TG-503. Choose from:

O<sub>3</sub> NH<sub>3</sub> Cl<sub>2</sub> EtO\* HCl O<sub>2</sub> CO\*\*  
SO<sub>2</sub> NO\* NO<sub>2</sub> HCN AsH<sub>3</sub> H<sub>2</sub>S\*\*  
F<sub>2</sub> ClO<sub>2</sub> CCl<sub>2</sub>O SiH<sub>4</sub> PH<sub>3</sub> HF

\*EtO and NO cannot both be installed into a single TG-502/TG-503

\*\*A CO/H<sub>2</sub>S combo sensor is also available

<sup>†</sup>Specialty mid-range and 9.8eV lamp PID sensors are also available on special order

- Order DirectSenseTVOC kits with a Mobile Windows Pocket PC, with an ultra-mini PC, with an AdvancedSense or WolfPack meter **included**, or order with software and connectors to operate with your own Laptop computer.
- Advanced Report Generator software for automated, enhanced reports, %RH calibration kits, and other accessories are available from GrayWolf.

#### MEASURE SMART

PCC-10P

▼ Security Case



#### REPORT EFFICIENTLY



Connect probes to Pocket PCs, AdvancedSense™ meters, WolfPacks™ or XP/VISTA/W7 PCs (MN-FJ3 pictured) ▼



ACC-FIL6 Probe Filters for dirty environments ▼



ADY-L2 Y adapter for dual ▲ probe connection to mobile PCs (specify ADY-U4 for use with PH-12S PPC or MN-FJ3 Vista PC)



Optional WolfPack ▲ modular area monitor

CA-GS25 ▼ Isobutylene Gas Cal Kit



CA-HD2 Calibration Hood

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



**GRAYWOLF<sup>®</sup>**  
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