

ADVANCEDSENSE[®] TOX DIRECTSENSE[®]

Toxic Gas Test Meters



GRAYWOLF[®]
SENSING SOLUTIONS
PH: 1-203-402-0477
FAX: 1-203-402-0478

EMAIL:
SALESTEAM@GRAYWOLFSENSING.COM

WEBSITE:
WWW.GRAYWOLFSENSING.COM



Advanced Environmental Instrumentation Harnessing the Power of Mobile Computing



✓ Surveyed

✓ Documented

✓ Reported

Realtime

File	Log	Probe	View
Hydrogen Chloride		0.2 ppm	
Chlorine		0.64 ppm	
Oxygen		20.8 %	
Sulfur Dioxide		0.1 ppm	
Hydrogen		0 ppm	
Temperature		24.4 °C	

Attached Audio Note

Probe Calibration Info

Attached Photo(s)

Attached Text Note

Live: Fabrication Floor

Example Screens

Click the SNAP icon to record measurements, time, date and detailed location name

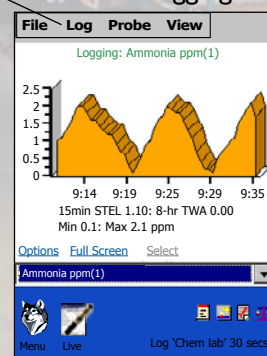
Snap-Shot Log

File	Log	Probe	View
Ozone		0.54 mg/m3	
Ammonia		1.3 mg/m3	
Sulfur Dioxide		1.3 mg/m3	
Nitric Oxide		2.0 mg/m3	
Hydrogen Sulfide		0.15 mg/m3	
Temperature		22.9 °C	
Barometric		754.2 mmHg	

Menu Snap

Snap Shot log to 'Lab 4'

Trend Logging



On-Board Docs



GrayWolf is transforming how to Measure, Data-log and Document worker exposure levels and indoor air quality parameters. The AdvancedSense and DirectSense TOX are powerful environmental data collection tools; intuitive and Easy-To-Use.

- Choose from SO₂, NO₂, NO, CO, H₂S, HCN, EtO, Cl₂, O₂, O₃, NH₃, HCl, H₂, SiH₄, AsH₃, PH₃... and more
- Up to 5 electrochemical gas sensors (plus °F / °C) per probe
- Connect multiple probes simultaneously (up to 4)
- "Snap-Shot" instantaneous data capture and long-term trending
- Stores measured data along w/calibration history, text notes, audio notes, user created field note templates... and more
- On-board measurement tips, industry guidelines and help files
- Remote Access any WiFi enabled platforms via optional GrayWolfLive[™]
- Cal checks, and extensive additional features are highly intuitive and Easy-To-Use

Choose Your Platform:

AdvancedSense Handheld Embedded PC Meter



WolfPack® Modular Area Monitor



GrayWolf Supplied Tablet
Entry level platform with great standard features
(built-in camera, WiFi)



Or Use Your Own Windows PC as the instrument platform
Remote Data Access to, and email/text alerts from, any WiFi enabled platforms via optional **GrayWolfLive™**

Advanced Toxic Gas Measurement

Example AdvancedSense/WolfPack® Screens

Intuitive File Naming

Alarm Lines

Realtime (multi-probe)

Sensor Tips
(extensive info for each parameter)

Video Help

Documenting and data-logging gas parameters has never been easier. Provide a descriptive name for files using the virtual keyboard. Record your readings as snap-shot data captures, or as trend logs over time. On-board educational info.

Efficiently attach notes, in-situ (or after-the-fact) direct to data files:

- Text
- Photos/Video
- Drawings
- Custom
- Audio
- Events (time-tagged text)
- Template "Field Forms"
- Auto-Fill (data & text)

Example WIN 8/7/XP Screens

GrayWolf provides embedded computer based meters and Windows tablets that are ideal for the application; or connect probes to your own PC.

GrayWolf's TOX kits come with WolfSense PC software for data transfer, analysis, graph/report generation and/or simple export to Excel.

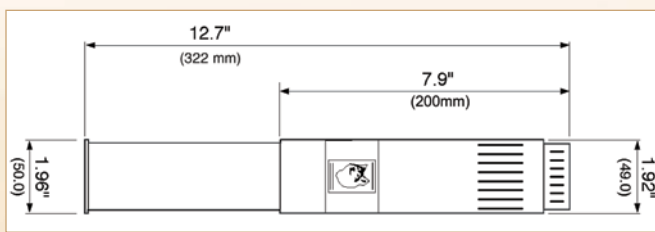
✓ Display

✓ Notate

✓ Data Log

✓ Organize

✓ Report



- Easy to calibrate all parameters
- Calibration history stored in probe
- CO & H₂S available in a single sensor
- Allows up to 5 gas sensors in one probe
- Plus Temperature

TG-501

Select up to 5 gas sensors in one probe (plus °F/°C):

Note: Sensors are factory installed (this optimizes their L.O.D.s). Sensors may be added or changed at a later time by GrayWolf or by an authorized cal lab.

- | | |
|--|---------------------------------|
| • Sulfur Dioxide (SO ₂) | • Ozone (O ₃) |
| • Nitrogen Dioxide (NO ₂) | • Oxygen (O ₂) |
| • Nitric Oxide (NO) | • Ammonia (NH ₃) |
| • Carbon Monoxide (CO) | • Chlorine (Cl ₂) |
| • Hydrogen Sulfide (H ₂ S) | • Hydrogen (H ₂) |
| • Hydrogen Cyanide (HCN) | • Fluorine (F ₂) |
| • Hydrogen Chloride (HCl) | • Phosphine (PH ₃) |
| • Hydrogen Fluoride (HF) | • Arsine (AsH ₃) |
| • Ethylene Oxide (C ₂ H ₄ O) | • Silane (SiH ₄) |
| • Chlorine Dioxide (ClO ₂) | • Phosgene (COCl ₂) |

Display units as:

- PPB
- PPM
- µg/m³
- mg/m³ (mass readings are auto compensated w/optional AdvancedSense barometric pressure sensor)

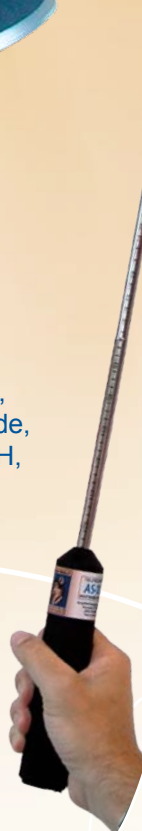
TG-502
VOCs (PID) plus 3 specific gases, %RH, and temperature



IQ-610
Carbon Dioxide, Carbon Monoxide, ppb VOCs, %RH, °F / °C plus one additional gas



AS-201
Air Velocity probe



EC-202

Any 1 (one) sensor in one probe, plus °F/°C



FM-801
Formaldehyde (ppb HCHO)

Interface these meters to GrayWolf platforms; and/or use as stand-alones



PC-3016A
6-Channel Particle Meter



PM-205
Particulate Concentration





ADVANCEDSENSE[®] DIRECTSENSE[®] TOX

Toxic Gas Test Meters

SPECIFICATIONS: TG-501, EC-202

Gas	Range/ Resolution (ppm)	Limit of Detection (ppm)
Standard Sensors		
Ammonia (NH ₃) Standard range sensor	0.0 to 100.0	<1.0
Ammonia (NH ₃) High range sensor	0 to 1000	12
Carbon Monoxide (CO solo)	0.0 to 750.0	0.5
Carbon Monoxide (CO combo w/H ₂ S sensor)	0.0 to 500.0	1.0
Chlorine (Cl ₂)	0.00 to 20.00	0.02
Hydrogen (H ₂)	0 to 1000	2.0
Hydrogen Chloride (HCl)*	0.0 to 30.0	0.7
Hydrogen Cyanide (HCN)	0.0 to 30.0	0.2
Hydrogen Sulfide (H ₂ S solo)	0.00 to 50.00	<0.03
Hydrogen Sulfide (H ₂ S combo w/CO sensor)	0.0 to 200.0	0.5
Nitric Oxide (NO)*	0.0 to 250.0	0.2
Nitrogen Dioxide (NO ₂)	0.00 to 20.00	0.02
Oxygen (O ₂)	0.0 to 25.0%	0.2%
Ozone (O ₃)	0.00 to 1.00	0.02
Sulfur Dioxide (SO ₂)	0.0 to 30.0	<0.1
Exotic Sensors		
Arsine (AsH ₃)	0.00 to 1.00	0.02
Chlorine Dioxide (ClO ₂)	0.00 to 1.00	0.02
Diborane (B ₂ H ₆)	0.00 to 1.00	0.03
Ethylene Oxide (C ₂ H ₄ O)*	0.0 to 20.0	0.3
Fluorine (F ₂)	0.00 to 1.00	0.02
Hydrogen Fluoride (HF)	0.00 to 10.00	<0.1
Phosgene (COCl ₂)	0.00 to 1.00	0.02
Phosphine (PH ₃)	0.00 to 5.00	0.05
Silane (SiH ₄)	0.00 to 50.00	0.05
Temperature: (PT100)	Accuracy: ±0.3°C	
	Range: -10.0° to 160.0°F (-25.0° to +70.0°C)	
Operating Range:	0 to 98%RH (non-condensing), -20° to 50°C	
	Specific gas sensors may have a reduced operating range	
Probe Dimensions:	2in. (5cm) dia. x 12.5in. (30cm) lgth.	
Weight (probe):	w/batteries 1lb. 10oz. (0.7kg)	
Power (probe):	2 x D cells; typical battery life 1500 hrs.	
	Meter/Mobile PC battery life varies by make and model	
PC Software Requirements:	Windows 8/7/XP	

*HCl, NO, EtO; up to 2, but not all 3 may be installed into a single TG-501 probe
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT FURTHER NOTICE

- All gas sensors are electrochemical. One per EC-202 or up to 5 per TG-501 may be included. Typical sensor life, sensor drift and response times vary by sensor.
- Probe wall mounting brackets, automated reporting software, and many other accessories are available from GrayWolf. View them on our website at accessories.graywolvesensing.com.



GRAYWOLF[®] SENSING SOLUTIONS

6 RESEARCH DRIVE (WORLDWIDE HEADQUARTERS)
SHELTON, CT 06484 USA
PH. (1)203-402-0477
800-218-7997
FAX: (1)203-402-0478

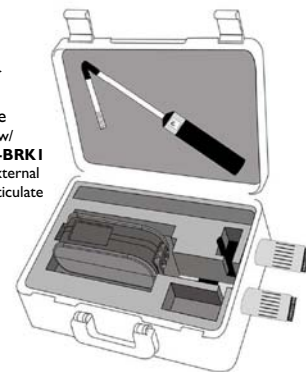
EMAIL: SALESTEAM@GRAYWOLFSENSING.COM

WWW.GRAYWOLFSENSING.COM

MEASURE SMART



◀ **PCC-15** ▶
Multi-Probe
Security Case
(shown at left w/
optional **ACC-BRK1**
brackets for external
HCHO or particulate
meters)



▲ **PCC-05IQ** probe pouch.
Neck pouches are also available
for tablet, AdvancedSense or
Pocket PC



▲ **CA-GSXX**
Gas Calibration Kit. Specific
calibration gases are available in
various portable cylinder sizes

▶ **ACC-APUMPI**
Portable Air Sampling
Pump with belt clip



▶ **CA-HD2**
Calibration Hood
May alternatively be
used with air pump
to draw sample
across sensors



▲ **ACC-FIL6** Probe
Filters for dirty
environments

- **AdvancedSense TOX** kits include an AdvancedSense meter, **DirectSense TOX TAB** kits include a tablet PC. These complete kits also come with WolfSense PC desktop data transfer software, hardshell security case, probe/meter pouches and more. Contact GrayWolf for details.

GRAYWOLF[®] SENSING SOLUTIONS

ANNACOTTY INDUSTRIAL PARK, UNIT 1C
ANNACOTTY, COUNTY LIMERICK
IRELAND
PH. (353) 61358044
FAX: (353) 61358160