

Harnessing the Power of Mobile Computing for Advanced Environmental Measurements

✓ Surveyed

✓ Documented

✓ Reported



DIRECTSENSE[®] TOX

Toxic Gas Test Monitor



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GrayWolf empowers mobile computers to Measure, Data-log and Document worker exposure levels and indoor air quality parameters. The DirectSense TOX is a powerful environmental data collection tool; 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
- Stores measured data along with text notes, graphic notes, audio notes, user created field note templates... and more
- Up to 5 electrochemical gas sensors (plus °F / °C) per probe
- On-board measurement tips, industry guidelines and help files
- 2 probes may be connected simultaneously to the mobile PC (3 to a WolfPack)
- On-screen, intuitive instructions to walk users through calibration checks
- "Snap-Shot" instantaneous data capture and long-term trending
- Calibration history and data file statistics auto-organized, stored with every data file

Advanced Toxic Gas Measurement

Example Mobile PC Screens



Standard Pocket PC



Ruggedized Pocket PC

Live Graph

Alarm Lines

Video Help

Realtime

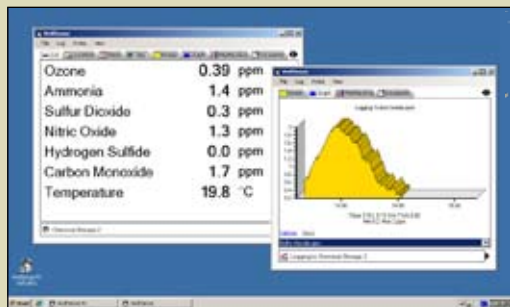
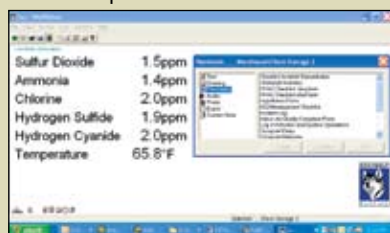
Ozone	0.36 ppm
Ammonia	0.7 ppm
Sulfur Dioxide	0.3 ppm
Nitric Oxide	0.5 ppm
Hydrogen Sulfide	0.03 ppm
Carbon Monoxide	1.4 ppm
Temperature	70.8 °F

Custom Note
(e.g. CAD/CAM)

Documenting and data-logging gas parameters has never been easier. Provide a descriptive name for data files via virtual keyboard or handwriting recognition on PPCs (or keyboard on Notebook PCs). Record your readings as a “snap-shot” data capture, or as a trend log over time. User-selectable time intervals: 00hr 00min 00sec. Log instantaneous readings or readings that have been averaged over the log interval. Even attach notes to each data file:

- Text
- Audio
- Drawings
- Events (time-tagged text)
- Photos/Video
- Custom (attach Blueprint, CAD/CAM, GPS, Map, etc. files)
- Word “Field Forms”

Example Notebook Screens



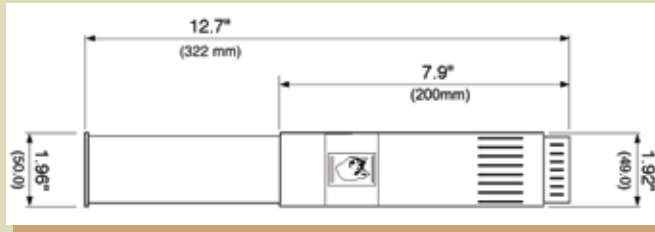
Ultra-Mobile Notebook PC



WS PC Data Transfer Software

GrayWolf provides Windows Mobile Pocket PCs, Embedded computer based Instruments, Ultra-Mini PCs and Tablet PCs that are ideal for the application – or use your own.

The DirectSense TOX comes with WolfSense PC software for desktop data transfer, analysis, graph generation and/or simple export to Excel.



TG-501

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

Note: Sensors must be factory installed, but may be added or changed at a later time

- Easy to calibrate all parameters
- Calibration history stored in probe
- CO & H₂S available in a single sensor
- Allows up to 6 total gases with one probe
- Plus Temperature

- Sulfur Dioxide (SO₂)
- Nitrogen Dioxide (NO₂)
- Nitric Oxide (NO)
- Carbon Monoxide (CO)
- Hydrogen Sulfide (H₂S)
- Hydrogen Cyanide (HCN)
- Hydrogen Chloride (HCl)
- Hydrogen Fluoride (HF)
- Ethylene Oxide (C₂H₄O)
- Chlorine Dioxide (ClO₂)
- Ozone (O₃)
- Oxygen (O₂)
- Ammonia (NH₃)
- Chlorine (Cl₂)
- Hydrogen (H₂)
- Fluorine (F₂)
- Phosphine (PH₃)
- Arsine (AsH₃)
- Silane (SiH₄)
- Phosgene (CCl₂O)

EC-202

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

PM-205
Particulate Concentration

TG-502
ppm 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

PC-GW6
6-Channel Particle Counter

ZEPHYR
Differential Pressure



GrayWolf offers additional probes and 3rd party sensors...and more are on the way.



DIRECT SENSE[®] TOX

Toxic Gas Monitor

SPECIFICATIONS: TG-501, EC-202

Gas	Range	Limit of Detection
Sulfur Dioxide (SO ₂)	0.0 to 30	0.1
Nitrogen Dioxide (NO ₂)	0.00 to 30	0.02
Nitric Oxide (NO)*	0.0 to 140	0.2
Carbon Monoxide (CO solo)	0.0 to 750	0.5
Carbon Monoxide (CO combo w/H ₂ S sensor)	0.0 to 500	1.0
Hydrogen Sulfide (H ₂ S solo)	0.00 to 50	<0.03
Hydrogen Sulfide (H ₂ S combo w/CO sensor)	0.0 to 80	0.5
Hydrogen Cyanide (HCN)	0.0 to 100	0.2
Hydrogen Chloride (HCl)	0.0 to 30	0.5
Hydrogen (H ₂)	0 to 1000	2.0
Chlorine (Cl ₂)	0.00 to 10	0.02
Ammonia (NH ₃) Standard range sensor	0.0 to 100	1.0
Ammonia (NH ₃) High range sensor	0 to 1000	12
Ethylene Oxide (C ₂ H ₄ O)*	0.0 to 20	0.3
Ozone (O ₃)	0.00 to 1.00	0.02
Oxygen (O ₂)	0.0 to 25%	0.2%
Silane (SiH ₄)	0.00 to 50	0.05
Arsine (AsH ₃)	0.00 to 1.00	0.02
Chlorine Dioxide (ClO ₂)	0.00 to 1.00	0.02
Phosphine (PH ₃)	0.00 to 5.0	0.05
Phosgene (CCl ₂ O)	0.00 to 1.0	0.02
Fluorine (F ₂)	0.00 to 1.0	0.02
Hydrogen Fluoride (HF)	0.00 to 10.0	0.1
Temperature: (PT100)	Range: 15° to 160°F (-10° to +70°C)	

Accuracy: ±0.3°C

Probe Dimensions : 2in. (5cm) dia. x 12.5in. (30cm) lgth.

Weight (probe): w/batteries 1lb. 10oz. (0.7kg)
2 x D cells; typical battery life 1500 hrs.

Power (probe): Mobile PC battery life varies by make and model

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

*NO and EtO cannot be installed into the same probe

ALL SPECIFICATIONS ARE TO 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.
- DirectSense TOX kits are complete kits that include a Mobile PC and come with the TG-501 probe, WolfSense application software, WolfSense PC desktop data transfer software, hardshell security case, probe and mobile PC pouches and much more. Contact your representative or GrayWolf for details.



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✓ MEASURE SMART

✓ REPORT EFFICIENTLY



PCC-15P
Multi-Probe
Security Case



WolfPack Area
Monitor allows
up to 3 probes,
pressure plus
particulate



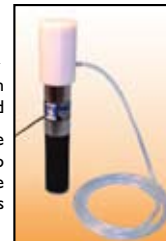
▲ PCC-MN03 soft carrying
case for MN-FJ3 Vista PC,
shown with PCC-051Q
probe pouch



▲ Gas Calibration Kit. Specific
calibration gases are available in
various portable cylinder sizes

CA-HD2 Calibration
Hood

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



ACC-APUMPI
Portable Air Sampling
Pump with belt clip



ACC-FIL6 Probe Filters ▲
for dirty environments

- Portable printers, air pumps, extension cables, audio recording to text translation software, automated reporting software, GPS software, and other accessories are available from GrayWolf.

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