MiniRAE 3000

Advanced wireless handheld VOC monitor with parts per million measurements.

Product description

The MiniRAE 3000 is a comprehensive handheld VOC (Volatile Organic Compound) monitor that uses a third-generation patented PID technology to accurately measure more ionizable chemicals than any other device on the market. It provides full-range measurement from 0 to 15,000 ppm of VOCs.

The MiniRAE 3000 has a built-in wireless modem that allows real-time data connectivity with the ProRAE Guardian command center located up to 2 miles (3 km) away through a Bluetooth connection to a RAELink 3* portable modem or optionally via Mesh Network.

Features

- Third-generation patented PID technology
- VOC detection range from 0 to 15,000 ppm
- 3-second response time
- Humidity compensation with built-in humidity and temperature sensors
- Six-month datalogging
- Real-time wireless built-in – Bluetooth (and optional RAELink3 portable modem) or Mesh
- Large graphic display with integrated flashlight
- Multi-language support with 10 languages encoded
- IP- 67 waterproof design

Applications

- Oil and Gas
- Hazmat
- Industrial Safety
- Civil Defense
- Environmental and Indoor Air Quality

Technical specifications

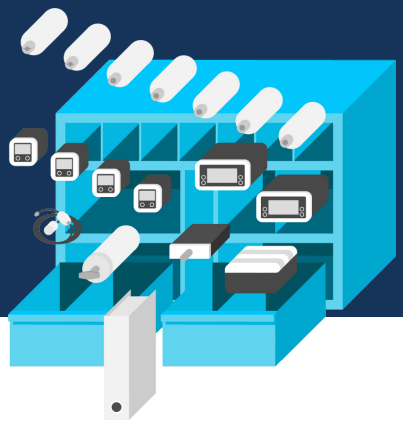
Detector	
Size	10" L x 3.0" W x 2.5" H (25.5 cm x 7.6 cm x 6.4 cm)
Weight	26 oz (738 g)
Sensors	Photoionization sensor with standard 10.6 eV, or optional 9.8 eV or 11.7 eV lamps
Battery	• Rechargeable, external field-replaceable Lithium-Ion battery pack • Alkaline battery adapter
Operating Hours	16 hours of operation (12 hours with alkaline battery)
Display Graphic	4 lines, 28 x 43 mm, with LED backlight for enhanced display readability
Keypads	1 operation and 2 programming keys, 1 flashlight on/off
Direct Readout	Instantaneous reading - VOCs as ppm by volume - High values - STEL and TWA - Battery and shutdown voltage - Date, time, temperature
Alarms	95dB at 12" (30 cm) buzzer and flashing red LED to indicate exceeded preset limits - High: 3 beeps and flashes per second - Low: 2 beeps and flashes per second - STEL and TWA: 1 beep and flash per second - Alarms latching with manual override or automatic reset - Additional diagnostic alarm and display message for low battery and pump stall
EM/RFI	Highly resistant to EMI/RFI Compliant with EMC Directive 2004/108/EC
IP Rating	- IP67 unit off and without flexible probe - IP65 unit running
Data Logging	Standard 6 months at one-minute intervals
Calibration	Two-point or three-point calibration for zero and span. Calibration memory for 8 calibration gases, alarm limits, span values and calibration dates
Sampling Pump	- Internal, integrated flow rate at 500 cc/mn, - Sample from 100' (30m) horizontally and vertically
Low Flow Alarm	Auto shutoff pump at low-flow condition
Communications	Download data and upload instrument set-up from PC through charging cradle or optional Bluetooth™. Wireless data transmission through built-in RF modem.
Frequency	902 to 928 MHz (license-free), 2.400 to 2.4835 GHz (license-free), 433 MHz, 869 MHz
RF Range	Up to 500' (152m; 900 MHz, 433 Mhz, 869 Mhz), extendable with RAELink3 Repeater to 2 miles (3.2km)
Hazardous Area Approval	US and Canada: Classified as Intrinsically Safe for use in Class I, Division 1 Groups A, B, C, D Europe: ATEX II 1G Eex ia IIC T4 (pending) IECEx: II 1G Eex ia IIC T4(pending)
Temperature	-4 to 113 °F (-20 to 50 °C)
Humidity	0% to 95% relative humidity (non-condensing)
Attachment	Durable bright yellow rubber boot with belt clip
Warranty	Lifetime on non-consumable components (per RAE Systems Standard Warranty), 3-year warrant y for 10.6 eV lamp, 1 year for pump and battery

(*) Specifications are subject to change

Technical specifications

Sensor			
Gas Monitor	Range	Resolution	Response time T90
VOCs	0 to 999.9 ppm 1000 to 15,000 ppm	0.1 ppm 1 ppm	< 3 s < 3 s

The Bruusgaard System



BRUUSGAARD

TBS is a unique turnkey portable gas detection solution, giving you increased safety and substantial cost savings through standardised instruments, routines, training and procurement.

Logistic Support

At any given time we know the status of all vessels and sites covered by The Bruusgaard System. We consolidate all shipments and make sure you have everything you need on board until next scheduled delivery. This results in fewer shipments and substantial savings!

- Year round follow up of instruments, spares and consumables
- Handling of all shipments & logistics
- Annual reports per vessel including budgeting

Safety

QA – strict routines and logging

- Crew are able to use instruments and follow routines correctly
- Instruments are in proper working condition at all times
- Instruments are calibrated at correct intervals
- Sensors and other items are replaced at correct intervals
- Usage of instruments is logged, including abnormal observations
- Traceability – instrument history and usage
- Routines and procedures can merge into the overall QA-system

Effective and proven training is an integrated part of The Bruusgaard System.

Instruments

All the equipment used for gas detection and calibration is placed in a custom-made wall cabinet. Including Log & Instruction Manual, which are crucial to maintaining the safety integrity.

- Standardised vessel specific gas detector solutions
- Total solutions including all equipment and routines necessary for efficient and safe use, storage and maintenance

Cost Savings

Some of our customers have been able to go from 8 to 10 suppliers down to 1 – translating into cost savings of up to 40-50%. For one vessel, this could be thousands of dollars annually, and for a whole fleet, the cost savings can be dramatic. This is achieved through:

- One contact for worldwide supply of spares & gases
- All service and calibration can be done on site.
- Reductions of instrument types from 10-12 to 2-3

Reduced maintenance costs through:

- On board calibration
- Fewer instruments on board
- No need for spares on board
- One PO per year
- Increased safety
- Less use of administrative time