



TRIGON INDUSTRIES

TRIGON AIR ONE

Air Sampling Pump
Model TI-004

The Air One personal sampling pump is designed for OSHA compliance monitoring in the abatement environment where it may be subjected to rough handling and exposure to water and humidity. It is watertight. The thick polycarbonate case (the same material used to make bullet resistant windows) resists cracking, and the internal components are designed for reliability and long service life.



FEATURES

- ▶ Thick, impact resistant yellow polycarbonate case with integral belt clip
- ▶ Electronic motor speed control for accurate flow adjustment
- ▶ Exhaust is vented outside the case, keeping water away from components
- ▶ Integral pulsation dampener
- ▶ Field repairable
- ▶ Twelve month limited warranty
- ▶ Each Air One pump is supplied with a battery charger, a small screwdriver for flow adjustment, and several feet of flexible tubing with a collar clip

APPLICATIONS

The TI-004 is designed for OSHA compliance monitoring in the asbestos abatement and lead-based paint removal industries.

SPECIFICATIONS

Flow Range—1.5 to 3.0 liters per minute (LPM)
Flow Control—Adjustable motor speed
Operating Duration—9+ Hours at 2 LPM with a 0.8 µm filter cassette at 70°F (21°C)
Operating Temperature—5°F to 105°F (-15°C to 41°C)
Dimensions—4-1/4" wide x 3-3/4" high x 2-3/4" deep (108mm x 95mm x 70mm)
Weight—1 lb. 7 oz. (0.6 kg)
Battery Pack—Rechargeable nickel-cadmium, 6VDC
Charging—16 hours charge time for a fully discharged battery pack

IMPORTANT INFORMATION

Do not use the TI-004 in explosive environments.

Please read the entire Operating Instructions pamphlet before placing the pump into service.

Except when charging the battery pack, the charger jack cover should be snapped securely in place to prevent water from entering the pump.

The nickel-cadmium (NiCad) battery pack is not user-repairable. NiCad batteries must be disposed of properly and are recyclable.

APPLICATIONS

The pump, charger and battery pack are covered by a one year limited warranty. The manufacturer warrants to the original purchaser that its equipment is free from defects in workmanship or materials for a period of twelve months from the date of sale. The warranty does not cover damage to the equipment resulting from abusive handling. All warranty related inspection and repair services must be performed by an authorized representative of Trigon Industries.



Micro-Trap™ Corporation

Micro-MAX HP



The Micro-Max HP is a high volume air sampling pump. This unique compact sampling pump is designed for long life and low maintenance and has been adapted specifically for PCM testing.

Specifications

Air flow Range: 0-31 liters per minute (0-1.95 cubic feet/minute)
recommended range 5-15 liters per minute
Filter Cassettes: 25mm or 37mm—recommended non-static type
15 VAC, 60 Hz, 1 phase, .35 amps

Note: Initial current on start up can be up to 5 times higher
Pump Life: 35,000
Rotometer Accuracy: +/-5%

Dimensions of Unit

Height: 6 inches (15.2 cm) Width: 4 inches (10.2 cm)
Length: 6 inches (15.2 cm) Weight: 3.5 lbs

TRI/MON



The TRI/MON is a sensitive manometer/printer that measures and records minute pressure differences. The TRI/MON is designed for use with negative pressure systems at asbestos abatement sites. The TRI/MON can also measure differential pressures wherever air handling equipment and heating, ventilation and air conditioning

(HVAC) systems are used to create and maintain an air flow which produces small differential pressure.

Specifications

Differential pressure range: +/-0.22" W.C.
Transducer range: display output limited to 0.22" W.C. due to over-pressure sensing
Over-pressure protected with auto valve closure if the pressure is greater than 0.22 inches of water
Accuracy of differential pressure reading: +/-1%
Resolution of differential pressure reading (panel display): 0.001 inch of water gauge (0.249 Pa)
Resolution of differential recorder (printer): 0.001 inch of water gauge (0.249Pa)
Ambient warning tone: 3.8 Hz, 80 dB at 40 inches (1m)
Operating temperature range: 0-50°C (32° to 120°F)
Printout interval programmed by user: Range: 4 readings/minute to 1 reading/hour
Differential pressure sensor transducer output range: 0-5 VDC
Input tubing diameter: 1/8 inches ID (4.8mm)
Input tubing length: 20 feet (60m)
Power supply requirements: 120 VAC 0.5A 60Hz (other power options available)
Data storage capacity: 7 days
Options Available: Remote Alarm Assembly Circular Chart Recorder

Features

Rugged 1/8" thick aluminum case
Full width aluminum carrying handle, also doubles as tilt leg
Brackets to hold power cord
Uses plain paper
Large bright red digital display
Simple keypad selected functions
Self calibrates on each start-up
Available with circular chart recorder, remove alarm, or digital data download capability
"Smart" button for easy reset to factor operating parameters
Special indicators to hi-lite systems functions
Keypad lock to prevent tampering
Stores 7 days of data in memory
Operating temperature range 32°-120°F
Simple start-up. Just turn on and load paper.
No separate or loose parts to lose.



GE Measurement & Sensing Technologies



Hygromaster

Versatile hygrometer measure relative humidity, temperature and dew point

- ▶ Large LCD display in .1% increments
- ▶ Modular, replaceable Hygrostick probe
- ▶ Optional surface temperature probe (BLD4701) for a range of applications
- ▶ Supplied with pouch, Hygrostick and instructions



Surveymaster SM

2 Meters in One

Search Mode uses non-invasive radio frequency to detect moisture below the surface and behind finishes such as ceramic tile and floor coverings. Measure Mode uses pin electrodes or deep wall probe (included) for precise moisture measurements in common building materials.

- ▶ Supplied with nylon pouch, heavy duty pin extension lead, deep wall probes, wood calibration chart, calibration check device, spare pins and instructions



Aquant

The hand held moisture detector from GE protimeter

- ▶ Assesses and monitors the relative moisture level of materials including plaster, masonry, concrete and fiberglass (GRP).
- ▶ Identifies leak paths in shower cubicles (behind ceramic tiles), in caravans/motor homes and mobile homes.
- ▶ Surveys GRP boat hulls for the early detection of damp spots.



BLD5760

Timbermaster

Built-in calibration groups for over 160 wood species

- ▶ Large LCD displays moisture content and temperature in .1% increments, with built-in temperature correction
- ▶ May be used with optional Hammer Electrode (BLD5000) and other accessories
- ▶ Supplied with nylon carry pouch, heavy duty pin extension lead, temperature probe, wood calibration chart, calibration check device, spare pins and instructions



Humilog Data Logger

BLD4100



Humidity, temperature and moisture monitoring systems for buildings

The Humilog BLD4100 model measures and stores:

- ▶ Relative humidity and air temperatures of environments
- ▶ Surface temperatures
- ▶ Moisture levels (expressed as WME Values) of walls, floors and other building components.

Typical Humilog applications include:

- ▶ Environmental monitoring in buildings
- ▶ Condensation risk assessment and diagnosis
- ▶ Monitoring the drying rates of damp walls and floors in new constructions
- ▶ Flood damage management

MMS Plus



BLD5800LH

Pin type, non-invasive and hygrometer with data storage in one meter.

- ▶ The Protimeter Moisture Measurement System (MMS) Plus is a complete moisture measurement device for use in many different building related industries.
- ▶ The MMS combines pin type and non-invasive modes of measurement together with a thermo-hygrometer in one state-of-the-art instrument.
- ▶ The MMS Plus incorporates grains per pound calculation; important when monitoring the drying out of buildings.
- ▶ The MMS Plus is also standard with data download software and a cable for capturing and downloading up to 1000 results to a PC.

Multigas Instruments

Multigas detectors are used primarily to monitor immediate hazards. They can be used for both continuous and intermittent gas detection.

MSA offers a full line of multigas instrument accessories, including batteries, chargers, pumps, sample lines and probes.

Solaris™ Multigas Detector

- ▶ Simultaneously detects up to 4 gases: O₂, H₂S, CO and combustible gas.
- ▶ IP 65-rated.
- ▶ Versatile, easy-to-read display.
- ▶ Alphanumeric message bar easily guides users.
- ▶ Simple, intuitive 1-button calibration.
- ▶ Rechargeable lithium ion battery provides 14+ hours of continuous operation and fully recharges in less than 4 hours.
- ▶ Optional powered sampling pump.
- ▶ Also available: Solaris Fire and Solaris FX.



Sirius™ Multigas Detector

- ▶ Simultaneously detects 4 gases (O₂, CO, H₂S and combustible gas) and hundreds of VOCs, including direct readings of 100 preprogrammed gases.
- ▶ Offers tremendous flexibility in a reliable, durable, easy-to-use unit.
- ▶ Superior proprietary PID sensor design reduces maintenance.
- ▶ Loud, attention-grabbing double-alarm system.
- ▶ Interchangeable lithium-ion and alkaline battery packs allow non-stop operation.
- ▶ Long-term storage kit ensures that unit is working properly in case of an emergency.



Orion® Multigas Detector



- ▶ Detects up to 4 gases including O₂, CO, H₂S, and combustible gas
- ▶ Simple, intuitive 2-button operation
- ▶ Rugged construction
- ▶ Large display with great contrast
- ▶ Internal pump
- ▶ 16-hr run time in pumped mode
- ▶ NiMH or alkaline batteries
- ▶ TIM System-compatible
- ▶ IP54-rated
- ▶ Sensors are easy to change
- ▶ Also available: Orion Plus, Orion Fire and Orion FX

FiveStar® Alarm



- ▶ Sensors available: O₂, CO, Cl₂, ClO₂, H₂S, NO, NO₂, PH₃, SO₂, NH₃ and combustible gas
- ▶ Autocalibration
- ▶ "Smart sensors"
- ▶ Pressure-compensated oxygen
- ▶ High levels of RFI protection
- ▶ Multilingual display
- ▶ Weather-resistant
- ▶ World's leading poison-tolerant combustible sensor
- ▶ Battery gas gauge
- ▶ Fast charger option
- ▶ Up to 20 hours of use with optional NiMH battery

Watchman® Multigas Monitor



- ▶ Monitors up to 4 gases including O₂, CO, H₂S, NO, NO₂, SO₂ and combustible gas
- ▶ Extremely durable
- ▶ High RFI protection
- ▶ 14-hour battery run time as standard feature
- ▶ Remote alarm

Passport® Personal Alarm



- ▶ Detects up to five gases including NH₃, O₂, CO, Cl₂, H₂S, NO, NO₂, SO₂ and combustible gas
- ▶ Remote alarm

MicroGard® Portable Alarms

- ▶ Detects O₂ and combustible gas
- ▶ Pocket-sized
- ▶ Economical
- ▶ Lightweight



Multigas—cont.

HAZMATCAD™ Hazardous Material Chemical Agent Detector and HAZMATCAD Plus™ Detector with Selected Toxic Industrial Chemicals

- ▶ Use surface acoustic wave (SAW) technology to detect and classify trace amounts of chemical warfare agents (CWAs), including nerve and blister agents.
- ▶ Can be configured to detect phosgene or hydrogen cyanide.
- ▶ HAZMATCAD Plus detects both CWAs and selected toxic industrial chemicals (TICs) for multiple threat-detection capabilities.
- ▶ Ruggedly constructed, compact and lightweight.



Orion® G

Multigas & Leak Detector

- ▶ Multi-functional flexibility; indoor, outdoor and underground
- ▶ Measures low-level leaks, 0–100% LEL, 0–100% by volume, O₂, CO and H₂S
- ▶ Fast response, intrinsically safe leak sensor
- ▶ Long-life NiMH or alkaline batteries
- ▶ Large display
- ▶ Bar-hole probe filter trap designed to keep out water and dust
- ▶ Single key press begins automatic sampling and analysis.
- ▶ Audible and visual alarms.
- ▶ Self-diagnostic check during rapid warm-up.
- ▶ Alphanumeric display with LED alarms.
- ▶ 8–12 hour operation with rechargeable lithium ion batteries.
- ▶ Vapor diffusion check source verifies system performance.
- ▶ RS-232 and IrDA communication ports, stores up to 8 hours of data.



Single-Gas Instruments

Single gas detectors are an economical way to monitor a specific single gas. MSA toxic gas indicators can be used for continuous monitoring of CO, O₂, or H₂S. MSA combustible gas indicators can be used to measure methane, pentane, and many other combustible gases.

PULSAR® Single-Gas Detector

- ▶ Units detect CO, O₂ or H₂S
- ▶ Maintenance-free, two-year service life
- ▶ No need to calibrate instrument
- ▶ Long-life lithium battery, 33% longer than competition
- ▶ Large, easy-to-read, numeric end-of-service-life indicator, characters 4x larger than other displays
- ▶ Distinctive audio, visual and optional vibrating alarms
- ▶ Durable, passes 6-ft. drop test
- ▶ Water and dust resistant, passes IP54 rating



PULSAR+ Single-Gas Detector

- ▶ Units available to detect O₂, CO or H₂S
- ▶ Autocalibration with no accessories needed
- ▶ Long-life, replaceable lithium battery
- ▶ Excellent water and dust resistance, IP54 rating
- ▶ Piercing audio, ultra-bright visual and optional vibrating alarms



Responder® Series



- ▶ Units available to detect O₂, CO, H₂S, Cl₂ or ClO₂
- ▶ Digital display
- ▶ Pocket-sized
- ▶ Audible, visual & vibrating alarms (audible & visual alarms for MiniOx)
- ▶ Adjustable alarm levels
- ▶ Peak readings
- ▶ MiniOx Remote Responder available for remote sampling of confined spaces

Titan™ Combustible Gas Detector

- ▶ Detects and measures combustible gas or vapor concentrations
- ▶ Reads % LEL or % by volume
- ▶ Simple, intuitive, one-button operation
- ▶ Audible and visual alarm with optional vibrating alarm
- ▶ Optional NiMH battery pack
- ▶ Full battery charge with MSA Fast Charger
- ▶ Strong construction, with excellent resistance to water and dust penetration—IP54 rating
- ▶ Features MSA Series 20L Sensor for expanded sensor life



Tankscope® Combustible Gas Indicator, Model 62T

- ▶ Specifically designed to detect combustible gas levels in inerted shipboard oil holds





**Single-Gas—cont.
Explosimeter® Combustible
Gas Indicator**



- ▶ Detects and measures concentrations of combustible gases or vapors in the air
- ▶ Can be used in the immediate environment or for remote sampling of confined spaces

**Gascope® Combustible
Gas Indicator**



- ▶ Detects, measures, and pinpoints leaks of combustible gases and vapors
- ▶ Wide detection range allows for readings above the UEL
- ▶ Dual-detection range gives readings in both % LEL and % by volume

**PIDs, Detector Tubes
& Sampling Pumps**

Photoionization detectors (PIDs) are primarily used for detecting VOCs or very low concentrations of toxic gases. They are suitable for immediate as well as chronic hazard monitoring. Detector tubes are an inexpensive way to perform a quick atmospheric check. Sampling pumps and cassettes are particularly suited for monitoring chronic hazards related to dust, fibers and particulate.

**Passport® PID II
Organic Vapor Monitor**



- ▶ Built-in pump
- ▶ 0.1–10,000 ppm operating range
- ▶ Graphic & numeric displays
- ▶ Datalogging & data downloading

**Passport® VOC 2000
Organic Vapor and
Oxygen Monitor**



- ▶ Integrated O₂ sensor
- ▶ Built-in pump
- ▶ 0.1–10,000 ppm operating range
- ▶ Graphic & numeric displays
- ▶ Datalogging & data downloading

Detector Tubes

The MSA Kwik-Ref™ Detector Tube CD-Rom Database lists all tubes available, along with facts on chemical reaction and color changes, interferences, cross-sensitivities, and more.

MSA offers both manual and automatic detector tube pumps.



- ▶ Available for the detection of over 170 gases and vapors

We Offer

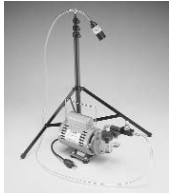
- ▶ Quality Products
- ▶ Value-added Service
- ▶ Customer Satisfaction
- ▶ Convenient Friendly Hours
- ▶ Trained and Knowledgeable Personnel
- ▶ Representing Hundreds of Manufacturers

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ALLEGRO
INDUSTRIES

Sampling Pumps

T100 Rotary Vane



Part No. 9803
T100 Sampling Pump
with Stand

Part No. 9803-88
T100 Sampling Pump
without Stand

- ▶ Sampling range of 3–20 LPM, and is excellent for use for sampling asbestos (25mm cassettes), lead (37mm cassettes) and mold (Air-O-Cell cassettes).
- ▶ Meets OSHA and AHERA standards.

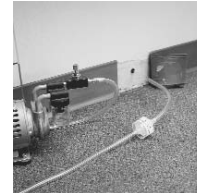
Venturi Sampling Pump



Part No. 9802
Venturi Sampler

- ▶ Air powered and requires only 40 PSI to draw samples.
- ▶ Complete with a built-in stand and vinyl tubing.
- ▶ Including asbestos (25mm cassettes), lead (37mm cassettes), mold (Air-O-Cell cassettes).
- ▶ For use with Impactors.

Wall Sampling Adapter



Part No. 9803-01

- ▶ Requiring only a small 3/8" hold in the wall to sample, place the tubing attachment into the wall and the connection is made directly to Air-O-Cell cassette.

T100M Rotary Vane



Part No. 9803M
T100M Sampling Pump
with Stand

Part No. 9803-88M
T100M Sampling Pump
without Stand

- ▶ Upgraded version of the T100 Sampling Pump.
- ▶ Incorporates all the features of the T100 with the addition of a built-in adjustable 5–50 LPM flow meter.

Diaphragm Sampling Pump



Part No. 9804-51
Diaphragm Pump with
Stand

Part No. 9804-50
Diaphragm Pump
without Stand

- ▶ Sampling asbestos (25mm cassettes PCM asbestos cassettes only), lead (37mm cassettes), and mold (Air-O-Cell cassettes).
- ▶ A locked-in operating range of 3–15 LPM.
- ▶ Meets OSHA and AHERA standards.

DC Sampling Pump



Part No. 9801-51
DC Sampler Kit with
Stand (Battery operated)

Part No. 9801-50
DC Sampler Kit without
Stand (Battery operated)

- ▶ Self-contained programmable unit.
- ▶ Designed to run Air-O-Cell (mold) cassettes. Flow range is 5–20 liters, but it is programmed for 15-LPM.
- ▶ Sampling times of 1, 2, 5 or 10 minutes.
- ▶ End-of-sample audio-visual/alarm indicates completion.
- ▶ 5 hours of continuous operation.

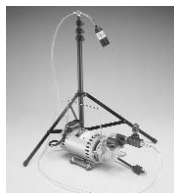
Dual Sampler



Part No. 9801
Dual Sampling Pump
with Stand

- ▶ Excellent for use in sampling asbestos (25mm cassettes), lead (37mm cassettes), mold (Air-O-Cell cassettes), as well as for use with Impactors.
- ▶ Designed for drawing dual samples in a mold environment.

A100 Rotary Vane



Part No. 9804
A100 Sampling Pump
with Stand

Part No. 9804-88
A100 Sampling Pump
without Stand

- ▶ Meets OSHA and AHERA standards.
- ▶ Sampling range of 3–20 LPM.
- ▶ Asbestos (25mm cassettes), lead (37mm cassettes) and mold (Air-O-Cell cassettes).

Allegro Impactor



Part No. 9804-15

- ▶ Single stage bioaerosol impaction sampler to sample mold and fungi with 400 precision drilled holes
- ▶ Proven performer for collecting viable mold samples.