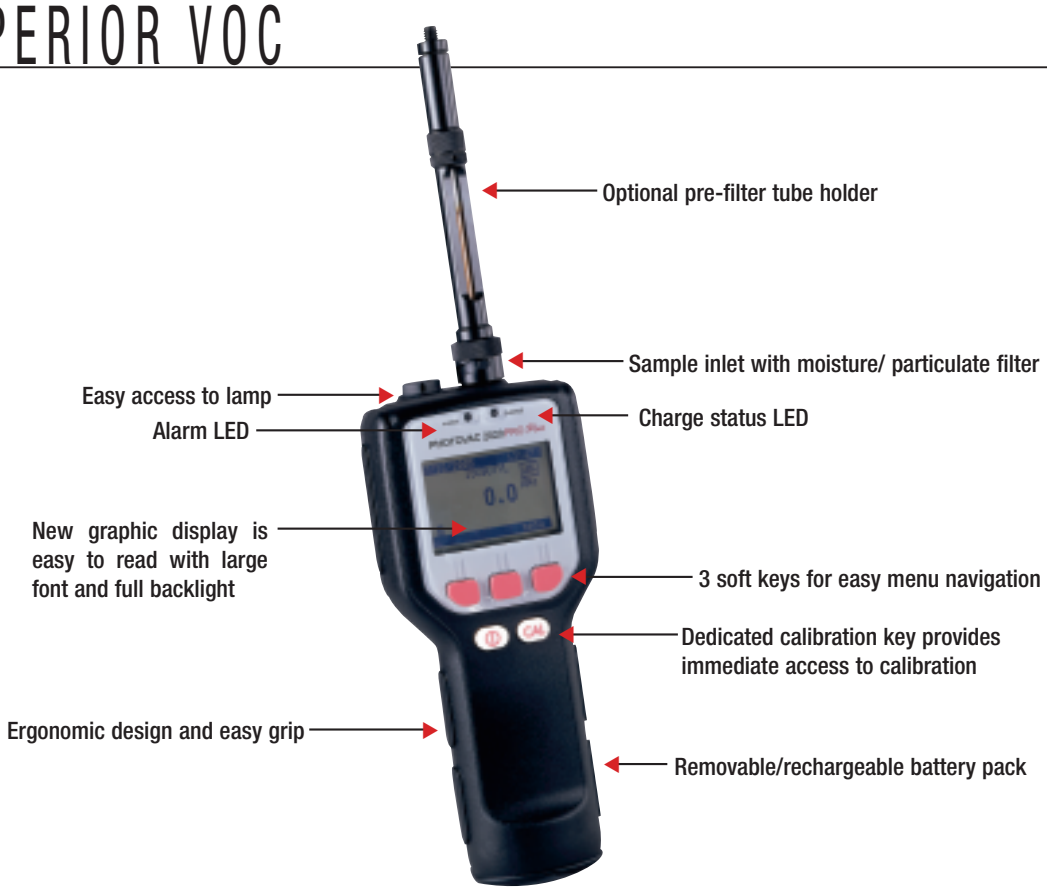
# 2020PRO*Plus*™

Photovac is MORE
than instruments.


Photovac delivers
PROVEN solutions.

PHOTOVAC, Inc.

# SUPERIOR VOC




## Rapid VOC detection in air, water and soil in the harshest environments

### Stable, linear Photovac PID

The 2020PRO*Plus* uses photoionization, the technology of choice for detecting VOCs. The 2020PRO*Plus* is equipped standard with a 10.6 eV lamp, and has an optional 11.7 eV lamp for ionizing chlorinated compounds. The UV lamp is easy to remove for cleaning or replacement.

### Ergonomic design for the real world

A new ergonomic design with textured grip and large keys makes the 2020PRO*Plus* easy to carry and use, even while wearing triple-layer gloves. The large backlit display is easy to read with large fonts. All information is clearly displayed on a single 8-line display.

### Effortless data handling

Expanded internal datalogging allows the operator to record up to 200 hours of 1 minute interval sampling points that can then be downloaded to a PC using Photovac's ProComm software.

### Dedicated calibration key

The dedicated calibration key provides immediate access to the calibration procedure. Clear prompts walk the user through the procedure assuring the user of accurate and complete calibration.

### Dräger tubes for zero calibration

Zero calibration is facilitated through the use of an activated charcoal pre-filter tube developed for Photovac by Dräger Safety AG. This multi-use tube helps ensure that trace volatiles in room air or impurities in portable cylinders of clean air are removed.

### Easy to use

Flexible operation to meet monitoring requirements
User selectable interval time (1 to 900 seconds)
Display readings in ppm, ppb, or mg/M3

### Intrinsically safe

The 2020PRO*Plus* is classified as Intrinsically Safe to North American and ATEX standards for use in potentially explosive environments.

### Lamp condition assessment

Following calibration the 2020PRO*Plus* provides the user with an assessment of the condition of the UV lamp. The assessment includes: "good", "medium", "bad", and "replace". The user can take immediate remedial action ranging from simply cleaning the lamp to replacing it with a new lamp.

**5th GENERATION Photoionization Monitor with the RUGGEDNESS and RELIABILITY you expect from Photovac**

# 2020PRO*Plus*

## Applications

- Fenceline and perimeter monitoring
- Confined space pre-entry
- Solvent storage and piping
- Transportation vessels
- Storage tank maintenance
- Site characterization
- Ambient air monitoring
- Emergency response and HazMat
- Petroleum product(s) tank entry
- Soil headspace screening
- Health and safety monitoring
- Surveying for buried chemical waste
- Aircraft fuel tank entry

PHOTOIONIZATION MONITOR

# 2020PRO*Plus*

## Solutions

### Emergency Response and HazMAT

HazMat and Emergency Response teams require portable, reliable instruments to quickly characterize accidents, spills, and contaminated sites. The 2020PRO*Plus* is ideal in these situations since it is lightweight and easy to use. The 2020PRO*Plus* provides sample analysis in less than three seconds. Rapid results are vital to responder safety to determine the level of personal protective equipment (PPE) required and the appropriate clean-up actions. Fast evaluation of the contamination present is also crucial to determine the hazard to the surrounding community and establish a safety perimeter around the site.

### Health and Safety Monitoring – Personal

A PID is the instrument of choice for personal safety monitoring because it responds best to the more toxic VOCs such as benzene. The 2020PRO*Plus* is small and lightweight so the instrument can be placed in a belt holster for personal monitoring. The audible and visual alarms for STEL, TWA, and real-time Peak levels provide the health and safety professional with an excellent way to alert workers to a potential risk to their well-being.

### Health and Safety Monitoring – Site

The 2020PRO*Plus* can be used for site monitoring to insure worker safety. In Interval Mode, the 2020PRO*Plus* automatically calculates and records PEAK, STEL, and TWA at a user selected interval. With datalogging capability supporting up to 200 hours of 1 minute sampling data, the 2020PRO*Plus* will handle short and long term monitoring requirements.

### Aircraft Wing Tank Entry

While jet fuels (e.g., JP-8, JP-4, JP-5) are typically a mixture of many complex hydrocarbons, aircraft maintenance workers need measurement of the total concentration of VOCs after draining and ventilating the fuel tank to determine if the environment is safe for entry. The 2020PRO*Plus* allows workers to quickly determine if respiratory protection is required and to enter the wing tank sooner with confidence. The 2020PRO*Plus* is ideal for this application given its ability to measure low ppm levels of VOCs in less than three seconds.

### Site Characterization

The 2020PRO*Plus* is ideal for site screening to determine the extent of contamination present by providing the concentration and defining the perimeter. The 2020PRO*Plus* can monitor a broad range of compounds with the 10.6 eV lamp and the optional 11.7 eV lamp. The 2020PRO*Plus* can be used in field characterization and monitoring potentially hazardous conditions during remediation.

### Soil/Water Jar Headspace Screening

The 2020PRO*Plus* can detect a wide range of VOCs from 0.1 to 10,000ppm. Given its broad detection range and capabilities, the 2020PRO*Plus* is an ideal screening tool for VOCs in soil or water static headspace.

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## Detectable Compounds

**Aromatics** - Benzene, Toluene, Naphthalene

**Unsaturated Hydrocarbons** - Acetylene, Ethylene, 1,3-Butadiene

**Chlorinated Hydrocarbons** - Vinyl chloride, Chloroform, Trichloroethylene, Methylene chloride

**Ketones** - Acetone, Methyl ethyl ketone, Methyl isobutyl ketone

**Alcohols** - Methanol, Ethanol, Isopropanol, n-Butanol

**Organic Fuels** - Gasoline and jet fuels, which are mixtures of hundreds of different compounds including aromatics, are well detected.

Please note: This list provides examples of the classes of compounds detectable by the 2020PRO*Plus*. Please contact Photovac Technical Support for details on specific compound detection.

For further information on Photovac products, or to arrange a product demonstration, please contact a Photovac representative near you, email us at salesadmin@photovac.com or contact Photovac, Inc.

## Specifications

### Size
9" (228.6 mm) long x 3" (76.2 mm) deep x 4.25" (107.9 mm) wide at display tapering to 2.6" (66.6 mm) at handle

### Weight
1.9 pounds (0.86 kg)

### Detector
Instant on photoionization detector with standard 10.6 eV lamp, and optional 11.7 eV lamp.

### Keypad
Two dedicated keys (ON/OFF and CAL) and three menu keys

### Display
128 x 64 graphic LCD, 6-line

### Datalogger Memory
200 hours at 1 minute interval sampling

### Serial Output
RS-232, 9600 baud, 8 data bits, no parity for connection to Windows-based PC

### Audio Output
85 db on alarm

### Inlet Connection
1/8"(3.175 mm) compression fitting

### Operating Temperature Range
Operating temperature: 0˚C to 50˚C (32˚F to 122˚F)
I/S Certified temperature: 0˚C to 40˚C (32˚F to 104˚F)

### Operating Humidity Range
0 to 95% relative humidity (non-condensing)

### Operating Humidity Range with Optional Humidity Pre-filter Tube
0 to 100% relative humidity (non-condensing)

### Operating Concentration Range
0.1ppm to 100ppm (isobutylene equivalent)
100ppm to 10,000ppm (isobutylene equivalent)

### Response Time
Less than 3 seconds, to 90%

### Low Detection Limit
0.1ppm Isobutylene

### Battery Capacity
8 hours

### Intrinsic Safety
Class I, Division 1, Groups A, B, C, & D
ATEX II 2 G EEx ib IIC T4 (TA = 0˚C to +40˚C)

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