

# Personal Environmental Monitoring

## Multi-functional Personal Environmental Monitor



NOISE



PARTICLES



GASES



TEMP



HUMIDITY

### PAMBRY PED 1780 KEY FEATURES

- Up to 4 gas sensors, or 1 gas sensor and particulate sensor
- Monitor PM 1.0, 2.5, 4.0 and 10 or TSP simultaneously
- Wide range of gases including CO, O3, HCHO, O2, NO2 ...
- Noise Dose/Level, Temperature & Humidity Monitoring
- Download data to PC for record retention and reporting
- Bluetooth™ connectivity
- Cloud data analytics option
- Black or red silicon grip
- Small and light for easy monitoring
- Visual/audible warning of hazards
- Battery life up to 160 hrs (4 working weeks)
- Rechargeable using USB-C
- Wide range of adapters to clip to an individual



#### PERSONAL DOSEMETER

A compact personal and portable device that measures noise, dust, gases, ...



#### BUILDING AIR QUALITY

Building certifications:  
LEED WELL BREEAM  
GRO, Green star, HQE,  
DGNB, Minergie, ...



#### ENVIRONMENTAL MONITORING

- Solar or battery powered
- Weather protection shield
- Auto data upload to cloud

Introducing the PED 1780,  
a versatile air quality monitor.  
Gases, Particle matter and noise... all in 1 instrument!

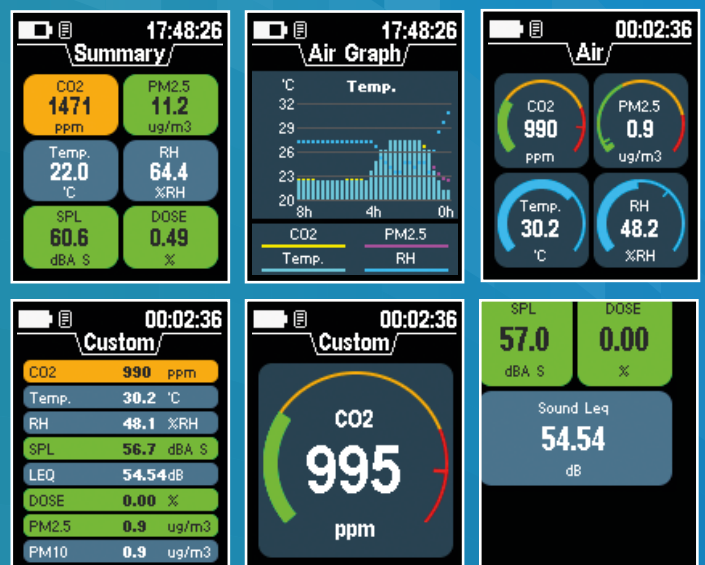
Find out more at:  
[www.hse-shop.eu](http://www.hse-shop.eu)  
[info@hse-shop.eu](mailto:info@hse-shop.eu)

# Personal Dosemeter



Prolonged exposure to harmful levels of particulate matter and gases can cause a variety of serious health problems. Getting real-time alerts when exposure levels are high lets you take immediate action to protect the health and safety of workers. Our personal dosemeter alerts you of occupational hazards exceeding user-defined limits.

The **PED 1780** has been developed for personal/ambient monitoring of air pollutants. Compact and convenient to use, it may be either worn or used for area monitoring and to maximize the health and productivity of your workforce with a real-time industrial hygiene air monitoring. Analysis of a specific contaminant after exposure yields the time-weighted (TWA) exposure concentration. It's a portable and wearable air quality monitor. Clip it to an individual and simultaneously measure particulates and gas concentration in real-time. The personal dosimeter is worn by the person being monitored, and it records the amount of exposure over the monitoring period.



## Key features of the PED 1780 personal environmental monitor:

- Up to 4 gas sensors, or 1 gas sensor and particulate sensor
- Active sampling of PM 1.0, 2.5, 4.0 and 10 simultaneously
- Noise Dose/Level, Air pressure, Temp. , %rh & movement
- Wide range of optional gases including CO2, O2, VOC, ...
- Download data to PC for record retention and reporting
- Compact and portable for easy monitoring
- Visual/audible warning of hazards
- Battery life up to 160 hrs (4 working weeks)
- Rechargeable using USB-C
- Wide range of adapters to clip to an individual
- Personal exposure monitoring
- Track indoor and outdoor air quality



# Building air quality

## Indoor air quality (IAQ) monitoring is essential for a healthy building.

Safeguarding human health and ensuring comfort in indoor environments by continuously assessing a wide range of pollutants like volatile organic compounds (VOCs), particulate matter (PM), carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), ozone (O<sub>3</sub>), formaldehyde (HCHO), nitrogen dioxide (NO<sub>2</sub>), temperature, air pressure and humidity levels.

The PED 1780 is a versatile IAQ monitor and can be used to measure air quality for building certification. Certifications to contribute to sustainability assessment and development of buildings:

- BREEAM (Building Research Establishment Environmental Assessment Method)
- LEED (Leadership in Energy and Environmental Design)
- WELL (WELL Building Standard)
- GRO (Belgium)
- Green Star (Australia)
- HQE (France, Haute Qualité Environnementale)
- DGNB (Germany, Deutsche Gesellschaft für Nachhaltiges Bauen)
- Minergie (Switzerland)

The PED 1780 provides essential data to support healthy, compliant indoor environments.

**Real-Time:** the PED 1780 provides immediate, accurate readings, audio and visual alarming. Enabling quick responses to any air quality changes.

**Remote Monitoring and Control:** the PED 1780, with the optional cloud interface module, offers remote access so users can track and manage air quality off-site. Ensuring continuous control over the indoor environment.

**Versatile:** Up to 4 gases, or 1 gas sensor and particulate matter can be measured simultaneously with a single instrument. AsH<sub>3</sub>, CH<sub>4</sub>S, CO<sub>2</sub>, CO, Cl<sub>2</sub>, ClO<sub>2</sub>, ETO, H<sub>2</sub>, H<sub>2</sub>S, HCHO, NH<sub>3</sub>, NO<sub>2</sub>, O<sub>2</sub>, O<sub>3</sub>, PH<sub>3</sub>, SO<sub>2</sub>, VOC, PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>4</sub> and PM<sub>10</sub> sensors are currently available.



Base Provision	PM Option (All provided)	Gas Options (4 Gas OR 1 Gas + PM)			
NOISE DOSE & LEVEL	PM 1.0	AsH <sub>3</sub> Arsine	ClO <sub>2</sub> Chlorine Dioxide	NH <sub>3</sub> Ammonia	SO <sub>2</sub> Sulphur Dioxide
AIR PRESSURE	PM 2.5	CH <sub>4</sub> S Methyl Mercaptane	ETO Ethylen Oxide	NO <sub>2</sub> Nitrogen Dioxide	VOC
MOVEMENT	PM 4.0	CO <sub>2</sub> Carbon Dioxide	H <sub>2</sub> Hydrogen	O <sub>2</sub> Oxygen	
HUMIDITY	PM 10	CO Carbon Monoxide	H <sub>2</sub> S Hydrogen Sulfide	O <sub>3</sub> Ozone	
TEMP	PM Typ Typical size	Cl <sub>2</sub> Chlorine	HCHO Formaldehyde	PH <sub>3</sub> Phosphane	

# Environmental monitoring



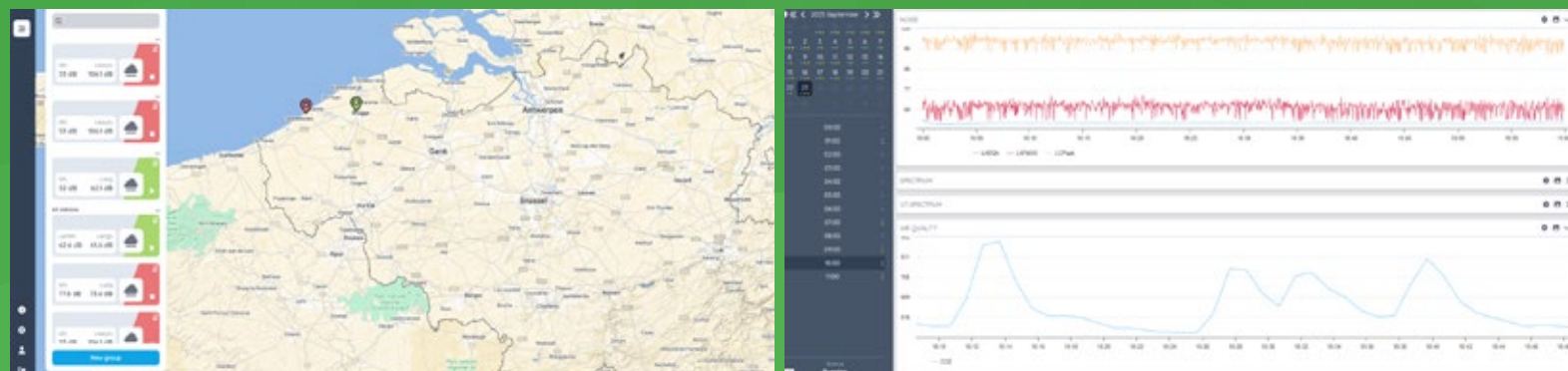
**A simple, flexible, and cost-effective alternative to traditional monitors.**

- Noise Level, Temperature, Air Pressure & Humidity Monitoring
- Simultaneous and real-time measurement of up to 4 gas sensors additionally:
  - Active sampling of Particulate Mass & Concentration PM 1.0, 2.5, 4.0, 10, TSP with sensor auto clean
  - Volatile Organic Compounds VOC
  - CO<sub>2</sub>, CO, HCHO, NO<sub>2</sub>, O<sub>3</sub>, O<sub>2</sub>, H<sub>2</sub>S, AsH<sub>3</sub>, Cl<sub>2</sub>, ETO, H<sub>2</sub>, NH<sub>3</sub>, PH<sub>3</sub>, SO<sub>2</sub>, HCN
- Optional Cloud upload and data analytics or download data to PC for record retention and reporting
- Battery life up to 160h
- 4GB memory, measurement interval can be set to 1s, 10s, 30s, 1min, 5min, 10min or 15min
- Small and light for easy monitoring (80 x 100 x 40mm)
- Visual and audio warning of hazards
- Charged using USB-C or a small solar panel



## LONG TERM OUTDOOR MONITORING

- Weather protection shield accessory
- Powerbank accessory for longer autonomy
- Solar power accessory for permanent monitoring
- Optional cloud interface for access from everywhere
- PM sensor auto self-clean every 8 or 96 hours



## WHO IS IT FOR?

- > Industrial site managers for perimeter air quality monitoring
- > Government authorities for ambient air quality and roadside monitoring
- > Environmental consultants
- > Researchers who want to collect scientific data for air quality research
- > EHS managers who need to demonstrate that they are providing a safe working environment
- > Construction site managers for fenceline and fugitive dust emission monitoring