

AS520

个人空气质量监控器

Wearable air quality monitoring system

Air quality near the wearer

Conduct a complete and reliable evaluation



AS520

Personal air monitoring system

The AS520 wearable air quality monitoring system takes full advantage of the complementary range of sensing technologies to provide a complete and reliable measurement of the air quality close to the wearer.

The system incorporates an electrochemical sensor, laser-optical particle monitor, and temperature-humidity sensor, along with a high-sensitivity GPS receiver and a 3-axis accelerometer. Microphones are integrated into the components to monitor ambient noise. The base station provides docking components for nighttime sensor storage and delivers 12V regulated power to charge the battery circuit. Equipped with a GPRS modem, antenna, and SIM card, the base station transmits daytime-stored data to the central monitoring station.

parameter

- Electrochemical sensors for accurate monitoring of CO, NO, NO₂ and O₃ (Alphasense A4). Other gas monitoring can be provided on demand.
 - Optical particle counter (Alphasense)
 - Temperature and relative humidity sensor (Atmospheric sensor)
 - MEMS3 axis accelerometer, used to detect motion
 - GPS module with integrated antenna
 - A microphone that detects ambient noise levels
 - High performance 32-bit ARM microcontroller
 - Dual-color LED indicates battery charge status and correct operation of components
 - The battery and compatible charging circuit ensure 24-hour operation of the device, while providing emergency power (two 18650 lithium batteries)
 - SD cards can store up to 32GB of data
 - It is also equipped with shoulder straps and belt clamps, so it can be worn in different ways
- Base station: 151Wx178Dx90H
Weight: 352g
- Sensor components: 100Wx83Dx130H
Weight: 534g
- Power supply: 1.2A (max) 12V (charging)
Weight: 180g
- The system consists of a base station, a power supply for the sensor assembly, and a shoulder strap. The sensor is equipped with a belt rack on the back.



深圳市杰晟兴电子有限公司 JM Components Limited