



The challenge in today's scenario is to obtain different characteristic of surrounding environment in fast and economical way whether it is a mining site, chemical lab or grocery market. Therefore researchers are constantly finding ways to solve these challenges using artificial intelligence and machine learning algorithm. For such research large data are needed.

Therefore, **Scientech 90 Handheld Sensor Node** provides a solution to collect data of surrounding parameters, relay over the air to host system and create datasets for analytics using machine learning and deep learning algorithms.

Scientech 90 provides various solution including camera, temperature, humidity and various gas sensors to measure the parameters of test subject or surrounding over long period in a easy to carry package with inbuilt battery and wi-fi connectivity. User can also check the values of various parameters with an onboard OLED display also log and view data over wi-fi.

Features

Contains primary gas sensor

Carbon dioxide (CO₂), carbon monoxide (CO), nitrogen dioxide (NO₂)

Contains secondary gas sensor

Ethanol(C₂H₆OH), hydrogen(H₂), ammonia (NH₃), methane(CH₄), propane(C₃H₈), ISO-butane(C₄H₁₀)

- Temperature & humidity sensor
- OLED display for on field sensor data
- Desktop application for data collection
- Battery backup inbuilt battery protection and charging circuit
- Inbuilt wireless data transmitter over wi-fi
- USB charging port
- Factory calibrated sensor
- Small form factor with stand
- Software dashboard for data representation and analysis

Application Areas:

- Food industry
- Agriculture research
- Environmental monitoring
- Data logging
- Civil Industries
- Mining industries
- Trenching ground
- Chemical industries

Technical Specifications

Connectivity

Wi-Fi	: 802.11 b/g/n wireless LAN
USB	: USB 2.0

Gas sensors

Carbon dioxide (CO ₂)	: 0–2000 ppm
Carbon monoxide (CO)	: 1–1000 ppm
Nitrogen dioxide (NO ₂)	: 0.05–10 ppm
Ethanol (C ₂ H ₆ OH)	: 10–500 ppm
Hydrogen (H ₂)	: 1–1000 ppm
Ammonia (NH ₃)	: 1–500 ppm
Methane (CH ₄)	: >1000 ppm
Propane (C ₃ H ₈)	: >1000 ppm
Iso-butane (C ₄ H ₁₀)	: >1000 ppm

Display : OLED Display

Temperature sensor : 0 to 100 degree celsius

Humidity sensor : 5 to 95% RH

Power : 5V DC/1A

PC interface : USB

Charging : USB

Battery : 3.7V/2200mAh

Note: Product customization is available as per users requirement for bulk quantity.



Software window

