EXPEC 1920 Fourier Infrared Gas Telemeter

Overview

EXPEC 1920 Fourier Transform Infrared Gas Telemeter displays the spatiotemporal distribution of toxic, harmful, flammable and explosive gases through images, with the functions of background visual imaging and gas cloud chemical imaging, among which the gas cloud chemical imaging adopts the innovative Fast Fourier transform infrared remote sensing detection technology. For the atmosphere of the target area, it uses passive Fourier transform infrared the remote sensing technology obtains the infrared absorption spectrum of the gas; based on the gas infrared fingerprint characteristic spectrum, EXPEC 1920 through the deep neural network algorithm and chemical measurement method, the gas composition is qualitatively determined, the gas concentration is calculated quantitatively, and depict the image of gas clouds.

It adopts exquisite structural design, especially suitable for situations where the danger cannot be judged. It can quickly arrive at the site, carry out risk assessment on the target gas, judge the chemical composition and corresponding concentration of the gas in a long-distance and non-contact manner, and master its distribution and diffusion in a large space. It can provide effective technical support for many fields such as environmental protection, fire protection, public security, petrochemical industry, etc., and escort the safety of people's lives and property, and the protection of ecological environment.

EXPEC 1920 Fourier Infrared Gas Telemeter

Features

Highly integrated
- The overall weight of the equipment is less than 25kg, small in size, light in weight, and easy to carry.
- Integrated gas factor analysis system, infrared/visible imaging system, pan-tilt scanning system, calibration and measurement calibration system, comprehensive data analysis system, etc., can be detected immediately after startup.

Visual detection
- The chemical imaging system with FTIR telemetry technology as the core, combined with high-resolution visible/infrared imaging, realizes the range detection of horizontal 360° and pitch 180° through the dual-axis scanning system.Image reveals problem points and risk sources. The view shows information such as gas cloud size, concentration distribution, diffusion trend, etc., providing real-time data basis for overall management of pollution sources and emergency decision-making.

Intelligent Monitoring
- Fully automatic viewing angle patrol scanning, automatic early warning when abnormalities are found, automatic tracking of clouds, locking and displaying the location of leaks, and clearly displaying the observed gas composition and concentration.

High-precision monitoring
- Using Stirling cooled (-200°C) scientific research-grade MCT infrared detector, combined with high-resolution FTIR optical sensing system and data processing algorithm, to achieve ppm*m level detection capability.

High security
- The equipment does not need to sample or enter the polluted area for detection. It directly detects the polluted area through long-distance and non-contact. The effective detection distance can reach 2km, and the detectable substances are greater than 400 species.

Strong compatibility
- A variety of models of equipment meet the different needs of customers, and can be carried by a single person or used in a vehicle. Provide a variety of reliable support accessories: such as tripods, car shock-absorbing bases, trolley transport boxes, etc.

Specification

● **Measuring components:** Toxic and harmful gases, flammable and explosive gases, etc. More than 400 kinds gases	● **Smart detect:** All-day and fully automatic detect
● **Band range:** 600-1500cm^{-1}(expandable)	● **Measure radius:** 2km
● **Lower limit of measurement:** ppm	● **Measure angle:** horizontal 360° and pitch 180°
● **Instrument weight:** <25kg	● **Display:** Pseudo-color overlay display, dynamic rendering
● **Detector:** Stirling cooled MCT detectors	● **Measure method:** Fixed-point monitoring, vehicle movement monitoring

Application

Fire Emergency

Environmental Protection Monitoring

Scientific Research

➢Fire emergency: Chemical accidents, fire emergency monitoring, security for large gatherings, etc.
➢Environmental protection monitoring: industrial park atmospheric monitoring, tank storage area leakage monitoring, chimney gas emission monitoring, etc.
➢Scientific research: airport aircraft exhaust research, port ship exhaust research, trace analysis of pollution sources, etc.

Hangzhou EXPEC Technology Co., Ltd
Address: 2466 Qingshanhu Technological Avenue,
Lin 'an District, Hangzhou City, Zhejiang Province
Website: www.expec-tech.com