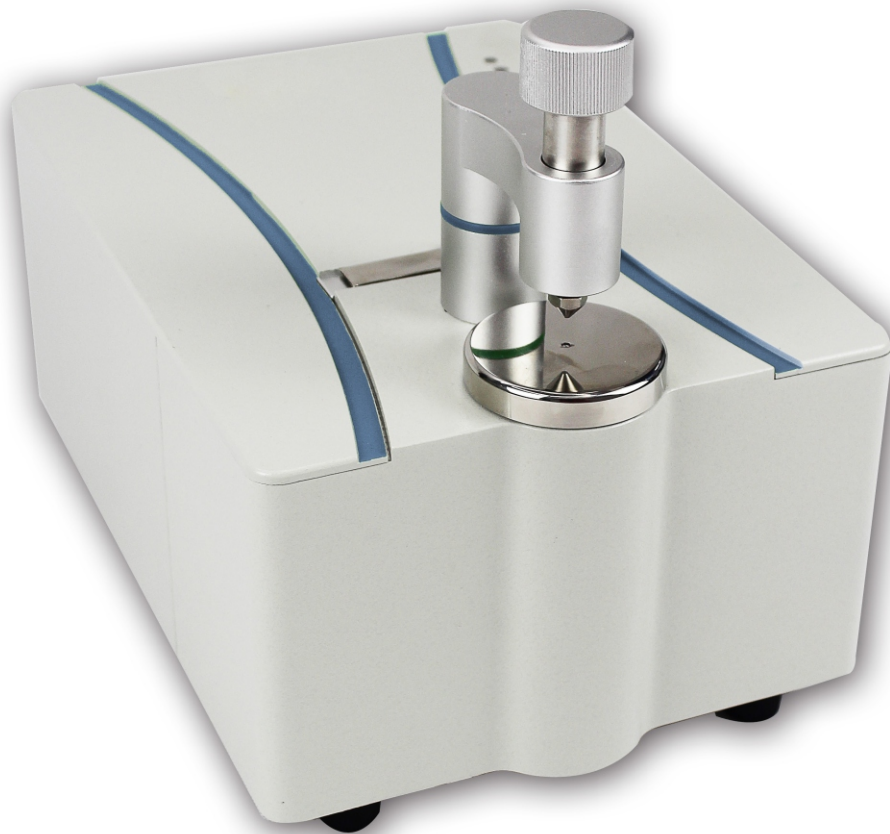


STALWART

**Compact FT-IR spectrometer
SFT-890IR**



Discription

SFT-890IR is the handheld FT-IR spectrometer with a resolution of 1cm-1, compact design fit tofield application
It's widely applied to online in real time monitor industrial gases, identify unknown narcotics , drugs and explosives by force enforcement , identify oil product quality, manufacturer , and gemstones classification , and gemstones classification , relics and museum antiques.

SFT-890IR has strictly satisfied standards of Design Qualification, Installation qualification, Operation Qualification and Performance Qualification verification.

Features

- Michelson interferometer with wear free and reliability of 10 year guaranty, with cube-corner mirror resist mechanical and temperature vibration
- Higher stability of optical system is designed with gold mirror improve reflectivity by >5% than traditional aluminium mirror.
- Super sensitivity and reliable temperature controlled DTGS detectors
- Reliable performance of solid laser life up to 10 years
- Vacuum cooling ceramic IR light source with high performance

Specification

Item	SFT-890IR
Spectral Range	7800~350 cm-1
Resolution	< 1 cm-1
SNR	40,000 : 1 1 min sample measurement, 4 cm-1, peak-to-peak
Wavenumber Accuracy	< 0.01 cm-1
Wavenumber Precision	<0.1 cm-1
Modules	Optional measure modules for replacement
Built-in Li-battery life	>8 hrs
Power	AC220V / 50Hz
Modules	plug-and-play
Analysis time	About 5 seconds
System	Windows 10
Software	<ul style="list-style-type: none">• Infrared control,• spectrum processing,• Quantitative analysis of multi-component samples,• Auto inspect software,• Advanced macro programming software• online continuous monitor of optical components, say laser light source, sensor , beam splitter so as to ensure best working status. Auto remove air water and Co2.
GMP software	In full compliance with GMP , 21CFR 11

Advantages To Monitor Gas

- No necessary to adjust cell in front of sample, Nitrogen calibration improves efficiency
- Permanent vertical interferometer module provides excellent shock and temperature resistant ensure reliability
- ZnSe-made beam splitter and mirror seal dehumidifying designed to operate in the field and at site
- Gas cell optical path allow customize by user own base on their specific concentration.
- Built-in temperature control system to keep the constant performance under different conditions
- Optional quality & flow controller for high concentration inlet sample and linearity calibration
- Built-in GTG sensor (optional MCT) stand severe environment

Application

- **Environmental industry:**

FTIR has been widely applied to environmental monitor, environmental chemistry, and environmental pollution. FTIR can online monitor gas pollution of H₂O , NO_X(NO₂ , NO , N₂O) , HF, SO₂, CO, HCl ,NH₃ , CO₂ etc. Particles in air pollution and their types and concentration. It also can monitor environmental equipment, say vacuum cleaner, desulfurization and depickle equipment.

- **Criminal investigation:**

Fast detect explosives export field evidence in dangerous site, black powder, nitrolite, TNT, hexogen, PETN...

- **Drugs enforcement:**

drugs screen morphine, heroin, Cocaine, Ice (crystal methamphetamine), Ketamin, new psychoactive substances (nps)

- **True/Fake**, quality qualified/disqualified, manufacturer's lubricating oil identification

- **Classification and identification** of gemstones and jade

- **QC check**, materials compliant with standards or not.

- **Identify unknown materials**, if the pollution to the material detected can be auto match in the library and know the pollution material name.