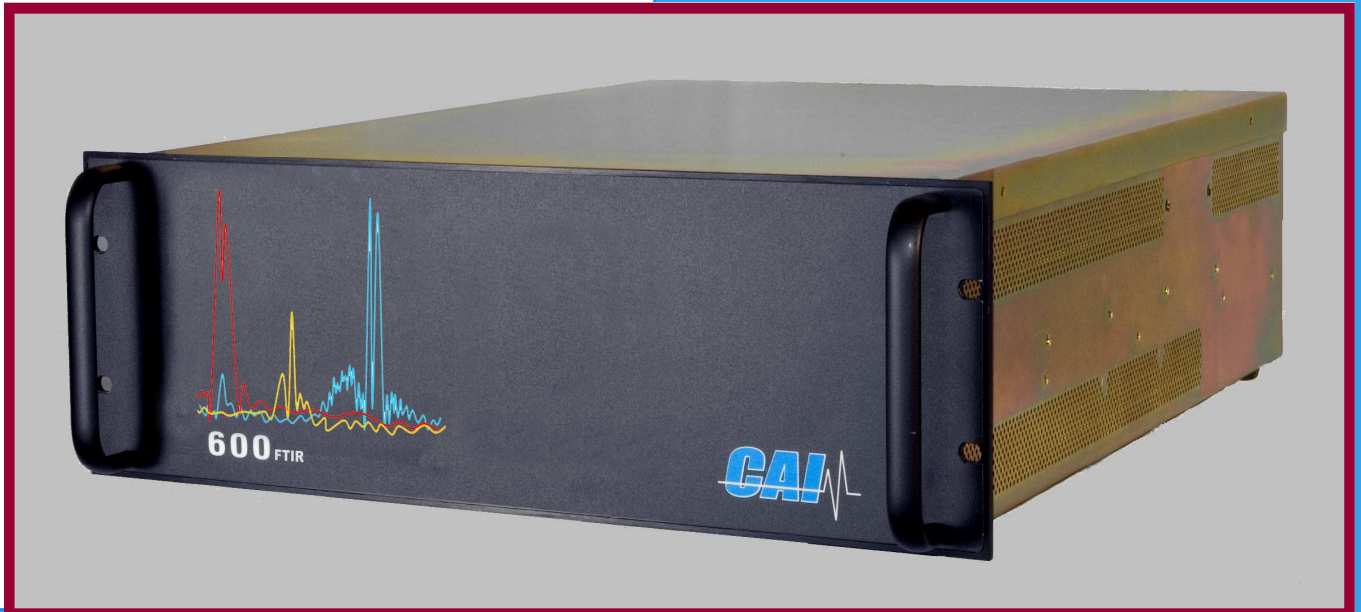


600

SERIES

FTIR

PRELIMINARY



APPLICATIONS

- Process Control
- Stack Gases (CEM / MACT)
- VOC Abatement/ Scrubber Efficiency
- Fermentation Monitoring
- Vehicle Emissions
- Ammonia Slip/SCR
- Gas Purity
- Monitoring of Agricultural Emissions

OPTIONS

- External Heated or Unheated Sample Pump
- PLC Output Module
- Intelligent Multipoint Sampler
- Flow Control Accessory

FEATURES

- Low Cost of Acquisition and Operation
- Minimum Yearly Calibration
- Proven, Rugged Interferometer With Gold Mirrors
- Multi-Gas Capability
- No Liquid Nitrogen Required
- Spectral Range 305-7500 CM^{-1} With Resolution of 0.9 CM^{-1}
- Heated Sample Cell (50 to 200 $^{\circ}$ C)
- Minimal Sensitivity to Vibration
- PC or Laptop Controlled with Opus/Mentor Spectroscopy Software
- On-board Self Diagnostics
- Compact Size
- Light Weight

600 Series FTIR Analyzer

Fourier Transform Infrared Preliminary

DESCRIPTION

The California Analytical Instruments Series 600 FTIR provides fast, continuous and stable analysis of virtually any gas which has an infrared absorption spectrum. The proprietary heated sample cell allows the instrument to accommodate hot samples containing high levels of moisture. The 600 Series FTIR can simultaneously measure, display and output multiple gases to serve a variety of applications including diesel emissions, CEM monitoring, ammonia slip, SCR inlet/outlet monitoring, process monitoring and others.

Unlike other FTIR Analyzers, the 600 Series FTIR does not require liquid nitrogen thus eliminating the need to constantly fill LN₂ dewars with associated safety issues. Its small footprint and light weight allows easy installation and transportability when required.

METHOD OF OPERATION—FTIR

FTIR spectroscopy is an analytical technique which measures infrared intensity versus wavelength. The FTIR spectrometer obtains infrared spectra by collecting an interferogram of a sample signal using an interferometer which measures infrared frequencies. Using a long path length, heated sample cell, the CAI Series 600 FTIR can make rapid and continuous measurements of on-line gas samples from ppb to ppm levels. Percent level measurements can be made using a shorter path length sample cell.

GASES AVAILABLE*

Acetylene	Nitrous Oxide
Ammonia	Nitric Oxide
Carbon Dioxide	Nitrogen Dioxide
Carbon Monoxide	Perchloroethylene
Chloroform	Phosgene
Dichloroethylene	Propane
Ethane	Propylene
Ethanol	R 134A
Ethyl Benzene	Sulfur Hexafluoride
Formaldehyde	Sulfur Dioxide
Methane	Toluene
Methyl Ethyl Ketone	Vinyl Chloride

*Contact CAI For Other Gases

SPECIFICATIONS*

Analysis Method: Fourier Transform Infrared (FTIR)

Components: Multiple Gases

Interferometer: Rocksolid™, Permanent Alignment, High Stability with Cube Corner Reflectors and Non-wearing Bearing for Long Life

Detector Type: Thermally Cooled—DTGS

Ranges: From ppb to percent

Response Time: Dependent Upon Scan Speed and Number of Components

Spectral Resolution: Better than 0.9 cm⁻¹

Spectral Range: 305-7500 cm⁻¹

Scan Speed: 1-300 Seconds

Outputs available: TCP/IP, RS-232, 4-20 mA

Control: PC, Windows XP

Ambient Temperature: 18° to 35°C

Ambient Humidity: Less than 80% RH (Non-condensing)

Fittings: ¼ inch Swaglock

Power Requirements: 115/230 (+/- 10%) VAC; 50/60Hz,

Dimensions: 7"Hx19"Wx24"D

Weight: Approximately 35-40 lbs.

*Specifications subject to change without notice.