

BOB-2000FT-G Series

Simultaneous multi-component gas analyzer using Fourier transform infrared spectrophotometry

High-performance FTIR exhaust gas analyzer with high cost merit

The BOB-2000FT-G is an FTIR gas analyzer that can perform high-accuracy measurement for simultaneous measurement of multiple components and trace emission substances. With our unique know-how and calibration technology, errors and noise due to interference between measured components are reduced to the utmost limit. In addition, due to its highly vibration-resistant structure which can be used in vehicles and simple hardware configuration, BOB-2000FT-G can easily be moved from location to location to be utilized by multiple test benches.

Interference reduction technology

Due to the principle of FTIR, many components can be measured at one time, but interference occurs between components with similar absorption characteristics, resulting in a large error in the quantitative results.

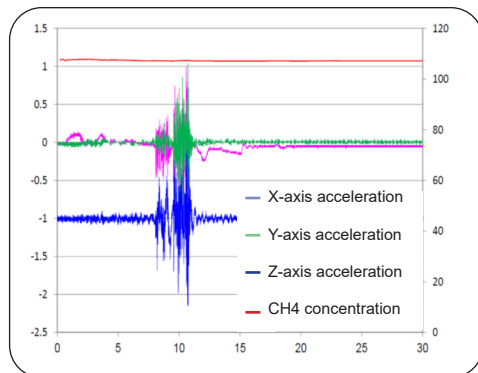
The Best Sokki FTIR gas analyzer is equipped with the technology to reduce the error caused by interference to the limit in-house calibration, and it is possible to accurately measure more components and lower concentration range.

For example, when measuring N2O, if H2O enters the gas, it will affect (interfere with) the measured value. Best Sokki FTIR uses this unique technology to reduce the effects of this interference.

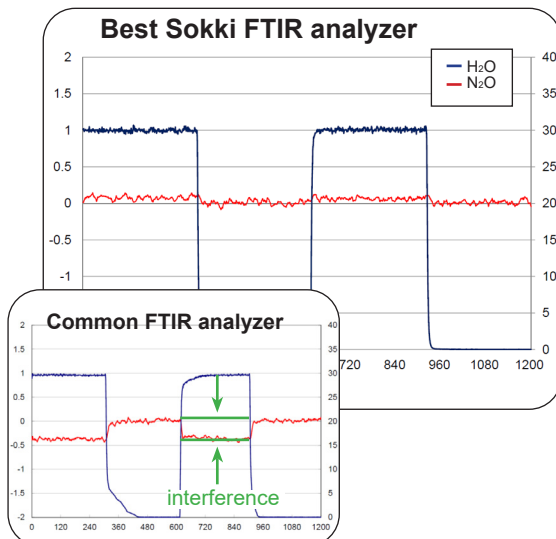
User can move between Test Cells

The extremely robust structure of the detector makes it highly vibration resistant and can be moved by the user. It can be used

without re-adjustment even after moving with vibration. The system rack is equipped with large diameter casters, making it easy to move the equipment.



Acceleration and measured value when vibration is applied to the device



Interference improvement example: Moisture interference of N2O

Due to high maintainability, delivery time is short

The inside of the system rack has a unit structure that is easy to handle, and it has good workability during inspections and repairs. In addition, the analyzers can be returned and replaced, shortening the delivery time.



Sample pic.
Actual unit is "cart type"

BOB-2000FT-G Series

Features

- Interference reduction
- High-speed response: T10-90% 1.0 ~ 1.5sec
- High speed sampling
- Excellent correlation with conventional analyzers
- Legal compliance (NH3, N2O)
- Easy connection with external systems

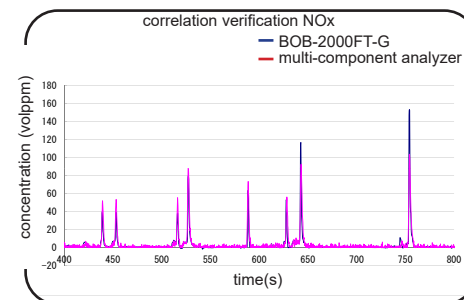
Excellent response performance

Best Sokki uses a vacuum sampling method. This is an excellent method, as "dead volume" that affects response delay, does not occur. Additionally, it has excellent response performance and is effective for measuring easily adsorbed components.

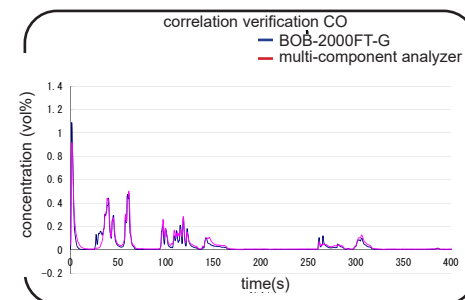
High correlation with multi-component analyzer

With our original and innovative technology, we have reduced the error and noise due to the interference that occurs. This has resulted in more accurate low concentration measurement, as well as a high correlation with conventional multi-component analyzers.

The reference graphs shows that the results are consistent with the NOx measured by the CLD method and CO measured by the NDIR method.



Correlation verification

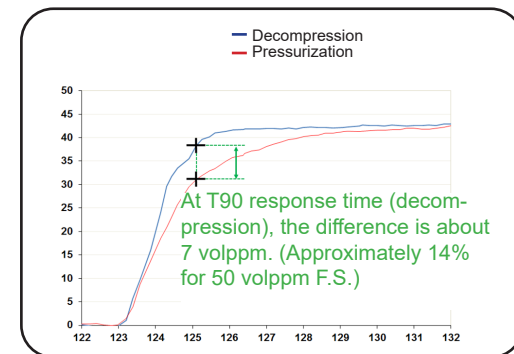


Comparison of BOB-2000FT-G and multi-component measurement results

Easy integration into A & D's ORION / iTest as well as other test automation systems.

Measurement component

CO/CO2/H2O/SO2/COS/NO/NO2/N2O/NH3/CH4/C2H2/C2H6/C2H4/C3H6/C3H8/n-C4H10/iso-C4H10/n-C5H12/C6H6/C6H5CH3/HCHO/CH3CHO/HNCO/NOx/SumHC



Comparison of rising response of pressurization and depressurization

Reduced running cost due to less contamination of conduit

The decompression sampling method used by Best Sokki reduces dirt due to adsorption, which reduces the frequency of cleaning and maintenance and reduces running costs.

Item	Specification	Item	Specification
Measuring ingredients	32 components, directly +in arithmetic components	Warm-up time	Within 1.0h
Sampling frequency	5Hz	Rack size	550W x 850D x 1350H
Measuring method	Decompression	Weight (rack storage)	280kg
Measuring temperature	191°C	Power	AC220V, 3kVA
Response speed	1.0 to 1.5sec		

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