

> Know what's in the air.



Analyzer for toxic gases

GT5000 Terra for hazardous gases

Gasmet GT5000 Terra is the most powerful portable solution for measuring the concentration of hazardous gases inside enclosed spaces such as shipping containers. The analyzer's ability to measure a large number of gases in just a few seconds provides unparalleled cost-efficiency.

The air inside shipping containers can be severely contaminated with hazardous gases, and the health of the workers involved in opening the containers is at risk. To analyze the atmosphere in a confined space requires a solution, and the subsequent results suggest further action, i.e. ventilation or the use of personal protective equipment (PPE). Performing good measurements inside shipping containers ensures the effective protection of workers, while also helping to avoid unnecessary ventilation as the atmosphere inside is safe.

Measuring the gases in shipping containers is challenging as it might be almost impossible to anticipate which gases are found inside. Hazardous gases can originate from the fumigation of the containers or even from the shipped goods themselves. An analyzer of shipping container measurements needs to be able to measure a variety of gases accurately and precisely and provide a result onsite.

A good multicomponent analyzer improves safety by measuring all relevant gases. An ability to differentiate between individuallymeasured gases can also greatly decrease the unnecessary ventilation of containers due to false positive results

Gasmet's Solution

Gasmet's solution for measuring hazardous gases in shipping containers is the weatherproof, multicomponent FTIR gas analyzer GT5000 Terra, which is the most powerful and versatile tool currently offered for challenging gas measurements. It gives accurate and specific measurements of an unprecedented number of different gases in a fully portable package. Quick and reliable results are crucial for the safety and smooth flow of containers. The analyzer includes an internal battery and sample pump, enabling direct sampling onsite without any need for separate sampling.



> Visual alarms > Great for onsite use > Cost-effective >
Weatherproof > Immediate online results > Multi-gas measurements

How does it work?

The Calcmet software that is used to operate the GT5000 Terra makes analyzing the composition of the unknown samples in shipping containers easy. The user can select the components that should be monitored, and the software automatically analyzes the concentrations of these gases. The software comes in two versions, Calcmet Easy for accessible onsite work and Calcmet Expert for further analysis with advanced tools.

The Calcmet software includes indicators of danger or unknown compounds. In the case of indications of interference from unexpected gases, Calcmet provides automatic search tools for identifying unknown gases with just a few easy steps, and once identified, new components can be added to the list of measured compounds for quantification.



What can be measured?

Standard components					
1	Formaldehyde	18	Dichloromethane	35	Ethyl acetate
2	Ethylene oxide (Oxirane; Epoxyethane)	19	Ethane	36	2-Butoxyethyl acetate
3	Benzene	20	<i>n</i> -Propane	37	Methylene dimethyl ether
4	Toluene	21	<i>n</i> -Butane	38	Acetaldehyde
5	Ethyl benzene	22	<i>n</i> -Hexane	39	Methyl ethyl ketone (MEK)
6	<i>m</i> -Xylene	23	<i>n</i> -Octane	40	Methanol
7	o-Xylene	24	Isopentane (2-Methyl butane)	41	Ethanol
8	<i>p</i> -Xylene	25	Ethylene (Ethene)	42	Isopropanol
9	Methyl Bromide (Bromomethane)	26	<i>n</i> -Propene	43	Ethylene dibromide
10	1,2-Dichloroethane (Freon 150)	27	Cyclohexane	44	Water
11	Chloropicrine (Trichloronitromethane)	28	α-Pinene	45	Carbon dioxide
12	Styrene	29	β-Pinene	46	Carbon monoxide
13	Phosphine	30	3-Carene	47	Nitrous oxide
14	Sulfuryl fluoride	31	Limonene	48	Methane
15	Hydrogen cyanide	32	Formic acid	49	Ammonia
16	Carbon disulfide	33	Acetic acid	50	Nitrogen monoxide (Nitric Oxide)
17	Acetone	34	Methyl acetate		

The analyzer is typically set up to measure the following 50 gases from shipping containers:

∧ Why Choose Gasmet

Gasmet is the number one FTIR analyzer and system manufacturer. We have supplied over 4,000 FTIR analyzers worldwide and have the highest installed base of onsite and industrial applications.

Front Seat

We are at the forefront of development. We have 30 years of FTIR experience and have introduced several groundbreaking innovations, such as launching the world's first in-situ FTIR gas analyzer and the world's first portable ambient FTIR analyzer. Our teams of specialists are continuously improving our products to ensure that your FTIR analyzer investment is always future-proofed.

Future First

The future belongs to everyone and we think that everyone has the right to clean air. Therefore, we are persistently developing our future-proof solutions and support global actions in mitigating climate change. Our vision is to live on a green planet with less emissions.

Global Presence

We know the importance of local support, globally. As our service and support network covers more than 70 countries, we can ensure local, high-quality technical support for our customers and guarantee the continuous availability of spare parts for our systems throughout the duration of their lifetime.



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