



# GT5000 Terra FTIR Gas Analyzer

Gasmet GT5000 Terra is a portable ambient temperature FTIR gas analyzer. It is designed for high-quality multigas measurements in the field. Built-in pump, battery operation, wireless connections and splash-proof cover allow ease of use in demanding conditions.

## System specifications

|                                     |  |
|-------------------------------------|--|
| <b>Measuring principle</b>          | Fourier transform infrared, FTIR   |
| <b>Multigas capability</b>          | Simultaneous analysis of up to 50 gas compounds  |
| <b>Response Time</b>                | Typically < 120 s, depending on the measured components and measuring time   |
| <b>Battery</b>                      | Li-ion battery, approximately 3-hour operation time  |
| <b>Power supply</b>                 | 115 / 230 VAC  |
| <b>Analysis Software</b>            | Calcmeter<br>Required operating system Windows 7, Windows 10 or Windows 11   |
| <b>Data Connection</b>              | USB, Ethernet, Bluetooth, WiFi Access Point and WiFi Station. Remote operable.   |
| <b>Sample pump flow</b>             | 2 liters / minute  |
| <b>Sample gas filtration</b>        | <b>Recommended filtration:</b> Gasmet sampling probe with 2 µm PTFE filter   |
| <b>Sample inlet/outlet fittings</b> | 6 mm quick-connect   |
| <b>Enclosure</b>                    | <b>Dimensions:</b> 450 x 287 x 166 mm (17,7 x 11,3 x 6,5 inches) (H x W x D)<br><b>Material:</b> ABS PC<br><b>IP class:</b> IP54 in portable field use   |
| <b>Weight</b>                       | 9.4 kg (with battery), 8.0 kg (without battery)  |
| <b>Product compliance</b>           | CE, UKCA   |
| <b>Spectrometer</b>                 | <b>Resolution:</b> 8 cm <sup>-1</sup><br><b>Scan frequency:</b> 10 scans / s<br><b>Detector:</b> Peltier cooled MCT<br><b>Beamsplitter:</b> ZnSe<br><b>Wave number range:</b> 900 - 4 200 cm <sup>-1</sup> |
| <b>Sample cell</b>                  | <b>Structure:</b> Multipass, fixed path length 5.0 m<br><b>Mirrors:</b> Fixed, gold coated<br><b>Volume:</b> 0.5 liters  |

## Operating conditions

|                               |  |
|-------------------------------|--|
| <b>Sample gas pressure</b>    | Ambient pressure                                 |
| <b>Sample gas temperature</b> | Ambient temperature (-5 – 40 °C), non-condensing |
| <b>Operating temperature</b>  | Short term -5 – 40 °C, Long term 5 – 30 °C       |

## Performance specifications

|  |   |
|--|---|
| <b>Zero-point drift</b>                | < 2 % of measuring range per 24 h background measurement interval   |
| <b>Sensitivity drift</b>               | None  |
| <b>Linearity deviation</b>             | < 2 % of measuring range  |
| <b>Temperature drift</b>               | < 1 % of measuring range per 10 K temperature change.* Ambient temperature changes are measured and compensated. (* = Typical GHG Application.) |
| <b>Pressure influence</b>              | 1 % change of measuring value for 1 % sample pressure change. Ambient pressure changes are measured and compensated.                            |
| <b>Background measurement interval</b> | Recommended 24 h  |

Gasmet Technologies Oy shall not be liable for technical or editorial errors or omissions contained herein. The information in this document is provided "as is" without warranty of any kind and is subject to change without notice. Should you find any errors, we would appreciate if you notified us.