



SPECSON  
INSTRUMENTS

# Evolved Gas Analysis TGA-IR INTERFACE



## Specson TGA-IR

Combination of TGA and FTIR is a powerful technique for the evolved gas analysis during material heating under controlled atmosphere. Transferring evolved gas with a constant flow rate to the temperature-controlled IR-cell during the process will provide information about gas species while material is losing weight. Gravity aligned quartz cell design and heatable transfer line makes this product highly resistant to corrosive gas environment and prevent water condensation.

# Specson TGA-IR Data Sheet

## Cell Specifications

Cell Material	Quartz & completely Inert flow cell
Cell Design	Gravity aligned gas flow path
Path Length	150 mm (high S/N ratio)
Dead Volume	11mL
Temperature Range	Up to 550C
Window Options	25x2mm KBr (default), CaF2, ZnSe or BaF2 IR
Gas Connections	1/8 inch stainless steel
Connector	Military type 8-pin connector
Cell Dimensions	160 x 120 x 120 mm

## Transfer Line Specifications

Inner Tube Outer Diameters	42mm
Transfer Line	100 to 250 cm long
TGA Purge Flow	Up to 200mL/min (60 ml/min recommended)
Inner Tube Options	1/8 inch stainless steel, Teflon, Silcosteel (Restek)

## PC-Controlled Heating Unit (Standard)

Controllers	Two independent PID controllers for Gas Cell and Transfer Line Manuel temperute controller
Software	SPECSON Software for PC control
Case	Robust 3mm anodized aluminum case

## Dijital Control Unit (Optional)

Controller	7 inch capacitive touch screen
Dry Vacuum Pump	20L/min
Flow Stabilization	MFC (Bronkhorst or Vögtlin)
In-line Filter	7 µm mesh size