

Technical Specifications



Characteristic Data for All Available FT-IR Coupling Systems

Coupling system	TG 309 <i>Libra</i> [®] <i>Select/Supreme</i>	STA 509 <i>Jupiter</i> [®] <i>Classic/Select/Supreme</i> ; DSC 500 <i>Pegasus</i> [®] ; STA 2500 <i>Regulus</i>	PERSEUS [®] STA 509 <i>Jupiter</i> [®] ; PERSEUS [®] TG 309 <i>Libra</i> [®] <i>Select/Supreme</i>	TMA 512 <i>Hyperion</i> [®] ; DIL 502 <i>Expedis</i> [®] <i>Select/Supreme</i>	DSC 300 <i>Caliris</i> [®] <i>Supreme</i>
Temperature range ¹	10°C (RT)-1100°C	RT-1600°C (<i>Regulus, Classic</i>) -150°C-2000°C (<i>Supreme/Select</i>)	RT-2000°C (STA) RT-1100°C (TGA)	RT-1550°C (TMA) RT-2000°C (DIL)	RT-700°C
Additional automatic sample changer operation ²	Yes	Yes (DSC 404, STA 509) No (<i>Regulus</i>)	Yes	No	Yes
Possible Bruker FT-IR spectrometer types ³	INVENIO	INVENIO	ALPHA	INVENIO	INVENIO
Stand-alone operation of the FT-IR	Yes	Yes	Yes	Yes	Yes
Additional analytical instruments to be coupled	MS or GC-MS	MS or GC-MS	MS or GC-MS	MS or GC-MS	MS or GC-MS
T _{max} transfer line, transfer tube/ adapter head	400°C	400°C	250°C	TMA: 400°C DIL: 300°C	400°C
Set-up gas cell	Internal or external	Internal or external	Internal	Internal or external	Internal or external
Material gas cell	Stainless steel	Stainless steel	Nickel-coated aluminum	Stainless steel	Stainless steel
Gas cell – path length	123 mm	123 mm	70 mm	123 mm	123 mm
Gas cell – volume	11.8 ml	11.8 ml	5.8 ml	11.8 ml	11.8 ml
Detector ⁴	DLaTGS or MCT	DLaTGS or MCT	DLaTGS	DLaTGS or MCT	DLaTGS or MCT

1 For most instruments, variable furnaces are required to cover the stated temperature range

2 Larger Dewar recommended for MCT detector

3 For coupling with FT-IR spectrometers from other suppliers, please contact your NETZSCH representative

4 MCT detector requires LN₂ cooling

Coupling to existing NETZSCH devices of the series TGA, DSC, STA, DIL and TMA is possible. Please, contact your NETZSCH sales representative for details.