

## 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 404 <b>F1/F3</b> <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 402 <b>F1/F3</b> ; DIL 402 <i>Expedis</i> <i>Select/Supreme</i>	DSC 300 <i>Caliris</i> ® <i>Supreme</i>
Temperature range <sup>1</sup>	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 <sup>2</sup>	Yes	Yes (DSC 404, STA 509) No ( <i>Regulus</i> )	Yes	No	Yes
Possible Bruker FT-IR spectrometer types <sup>3</sup>	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 <sub>max</sub> transfer line, transfer tube/ adapter head	400°C	400°C	250°C	230°C/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 <sup>4</sup>	DLaTGS or MCT	DLaTGS or MCT	DLaTGS	DLaTGS or MCT	DLaTGS or MCT

<sup>1</sup> For most instruments, variable furnaces are required to cover the stated temperature range

<sup>2</sup> Larger Dewar recommended for MCT detector

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

<sup>4</sup> MCT detector requires LN<sub>2</sub> 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.