

# Suggested ordering specification for DTA accessory

*Thermo Fisher Scientific, Process Instruments, Newington, USA*

## General

The Differential Thermal Analysis (DTA) accessory is an add-on option for high mass TG systems. It's designed to obtain simultaneous TG and DTA signal for samples.

## Performance

**Temperature range:** Ambient – 1500 °C, or max temperature of TGA system.

**Sample weight:** Function of density, TGA system is capable of 10-g weight differential.

**Heat/cool rates:** 0.1 to 100 °C/min, a function of the TGA system.

**Differential temperature range:** ± 50 °C

**Temperature resolution:** ± 0.1 °C

**Temperature accuracy:** within ± 1 °C or ± 2%, whichever is greater.

**Baseline stability:** Less than 5 °C full scale.

**Temperature reproducibility:** (using metal standards) ± 1%

**Gas environment:** Controlled by the TGA System, DTA sensor located inside the TGA reactor tube.

## Cell configuration

**Power:** from TGA system

**Two sensors:** Sample / Reference

**DTA sensor:** Platinum – 10 % Rhodium versus Platinum (“S”)

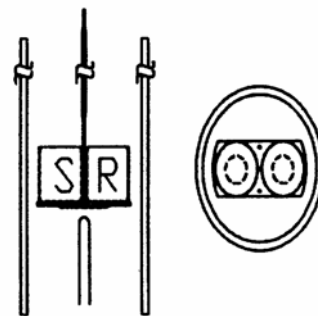
**Sample volume:** up to 100 mL

**Sample containers:** Platinum

## Installation

The DTA accessory can be installed in Thermo Scientific HIGH MASS TGA systems. The DTA accessory will be controlled by the current version of the Thermo Scientific TGA system.

The DTA sensor will be suspended from the balance's hang-down loop. Wires are attached to the balance base-plate connector, and run along the balance beam to connectors. These connectors are attached to the DTA sensor wires. The differential signal is amplified, and passed to a Thermo Scientific manufactured 24 bit A/D. The differential signal is recorded along with the TGA temperature and weight, for post analysis after the run is completed.



**Thermo Fisher Scientific  
Process Instruments**

**International/Germany**

Dieselstr. 4,  
76227 Karlsruhe  
Tel. +49(0)721 40 94-444  
info.mc.de@thermofisher.com

**Benelux**

Tel. +31 (0) 76 5 87 98 88  
info.mc.nl@thermofisher.com

**China**

Tel. +86 (21) 68 65 45 88  
info.mc.china@thermofisher.com

**France**

Tel. +33 (0) 1 60 92 48 00  
info.mc.fr@thermofisher.com

**India**

Tel. +91 (22) 27 78 11 06  
info.mc.in@thermofisher.com

**United Kingdom**

Tel. +44 (0) 1785 81 36 48  
info.mc.uk@thermofisher.com

**USA**

Tel. 603 436 9444  
info.mc.us@thermofisher.com

**[www.thermo.com/mc](http://www.thermo.com/mc)**

C228a\_15.08.2008

© 2007/07 Thermo Fisher Scientific.  
All rights reserved. This document is  
for informational purposes only and is  
subject to change without notice.