

TTDMA Accessories - 1 litre Super Cryo

The 1L Dewar is used for cryogenic cooling in conjunction with the range of Triton DMA equipment. It is of robust design with added safety features and a convenient lever shut off valve.

The thermally efficient design of Triton DMAs make a 1L dewar suitable for virtually all sub ambient experiments. 1L of liquid nitrogen can typically run 1 sample to -190°C or 6 samples to -100°C.



Coolant Consumption:

-100°C	3 minutes	0.125 L Liquid N ₂
-150°C	5 minutes	<.5 L Liquid N ₂
-190°C	7minutes	<1 L Liquid N ₂

Safety Features:

Pressure relief valve fitted as standard
Phase separator on outlet
Liquid nitrogen handling safety instructions

10 litre Auto Cryo

The 10L Dewar is used for cryogenic cooling in conjunction with the range of Triton DMA equipment. It is of robust design with added safety features and an automated approach to liquid nitrogen management.

Although the 10L Dewar has a longer equilibration time than the 1L Dewar, once pressurised, it will provide continuous use of the DMA over the full range of sub ambient temperatures for multiple samples.

The 10L Dewar comes with an Auto Cryo Kit to deliver cooling in a precise and controlled manner.



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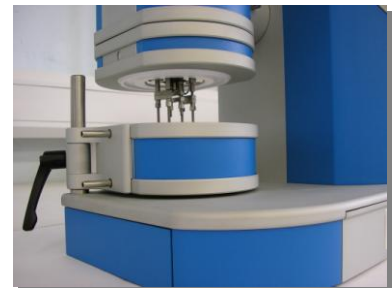
Immersion Accessory

The Triton Technology **Fluid Bath** is an accessory for the range of Triton Technology DMA equipment. The fluid bath enables a sample to be immersed in a solvent or media whilst the TTDMA experiment is being performed.

The immersion fluid can be temperature controlled using a circulating fluid from a separate circulation bath.

Ports are provided to allow circulation of:

- Gas (such as nitrogen or air)
- Humidity controlled environment (when used with the humidity generator and controller)
- Cryogenic fluid (such as liquid nitrogen)



Temperature Range:

Ambient to 150°C (dependant on immersion fluid used)

Immersion Bath Material:

Anodised Aluminium supplied as standard

85/85 Humidity Chamber

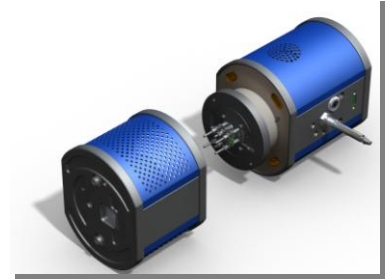
The Triton Technology **85/85 Humidity Chamber** is a unique solution to deliver an accurate relative humidity up to 85°C and up to 85% humidity in a TTDMA . This Chamber also requires the Triton Humidity Generator and Controller and a Recirculator.

Features

- Thermal jacket completely surrounds sample chamber
- Easy conversion to standard DMA use and vice versa
- Utilises the proven feedback control of the Triton Humidity Generator and Controller unit (humidity sensor incorporated inside the Chamber)

Benefits

- No 'cold spots'
- Highly stable humidity control
- Rapid set up



Humidity Range:	5% to 95% (25°C) 10% to 85% (85°C)
Temperature Range:	5°C to 85°C
Sample chamber volume:	200 cc (Approx)
Connections:	Heated humidity transfer line Humidity sensor connection In and out Recirculation fluid connections

Circulator for Humidity Chamber and /or Immersion accessory

When running the Triton Technology DMA, it is necessary to control the temperature of the sample environment. This is normally done by using the in-built electrical heating option in the furnace coupled with liquid nitrogen for cooling. By using these features alone or in conjunction with each other, good temperature control can often be achieved.

For some applications, however, it is necessary to have more stable temperature conditions. The circulator, supplied by Triton Technology, provides this very stable environment and is predominantly used in conjunction with the Fluid Bath and Humidity Controller where very precise temperature control is required.

The bath and temperature controller are manufactured by Grant Instruments Ltd. The final Circulator product that Triton Technology supply has been modified with quick release fittings and plumbing to attach directly onto either the Fluid Bath or the DMA furnace. The temperature range allows for the majority of both immersion and humidity controlled experiments.



Temperature Range:	-20°C to 100°C (using suitable circulating media)	
Stability:	±0.005°C	
Circulating volume:	5 L	
Instrument Footprint:	410mm depth x 230mm width x 590mm height	
Instrument Weight:	20 kg	
Connections:	Electrical	334W max heating, 2000W max cooling