

200°C DHG Laboratory Ovens

The DHG series from TMS Europe are a range of precision electric laboratory ovens. They are designed for low temperature thermal treatment such as drying, heating and thermal testing in an air-flow assisted environment.

Forced air convection is used to provide more effective drying and quicker heating, as well as improved temperature uniformity throughout the chamber. With a temperature range of 10°C above ambient to 200°C, the precision temperature control system provides excellent stability and uniformity with virtually no overshoot.

The ¼ DIN size digital PID temperature controller display the current temperature and set-point. It includes a simple timer, which can be used to hold the temperature at the set-point for a period before sounding a buzzer and cooling at its natural rate. A basic over-temperature protection alarm is built into the controller on all models, if the process temperature is more than 20°C above the set-point, it will disable the heating until the difference drops back below 20°C. Additionally, independent over-temperature protection (OTP) is included as standard for all models, which provides a separate dial for setting its absolute temperature limit.

A control knob selects internal or external air circulation (or a mixture as desired). All models have a switch to turn off the fan if it isn't desired (although best performance and thermal uniformity is achieved with it on). A round entry port (48mm diameter) into the chamber from the side is included as standard for all models.

All models listed are normally available from stock or on a short lead-time. Additional shelves are available from stock at extra cost. Our ovens are available with optional UKAS (ISO17025) calibration of the temperature controller and temperature sensor as a system or also with a thermal survey of the chamber volume.



- Stainless steel chamber lining
- Good stability and uniformity
- Glass observation window
- Entry Port as standard
- Independent Over-Temperature Protection as standard

| Model <i>TMS Stock Code</i> | Capacity (Approx.) | Chamber Size* External Size (WxDxH) | Shelves: Size, Number | Power | Oven Price | Extra Shelves |
|---|-----------------------|---|--------------------------|---------|---------------|------------------|
| DHG-9070 <i>FCETRIDHG9070</i> | 70 L | 400 x 350 x 500mm 550 x 680 x 810mm | 370 x 325mm 2 | 1.5kW | £1,180 | +£40 |
| DHG-9240 <i>FCETRIDHG9240</i> | 240 L | 500 x 600 x 740mm 650 x 900 x 1050mm | 460 x 560mm 2 | 2.3kW | £1,640 | +£50 |
| DHG-9620 <i>FCETRIDHG9620</i> | 620 L | 800 x 600 x 1300mm 1020 x 940 x 1700mm | 760 x 550mm 3 | 7.1kW † | £3,280 | +£60 |

Supply Voltage: 240Vac 50Hz (single phase).

Power Connector: **DHG-9070, DHG-9240:** BS1363 (UK) Plug via IEC C14 connector.

DHG-9620: IEC60309 (Round Blue) 32A P+N+E Plug.

* Note: Chamber size is full extents of the volume of the chamber, not all of this space can be used due to internal structure, available shelf positions, etc. A minimum gap of 5% of the internal dimension must be between each wall of the chamber and the user's load.
WxDxH = Width (Left-right) x Depth (Front-back) x Height (Top-bottom). † 4.8kW reduced peak power version also available on request.
Appearance may vary from images shown. Specification and price subject to change without notice. Trademarks acknowledged. Prices ex VAT.

| | | DHG-9070 | DHG-9240 | DHG-9620 |
|--|-------|------------------|------------------|------------------|
| Heating Time (Minutes. Approx. Including Stabilising at SP) | 80°C | 15 | 20 | 23 |
| | 160°C | 25 | 30 | 35 |
| | 200°C | 30 | 38 | 45 |
| Shelf Positions (~30mm apart) | | 11 | 19 | 37 |
| Shelf Loading Weight Limit; Single Shelf / Oven Total (Non-concentrated. Recommended.) | | 10 kg / 40 kg | 15 kg / 60 kg | 15 kg / 80 kg |
| Feet Centres (WxD approx.) | | 540x 470mm | 580 x 680mm | 880 x 640mm |
| Unit Weight (approx.) | | 59 kg | 88 kg | 194 kg |
| Packed Weight (approx.) | | 67 kg | 96 kg | 220 kg |



Independent Over-Temperature Protection



Entry Port

A high temperature rated silicon bung is provided to block the Entry Port. Flanges and objects passing through the Entry Port may get hot and conduct heat outside the chamber. Excessive thermal loading or insufficient insulation in the entry port can have a negative on thermal uniformity in the chamber.

Calibration of DHG Oven Systems

UKAS calibration of instrument and sensor, as a system, at your choice of temperature(s) between 30 and 200°C. A calibration certificate is issued reporting the tested system's measurement at each temperature. The typical lead-time is 6 - 10 working days. Fast turn-around may be available at additional cost.

£160 for the first calibration temperature
£40 per additional calibration temperature

A 5-point or 9-point thermal survey of the chamber volume can also be performed before despatch. We also provide on-site calibration services and thermal surveys. Please contact with your requirements for a quotation.



TMS Europe Ltd is a UKAS accredited calibration laboratory No. 0461. We are accredited for calibration on site and in our laboratory, as defined in our Schedule Of Accreditation (see www.tmseurope.co.uk/soa).

Our SNOL range of ovens is also available, for use up to 300°C, with capacities of 20 litres to 420 litres. They also offer many additional options, including programmable temperature controllers and timers.



Delivery & Shipping

These units are shipped as a palletised wooden crate, on a courier service which is normally next-day for much of the UK.

| Destination | Price | Typical Transit Time |
|---|---------------------------------|----------------------|
| UK Mainland (England, Wales, Scottish Lowlands) | £95 | 1-2 days |
| UK Scottish Highlands, Ilse of Wight | £130 | 1-3 days |
| UK Northern Ireland & Republic of Ireland | £175 | 1-3 days |
| Other destinations (including other UK coastal islands) | Please contact us for a quote. | |
| Collection from our factory (Derbyshire, UK) | £30 (Weekdays, by arrangement.) | |



These units are manufactured in China to TMS Europe Ltd's specification. Further quality control and improvements, full testing, localisation and after-sale service are performed in the UK by TMS Europe Ltd. TMS was established in 1979 and has offered the DHG range since 2013.



After Sales Service & Warranty

TMS Europe has been stocking and selling the DHG range since 2013. We hold UK stock of a range of spares and accessories and can offer service and repairs at our factory if required at a later date. We also offer a range of on-site calibration services, see our website or contact us for more details.

Each unit has a 1 year return to base warranty against manufacturing defects from the date of purchase from TMS Europe. This covers normal use of the unit in accordance with its instruction manual. It does not cover excessive 'wear and tear' or rough handling. Failures or damage resulting from the process/application or its by-products (e.g. leaks, spills, blockages, contamination, corrosion, etc.) cannot be considered manufacturing defects and as such are not covered by the warranty.

On receipt of the unit it is important to check for any transport damage and report it to TMS Europe and note it on the carrier's paperwork. It is recommended to keep the original wooden packaging base in case the unit ever needs returning.

Under the warranty any manufacturing defects will be rectified by TMS Europe at no charge. 'Return to base' means the customer is responsible for return of the unit to TMS Europe's site (Derbyshire, UK) for assessment with a view to repairing under warranty. Or, if necessary, we can provide collection at a cost, provided the unit is suitably packaged. For any work performed that is solely covered by the warranty TMS Europe will provide return shipment of the unit within the UK and Republic of Ireland at no charge. Whilst TMS Europe stocks a range of spares and aims to resolve any warranty repairs quickly, typically within 3 – 8 working days, the warranty does not guarantee this nor any provision of a loan unit while the customer's unit is with us.



Part of a range of thermal solutions from TMS Europe

