Thermo Scientific Heratherm
Heating and Drying Ovens

Efficient,
safe and easy

Thermo
SCIENTIFIC

Thermo Scientific Heratherm
Heating and Drying Ovens

your samples

We are obsessed with sample integrity. Each of our new laboratory heating and drying ovens is designed with sample protection as top priority.

our obsession

Our Heratherm® ovens are available in three different models. Choose gravity or mechanical convection technology.

- **General Protocol** units are optimally suited to everyday heating and drying applications up to 250 °C.
- **Advanced Protocol** models provide the necessary technologies for users requiring ultimate accuracy and increased heating capability up to 330 °C.
- **Advanced Protocol Security** ovens offer additional safety features aimed at ultimate protection of your most precious samples and products up to 330 °C.

Sizes include three table-top volumes of 60 L, 100 L and 180 L, and two free standing models of 400L and 750L.

Thermo Scientific Heratherm ovens family includes optional stainless steel models. All units are **CE** marked.

German engineered and manufactured

Energy efficient

The new Thermo Scientific™ Heratherm ovens feature an environmentally friendly design with cost savings in mind, reducing energy consumption by as much as 20% compared to previous models*.

Discover why laboratories across the globe rely on Thermo Scientific products every day.

From simple drying of glassware to the most complex and carefully controlled heating applications, your oven is an invaluable part of your daily work. The Heratherm oven range includes an array of solutions to match your needs – and are backed by a two-year warranty on parts and labor, meaning confidence for your investment.*

*Subject to Thermo Fisher Scientific Standard Limited Warranty. See www.thermofisher.com or product literature for details.

efficient

- Surpassing energy efficiency, increasing cost effectiveness, reducing environmental impact when compared to previous models*
- Unique door design reduces heat emission significantly
- Timer for effective usage and additional energy savings
- Space saving footprint without compromising volume
- Flexible shelving system allows for optimal space utilization

safe

- Routine check upon startup for optimum performance levels
- Temperature uniformity as good as +/- 2 °C at 150 °C
- Automatic audible and visual overtemperature alarm
- Access port for data logging with independent sensors
- Low surface temperatures

easy

- Easy to read, large display
- Easy setting with intuitive interface
- Easy cleaning with rounded corners

*based on internal testing 10/2010

Innovative technology
for outstanding versatility

HERATHERM FEATURES	GENERAL PROTOCOL OVENS		ADVANCED PROTOCOL OVENS		ADVANCED PROTOCOL SECURITY OVENS
	table top	large capacity	table top	large capacity	table top
Temperature range	50 °C[1] - 250 °C[2]		50 °C - 330 °C	50 °C - 250 °C[2]	50 °C - 330 °C
Interior material	stainless steel 1.4016		stainless steel 1.4301	stainless steel 1.4301	
Rounded interior corners	✔		✔		✔
Microprocessor control	✔		✔		✔
Automatic overtemperature alarm	✔		✔		✔
Stackable with optional stacking kit	✔	•	✔	•	✔
Easy calibration routine	✔		✔		✔
Gravity convection	choice	✔	choice	•	choice
Mechanical convection	choice	•	choice	✔	choice
Timer functions	on/ off		choice of weekly/ hourly/ real time		choice of weekly/ hourly/ real time
Fresh air damper	manually controlled		electronically controlled	electronically controlled	
Access port for independent data monitoring	use exhaust vent		✔		✔
RS232 interface	✔		✔		✔
Adjustable fan speed	•		5 speeds	2 speeds	✔
Programmable (ramps / dwells)	•		✔		✔
Boost function for accelerated heat-up	•		✔	•	✔
Optional stainless steel exterior	•		✔		✔
Dry alarm contact for connection of alarm device	•		✔		✔
Automatic undertemperature alarm	•		•		✔
Door alarm	•		•	✔	✔
Lockable door	•		•		✔
Connection for optional sample temperature sensor	•	•	✔	✔	

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit

[2] 750 L units available in 400V version: maximum temperature 300 °C

Convection technologies –
your choice

Mechanical convection

- Fast sample drying and heating
- Superior temperature uniformity
- Fast temperature recovery after door opening

Gravity convection

- Gentle drying and heating with low air turbulences
- Perfect for working with materials that are sensitive to airflow such as powders and foils

Select the right model
for your needs

Thermo Scientific Heratherm Ovens Selector Guide

APPLICATION	MATERIAL/ SAMPLE*	SAMPLE REQUIREMENTS	RECOMMENDED HERATHERM OVEN
Drying	Glassware	Fast drying	Gravity convection for gentle drying, Mechanical convection for fast drying. Choose Advanced Protocol for highest temperature accuracy and selection of fan speed. Choose Advanced Protocol Security for additional sample safety. Check also our vacuum ovens for speedy drying at low temperatures.
	Powders	Gentle / Fast drying	
	Paper, textile	Gentle / Fast drying	
	Soil, sand	Gentle drying	
	Electronics	Gentle drying	
	Pharmaceutical preparations	Gentle drying	
Material testing	Cables	Highest temperature accuracy; safe processes	Advanced protocol models with programming capabilities – mechanical convection models have highest temperature accuracy. Advanced protocol security models for additional sample safety.
	Plastics	Highest temperature accuracy; safe processes	
Curing	Paint	Gentle heating	Gravity convection for gentle heating. Choose Advanced Protocol for high temperature accuracy and Advanced Protocol Security for additional sample safety.
	Adhesives	Gentle heating	
	Plastics	Gentle heating	
	Metals	Gentle heating	
Heated storage	Pills, drugs	Gentle heating; safe processes	Gravity convection for gentle heating, or Advanced Protocol mechanical convection at low fan speed. Choose Advanced Protocol Security for additional sample safety.
Vulcanization	Rubber	Gentle heating	

*examples

For heat treatment and drying processes that involve flammable solvents or potentially explosive atmospheres, please ask for our special solutions!

Footprint Comparison*

Making the best use of valuable space in your lab, Heratherm ovens are designed with a very small footprint ratio compared to the interior volume. In addition they are stackable with an optional stacking kit.

Maximized space efficiency

manufacturer A

manufacturer B

The free standing models can easily be moved around on their casters as needed to use available space most efficiently. The casters can be locked to ensure stable set-up of the units.

*based on competitors' published specs

Thermo Scientific Heratherm
General Protocol Ovens

Heratherm General Protocol table top ovens are perfect for routine daily work, providing the ideal heating and drying solution for your applications.

Heratherm ovens have a smooth inner casing with easy to clean rounded corners

60 L, 100 L, 180 L models shown

technology for efficiency
- Low energy consumption
- Built in timer
- Excellent footprint/volume ratio
- Three sizes (60 L, 100 L, 180 L)
- Inner chambers made from corrosion-resistant stainless steel with rounded corners for easy cleaning

convenience for ease of use
- Large, easy to view vacuum fluorescent display
- Simple, microprocessor-based touch button controls
- Doors can be opened over 180° making these units easy to access
- Automatic overtemperature alarm system to protect samples

SPECIFICATIONS TABLE/ORDER NUMBERS GENERAL PROTOCOL OVENS

Order number		51028139	51028140	51028141
Model		OGS60	OGS100	OGS180
Convection technology		Gravity convection	Gravity convection	Gravity convection
Temperature range	°C	50 °C[1] - 250 °C	50 °C[1] - 250 °C	50 °C[1] - 250 °C
Spatial temperature deviation	at 150 °C	± 4.4 °C	± 4 °C	± 4 °C
Temperature deviation over time	at 150 °C	± 0.4 °C	± 0.4 °C	± 0.4 °C
Footprint	m² / sqft	0.3 / 3.2	0.36 / 3.9	0.47 / 5.1
Chamber volume	L / cuft	65 / 2.3	105 / 3.75	176 / 6.2
Dimensions	chamber, mm / in (W x H x D)	328 x 480 x 415 / 12.9 x 18.9 x 16.3	438 x 580 x 414 / 17.2 x 22.8 x 16.3	438 x 680 x 589 / 17.2 x 26.8 x 23.2
	exterior², mm / in (W x H x D)	530 x 720 x 565 / 20.9 x 28.3 x 22.2	640 x 820 x 565 / 25.2 x 32.3 x 22.2	640 x 920 x 738 / 25.2 x 36.2 x 29.1
Number of shelves	supplied / max	2 / 13	2 / 16	2 / 19
Max. shelf load	kg / lb	25 / 55	25 / 55	25 / 55
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	230 / 50/60
Rated power / max. current	W / A	1800 / 7.9	3100 / 13.5	3100 / 13.5
Energy consumption at 150° C	W	194	261	320
Weight	kg / lb	42 / 93	53 / 117	66 / 146

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit
[2] Depth of handle / display not included in depth (65 mm); adjustable feet not included in height (35 mm) – required distance to rear wall: 80 mm

180° door opening

The door can be opened 180° to allow convenient access to the interior for hassle free cleaning and easy loading of samples.

Standard RS232 interface on all units

Fresh Air Damper provides control over air exchanges

Operating up to 250 °C

performance for proven results

- Operating from 50 °C up to 250 °C
- Gravity convection units are designed to protect delicate samples while offering temperature uniformity of +/- 4 °C with temperature stability of +/- 0.4 °C at 150 °C
- Mechanical convection models provide a temperature uniformity of +/-3.3 °C with temperature stability of +/-0.3 °C at 150 °C

data logging

- The exhaust vent can be used as an access port for an external temperature sensor
- All Heratherm ovens come standard with a RS232 data interface
- Optional access ports available

SPECIFICATIONS TABLE/ORDER NUMBERS GENERAL PROTOCOL OVENS

Order number		51028148	51028149	51028150
Model		OMS60	OMS100	OMS180
Convection technology		Mechanical convection	Mechanical convection	Mechanical convection
Temperature range	°C	50 °C[1] - 250 °C	50 °C[1] - 250 °C	50 °C[1] - 250 °C
Spatial temperature deviation	at 150 °C	± 2.8 °C	± 2.5 °C	± 2.8 °C
Temperature deviation over time	at 150 °C	± 0.3 °C	± 0.3 °C	± 0.3 °C
Footprint	m² / sqft	0.3 / 3.2	0.36 / 3.9	0.47 / 5.1
Chamber volume	L / cuft	66 / 2.3	104 / 3.65	179 / 6.3
Dimensions	chamber, mm / in (W x H x D)	354 x 508 x 368 / 13.9 x 20 x 14.5	464 x 608 x 368 / 18.3 x 23.9 x 14.5	464 x 708 x 543 / 18.3 x 27.9 x 21.4
	exterior², mm / in (W x H x D)	530 x 720 x 565 / 20.9 x 28.3 x 22.2	640 x 820 x 565 / 25.2 x 32.3 x 22.2	640 x 920 x 738 / 25.2 x 36.2 x 29.1
Number of shelves	supplied / max	2 / 13	2 / 16	2 / 19
Max. shelf load	kg / lb	25 / 55	25 / 55	25 / 55
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	230 / 50/60
Rated power / max. current	W / A	1400 / 6.1	3060 / 13.3	3060 / 13.3
Energy consumption at 150° C	W	291	426	473
Weight	kg / lb	42 / 93	53 / 117	66 / 146

NOTE: All figures in all tables are typical average values for series devices, based on factory standard following norm DIN12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm
Advanced Protocol Ovens

As well as incorporating all the benefits of our General Protocol table top ovens, the Advanced Protocol range boasts additional features providing even more flexibility, accuracy and dependability.

100 L model shown

maximum efficiency
- Sophisticated timer extends the automation options available to the user
  > Automate the oven to turn on or off at pre-set times
  > Choose between a recurring weekly timer or run timer based on the 24 hour clock

ultimate performance
- Capable of operating at temperatures up to 330 °C
- Our highest level of temperature uniformity
- Exceptionally low energy consumption – 60 liter models just need 170 W (gravity convection) and 259 W (mechanical convection) per hour to maintain 150 °C

SPECIFICATIONS TABLE/ORDER NUMBERS ADVANCED PROTOCOL OVENS

Order number (coated exterior)		**51028142**	**51028143**	**51028144**
Model		OGH60	OGH100	OGH180
Order number (stainless steel exterior)		**51028709**	**51028711**	**51028712**
Model		OGH60 SS	OGH100 SS	OGH180 SS
Convection technology		Gravity convection	Gravity convection	Gravity convection
Temperature range	°C	50 °C[1] - 330 °C	50 °C[1] - 330 °C	50 °C[1] - 330 °C
Spatial temperature deviation	at 150 °C	± 2.5 °C	± 3.0 °C	± 2.5 °C
Temperature deviation over time	at 150 °C	± 0.3 °C	± 0.3 °C	± 0.3 °C
Footprint	m² / sqft	0.3 / 3.2	0.36 / 3.9	0.47 / 5.1
Chamber volume	L / cuft	61 / 2.15	99 / 3.6	168 / 6.05
Dimensions	chamber, mm / in (W x H x D)	328 x 480 x 389 / 12.9 x 18.9 x 15.3	438 x 580 x 389 / 17.2 x 22.8 x 15.3	438 x 680 x 564 / 17.2 x 26.8 x 22.2
	exterior², mm / in (W x H x D)	530 x 720 x 565 / 20.9 x 28.3 x 22.2	640 x 820 x 565 / 25.2 x 32.3 x 22.2	640 x 920 x 738 / 25.2 x 36.2 x 29.1
Number of shelves	supplied / max	2 / 13	2 / 16	2 / 19
Max. shelf load	kg / lb	25 / 55	25 / 55	25 / 55
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	230 / 50/60
Rated power / max. current	W / A	1800 / 7.9	3100 / 13.5	3100 / 13.5
Energy consumption at 150° C	W	170	210	290
Weight	kg / lb	44 / 97	55 / 121	69 / 152

Thermo Scientific Heratherm Heating and Drying Ovens

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit
[2] Depth of handle / display not included in depth (65 mm); adjustable feet not included in height (35 mm) – required distance to rear wall: 80 mm

Fan adjustable in five speed settings for matching the airflow to your application

Dedicated access port (18 mm in diameter) allows the introduction of independent sensors

Operating temperatures as high as 330 °C

Optional stainless steel exterior is available:

- Robust and corrosion-resistant surface
- Easy to clean
- Meets demanding needs in pharmaceutical and clinical laboratories

unmatched sophistication

- Adjustable fan speed for application related airflow
  > High speed for fastest drying/heating, quick recovery as well as best temperature stability/uniformity
  > Reduced speed for applications that require minimal airflow, like drying of powders
- Programmable controller for temperature ramps and dwells
  > Store up to 10 programs with 10 discrete steps
  > Features electronically controlled fan speed and damper position
- Access port allows the introduction of sensors for independent data monitoring
- A simple calibration routine ensures temperature accuracy over time
- Boost function enables rapid heating up – no need to run the oven 24/7

SPECIFICATIONS TABLE/ORDER NUMBERS ADVANCED PROTOCOL OVENS

Order number (coated exterior)		**51028151**	**51028152**	**51028153**
Model		OMH60	OMH100	OMH180
Order number (stainless steel exterior)		**51028713**	**51028715**	**51028716**
Model		OMH60 SS	OMH100 SS	OMH180 SS
Convection technology		Mechanical convection	Mechanical convection	Mechanical convection
Temperature range	°C	50 °C[1] - 330 °C	50 °C[1] - 330 °C	50 °C[1] - 330 °C
Spatial temperature deviation	at 150 °C	± 1.8 °C	± 1.3 °C	± 1.8 °C
Temperature deviation over time	at 150 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Footprint	m² / sqft	0.3 / 3.2	0.36 / 3.9	0.47 / 5.1
Chamber volume	L / cuft	62 / 2.2	97 / 3.5	170 / 6.1
Dimensions	chamber, mm / in (W x H x D)	354 x 508 x 343 / 13.9 x 20 x 13.5	464 x 608 x 343 / 18.3 x 23.9 x 13.5	464 x 708 x 518 / 18.3 x 27.9 x 20.4
	exterior², mm / in (W x H x D)	530 x 720 x 565 / 20.9 x 28.3 x 22.2	640 x 820 x 565 / 25.2 x 32.3 x 22.2	640 x 920 x 738 / 25.2 x 36.2 x 29.1
Number of shelves	supplied / max	2 / 13	2 / 16	2 / 19
Max. shelf load	kg / lb	25 / 55	25 / 55	25 / 55
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	230 / 50/60
Rated power / max. current	W / A	1400 / 6.1	3060 / 13.3	3060 / 13.3
Energy consumption at 150° C	W	259	358	424
Weight	kg / lb	44 / 97	55 / 121	69 / 152

NOTE: All figures in all tables are typical average values for series devices, based on factory standard following norm DIN12880. Please contact us for certification information or IQ/OQ documents.

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Thermo Scientific Heratherm
Advanced Protocol Security Ovens

Our Advanced Protocol Security table top portfolio combines the benefits of our advanced protocol line with an extra layer of security for applications where process reliability and sample protection are paramount.

All Heratherm Advanced Protocol Security ovens are available in coated or stainless steel exterior. (model 100)

enhanced safety

Additional security features provide peace of mind for precious samples
- Auto-dry function deactivates oven when the samples are dry, saving energy (Note: An optional sample temperature sensor is required to utilize this feature)
- Standard overtemperature alarm and an additional undertemperature alarm ensure that your samples are kept at the correct temperature
- Door lock prevents disruption, tampering or accidental opening
- Door alarm notifies the operator when door is left open accidentally
- Socket for independent sample sensor (option): When connected, exact sample temperature is shown on display for additional peace of mind

SPECIFICATIONS TABLE/ORDER NUMBERS ADVANCED PROTOCOL SECURITY OVENS

Order number (coated exterior)		**51028145**	**51028146**	**51028147**
Model		OGH60-S	OGH100-S	OGH180-S
Order number (stainless steel exterior)		**51028544**	**51028545**	**51028546**
Model		OGH60-S SS	OGH100-S SS	OGH180-S SS
Convection technology		Gravity convection	Gravity convection	Gravity convection
Temperature range	°C	50 °C[1] - 330 °C	50 °C[1] - 330 °C	50 °C[1] - 330 °C
Spatial temperature deviation	at 150 °C	± 2.5 °C	± 3.0 °C	± 2.5 °C
Temperature deviation over time	at 150 °C	± 0.3 °C	± 0.3 °C	± 0.3 °C
Footprint	m² / sqft	0.3 / 3.2	0.36 / 3.9	0.47 / 5.1
Chamber volume	L / cuft	61 / 2.15	99 / 3.6	168 / 6.05
Dimensions	chamber, mm / in (W x H x D)	328 x 480 x 389 / 12.9 x 18.9 x 15.3	438 x 580 x 389 / 17.2 x 22.8 x 15.3	438 x 680 x 564 / 17.2 x 26.8 x 22.2
	exterior², mm / in (W x H x D)	530 x 720 x 565 / 20.9 x 28.3 x 22.2	640 x 820 x 565 / 25.2 x 32.3 x 22.2	640 x 920 x 738 / 25.2 x 36.2 x 29.1
Number of shelves	supplied / max	2 / 13	2 / 16	2 / 19
Max. shelf load	kg / lb	25 / 55	25 / 55	25 / 55
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	230 / 50/60
Rated power / max. current	W / A	1810 / 7.9	3100 / 13.5	3100 / 13.5
Energy consumption at 150° C	W	170	210	290
Weight	kg / lb	44 / 97	55 / 121	69 / 152

Thermo Scientific Heratherm Heating and Drying Ovens

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit
[2] Depth of handle / display not included in depth (65 mm); adjustable feet not included in height (35 mm) – required distance to rear wall: 80 mm

An audible door alarm notifies the operator when the door is left open

Check the unique optional sample sensor:

• Measure exact sample temperature: shown on display in addition to chamber temperature
• When used with "auto dry" program, the oven will switch off automatically as soon as sample is dry to save energy!

A lockable door restricts access

The stainless steel exterior meets demanding needs in pharmaceutical and clinical laboratories

SPECIFICATIONS TABLE/ORDER NUMBERS ADVANCED PROTOCOL SECURITY OVENS

Order number (coated exterior)		51028154	51028155	51028156
Model		OMH60-S	OMH100-S	OMH180-S
Order number (stainless steel exterior)		51028547	51028548	51028549
Model		OMH60-S SS	OMH100-S SS	OMH180-S SS
Convection technology		Mechanical convection	Mechanical convection	Mechanical convection
Temperature range	°C	50 °C[1] - 330 °C	50 °C[1] - 330 °C	50 °C[1] - 330 °C
Spatial temperature deviation	at 150 °C	± 1.8 °C	± 1.3 °C	± 1.8 °C
Temperature deviation over time	at 150 °C	± 0.2 °C	± 0.2 °C	± 0.2 °C
Footprint	m² / sqft	0.3 / 3.2	0.36 / 3.9	0.47 / 5.1
Chamber volume	L / cuft	62 / 2.2	97 / 3.5	170 / 6.1
Dimensions	chamber, mm / in (W x H x D)	328 x 508 x 343 / 12.9 x 20 x 13.5	438 x 608 x 343 / 17.2 x 23.9 x 13.5	464 x 708 x 518 / 18.3 x 27.9 x 20.4
	exterior², mm / in (W x H x D)	530 x 720 x 565 / 20.9 x 28.3 x 22.2	640 x 820 x 565 / 25.2 x 32.3 x 22.2	640 x 920 x 738 / 25.2 x 36.2 x 29.1
Number of shelves	supplied / max	2 / 13	2 / 16	2 / 19
Max. shelf load	kg / lb	25 / 55	25 / 55	25 / 55
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	230 / 50/60
Rated power / max. current	W / A	1400 / 6.1	3060 / 13.3	3060 / 13.3
Energy consumption at 150° C	W	259	358	424
Weight	kg / lb	44 / 97	55 / 121	69 / 152

NOTE: All figures in all tables are typical average values for series devices, based on factory standard following norm DIN12880. Please contact us for certification information or IQ/OQ documents.

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Thermo Scientific Heratherm
Large Capacity General Protocol Ovens

Heratherm large capacity ovens have been designed with your need for larger samples or high sample volume in mind. The General Protocol ovens provide high capacity for your day-to-day drying and heating applications.

Thermo Scientific Heratherm large capacity ovens are available as 400 L and 750 L units

400 L

750 L

efficiency	• Two sizes (400 and 750 L) • Gravity convection technology for gentle heating and drying • Low overall energy consumption: 25% energy savings compared to conventional ovens* • Great footprint/volume ratio and optimal use of chamber with flexible shelving system • Inner chambers made from corrosion-resistant stainless steel (1.4016)
exceptional performance	• Operating from 10 °C above ambient temperature up to 250 °C • Protect delicate samples while still offering a uniformity of +/- 3.0 °K and temperature stability of 0.5 °K at 150 °C • 750 L unit available in 400 V for high temperatures and fastest heat-up and recovery times
ease of use	• "Plug and play" for 230 V models with standard plug: no special high voltage connection needed • Intuitive user interface and easy to read display • Lockable casters for mobility and easy set-up in your lab

*based on internal testing 04/2012

Easy to view, vacuum fluorescence display with simple to use touch button operation

Thermo Scientific Heratherm large capacity ovens offer 25% energy savings compared to conventional ovens*

Factory installed casters allow for increased mobility and make setting up your lab easy.

* based on internal testing 04/2012

maximum convenience for maximum safety

- Large, easy to view, vacuum fluorescence display with simple to use touch button operation controlled by an onboard microprocessor
- Doors can be opened over 180 ° for ease of access
- Easy to remove shelves for cleaning
- Automatic overtemperature alarm system to protect samples – no need for timely manual setting
- Timer function to program start or switch off times for additional energy savings
- Lockable casters for easy mobility and stability

SPECIFICATIONS TABLE/ORDER NUMBERS LARGE CAPACITY GENERAL PROTOCOL OVENS

Order number		51029328	51029340	51029342
Model		OGS400	OGS750	OGS750-3P
Convection technology		gravity convection	gravity convection	gravity convection
Temperature range	°C	+50 °C[1] - 250 °C	+50 °C[1] - 250 °C	+50 °C[1] - 300 °C
Spatial temperature deviation	at 150 °C	±3.0 °C	±3.7 °C	±3.7 °C
Temperature deviation over time	at 150 °C	±0.5 °C	±0.5 °C	±0.5 °C
Footprint	m² / sqft	0.56 / 6.0	0.91 / 9.8	0.91 / 9.8
Chamber volume	L / cuft	419 / 14.8	774 / 27.3	774 / 27.3
Dimensions	chamber mm / in (W x H x D)	544 x 1307 x 590 / 21.4 x 51.5 x 23.2	1004 x 1307 x 590 / 39.5 x 51.5 x 23.2	1004 x 1307 x 590 / 39.5 x 51.5 x 23.2
	exterior[2] mm / in (W x H x D)	778 x 1545 x 770 / 30.6 x 60.8 x 30.3	1261 x 1545 x 770 / 49.6 x 60.8 x 30.3	1261 x 1545 x 770 / 49.6 x 60.8 x 30.3
Number of shelves	supplied / max	2 / 39	2 / 39	2 / 39
Max. shelf load	kg / lb	40 / 88	40 / 88	40 / 88
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	400V 3~/N
Rated power / max. current	W / A	2400 / 10.5	3000 / 13.0	6350 / 11
Energy consumption at 150° C	W	520	800	800
Weight	kg / lb	136 / 300	182 / 401	182 / 401

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit
[2] Depth of handle / display not included in depth (65 mm); casters not included in height (108 mm) – required distance to rear wall: 120 mm

NOTE: All figures in all tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Thermo Scientific Heratherm
Large Capacity Advanced Protocol Ovens

The Heratherm Advanced Protocol ovens offer mechanical convection technology for faster drying and better temperature stability and uniformity. Greater flexibility, accuracy and dependability are provided through a wide range of additional features.

prime performance

- Operating at temperatures as high as 250 °C – large 400 V unit available for up to 300 °C
- Improved level of temperature uniformity: +/-3 to 4 °K
- Mechanical convection technology ensures optimal temperature distribution, and fast heat-up and drying processes.
- 2-speed fan for application flexibility:
  > Slow speed for applications that require minimal airflow (e.g. drying of powders),
  > high speed for fastest drying and heating, and best temperature stability and uniformity

Advanced protocol units available in stainless steel exterior

Fan adjustable in two speeds for matching the airflow to your application

Additional features

• Access port for introduction of external sensors for independent data monitoring, or other devices for specific test set-ups
• The units offer a simple calibration routine to ensure temperature compliance over time.

greater efficiency

• Programmable controller for pre-defined temperature ramps
  > Up to 10 temperature steps can be defined per program
  > Fan speed and damper position are controlled electronically, and can be changed for every program step individually for maximal process flexibility
  > Up to 10 programs can be saved for simple and speedy process repetition
• Sophisticated timer extends the automation options available to the user
  > Choose between a simple on/off timer, recurring weekly timer or set oven activity based on the 24 hour clock
• Inner chamber made from stainless steel (highly resistant quality 1.4301)

SPECIFICATIONS TABLE/ORDER NUMBERS LARGE CAPACITY ADVANCED PROTOCOL OVENS

Order number (coated exterior)		**51029331**	**51029345**	**51029348**
Model		OMH400	OMH750	OMH750-3P
Order number (stainless steel exterior)		**51029332**	**51029346**	
Model		OMH400-SS	OMH750-SS	n/a
Convection technology		mechanical convection	mechanical convection	mechanical convection
Temperature range	°C	+50 °C[1] - 250 °C	+50 °C[1] - 250 °C[2]	+50 °C[1] - 300 °C
Spatial temperature deviation	at 150 °C	±2.1 °C	±3.1 °C	±3.1 °C
Temperature deviation over time	at 150 °C	±0.3 °C	±0.4 °C	±0.4 °C
Footprint	m² / sqft	0.56 / 6.0	0.91 / 9.8	0.91 / 9.8
Chamber volume	L / cuft	396 / 14	731 / 25.8	731 / 25.8
Dimensions	chamber mm / in (W x H x D)	544 x 1335 x 545 / 21.4 x 52.6 x 21.5	1004 x 1335 x 545 / 39.5 x 52.5 x 21.5	1004 x 1335 x 545 / 39.5 x 52.6 x 21.5
	exterior[3] mm / in (W x H x D)	778 x 1545 x 770 / 30.6 x 60.8 x 30.3	1261 x 1545 x 770 / 49.6 x 60.8 x 30.3	1261 x 1545 x 770 / 49.6 x 60.8 x 30.3
Number of shelves	supplied / max	2 / 39	2 / 39	2 / 39
Max. shelf load	kg / lb	55 / 88	55 / 88	55 / 88
Rated voltage / frequency	V / Hz	230 / 50/60	230 / 50/60	400V 3~/N
Rated power / max. current	W / A	2400 / 10.5	3000 / 13.0	5750 / 12
Energy consumption at 150° C	W	630	990	990
Weight	kg / lb	135 / 298	185 / 408	185 / 408

[1] Temperatures as low as ambient +10 °C can be selected – requires open damper and no additional heat in unit
[2] With low voltage and open damper max temperature is 235 °C
[3] Depth of handle / display not included in depth (65 mm); casters not included in height (108 mm) – required distance to rear wall: 120 mm

NOTE: All figures in all tables are typical average values for series devices, based on factory standard following norm Din12880. Please contact us for certification information or IQ/OQ documents.

Factory installed options

DESCRIPTION	ORDER NUMBER	DETAILS
Options		
General Protocol Kit for underbench installation	50128887	Kit for underbench installation; for all General Protocol ovens; consists of exhaust tubing (1.5 m length) and details on wall distances.
Advanced Protocol Kit for underbench installation	51901061	Kit for underbench installation; for all table top Advanced Protocol and Advanced Protocol Security ovens; consists of exhaust tubing (1.5 m length) and details on wall distances; maximum temperature of oven is set at 250 °C for underbench installation. Please order in conjunction with desired oven.
Heratherm Access port left, small	51900996	Additional access port on center of left side of unit; Ø 24 mm for all mechanical convection ovens / Ø 19 mm for all gravity convection ovens. Please order in conjunction with desired oven.
Heratherm Access port left, large	51900997	Additional access port on center of left side of unit; Ø 58 mm for all mechanical convection ovens / Ø 53 mm for all gravity convection ovens. Please order in conjunction with desired oven.
Heratherm Access port right, small	51900998	Additional access port on center of right side of unit; Ø 24 mm for all mechanical convection ovens / Ø 19 mm for all gravity convection ovens. Please order in conjunction with desired oven.
Heratherm Access port right, large	51900999	Additional access port on center of right side of unit; Ø 58 mm for all mechanical convection ovens / Ø 53 mm for all gravity convection ovens. Please order in conjunction with desired oven.
Heratherm Access port top, small	51901000	Additional access port on center of top of unit; Ø 24 mm for all ovens. Please order in conjunction with desired oven.
Heratherm Access port top, large	51901001	Additional access port on center of top of unit; Ø 58 mm for all ovens. Please order in conjunction with desired oven.
Door hinge left side	51900993	Door hinge on left side – Available for all table top units. Coated exterior only. Please order in conjunction with desired oven.
Ovens with view package* – coated exterior (stainless steel exterior not available for this option)		
OGH60 with view package 230VAC; 50/60Hz	51028897	Advanced Protocol oven with gravity convection; 61 liters volume; 230VAC; 50/60Hz; 1 window; light
OGH100 with view package 230VAC; 50/60Hz	51028898	Advanced Protocol oven with gravity convection; 99 liters volume; 230VAC; 50/60Hz; 1 window, light
OGH180 with view package 230VAC; 50/60Hz	51028916	Advanced Protocol oven with gravity convection; 168 liters volume; 230VAC; 50/60Hz; 2 windows, light
OMH60 with view package 230VAC; 50/60Hz	51028923	Advanced Protocol oven with mechanical convection; 62 liters volume; 230VAC; 50/60Hz; 1 window; light
OMH100 with view package 230VAC; 50/60Hz	51028734	Advanced Protocol oven with mechanical convection; 97 liters volume; 230VAC; 50/60Hz; 1 window, light
OMH180 with view package 230VAC; 50/60Hz	51028910	Advanced Protocol oven with mechanical convection; 170 liters volume; 230VAC; 50/60Hz; 2 windows, light
OGH60-S with view package 230VAC; 50/60Hz	51028736	Advanced Protocol Security oven with gravity convection; 61 liters volume; 230VAC; 50/60Hz; 1 window; light
OGH100-S with view package 230VAC; 50/60Hz	51028924	Advanced Protocol Security oven with gravity convection; 99 liters volume; 230VAC; 50/60Hz; 1 window, light
OGH180-S with view package 230VAC; 50/60Hz	51028925	Advanced Protocol Security oven with gravity convection; 168 liters volume; 230VAC; 50/60Hz; 2 windows, light
OMH60-S with view package 230VAC; 50/60Hz	51028926	Advanced Protocol Security oven with mechanical convection; 62 liters volume; 230VAC; 50/60Hz; 1 window; light
OMH100-S with view package 230VAC; 50/60Hz	51028927	Advanced Protocol Security oven with mechanical convection; 97 liters volume; 230VAC; 50/60Hz; 1 window, light
OMH180-S with view package 230VAC; 50/60Hz	51028733	Advanced Protocol Security oven with mechanical convection; 170 liters volume; 230VAC; 50/60Hz; 2 windows, light

*maximum temperature for ovens with view package is 250 °C

Please ask for our special solutions. We can provide Heratherm tabletop ovens for cable testing applications, clean room applications, and inner casing with conditional gas-tightness for inert gas applications. We can provide additional access ports for the large capacity ovens at your preferred position, on demand.

Access port top and right

Underbench installation kit

Viewing windows in 180L unit

Viewing window in 100L unit
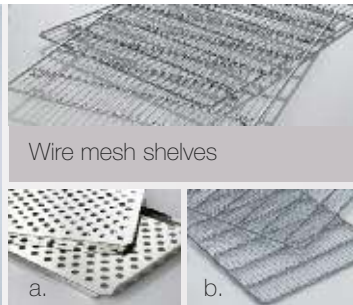
Accessories

SPECIFICATIONS TABLE/ORDER NUMBERS

DESCRIPTION	ORDER NUMBER	DETAILS
Additional shelving – gravity convection		
Additional wire mesh shelf, 60 L models	50127761	Wire mesh shelf for General Protocol; Advanced Protocol; Advanced Protocol Security ovens; incl. 2 shelf supports; 312 x 386 mm
Additional wire mesh shelf, 100 L models	50127762	Wire mesh shelf for General Protocol; Advanced Protocol; Advanced Protocol Security ovens; incl. 2 shelf supports; 422 x 386 mm
Additional wire mesh shelf, 180 L models	50127763	Wire mesh shelf for General Protocol; Advanced Protocol; Advanced Protocol Security ovens; incl. 2 shelf supports; 422 x 561 mm
Additional wire mesh shelf, 400 L models	50135245	Wire mesh shelf for General Protocol ovens; incl. 2 shelf supports; 528 x 535 mm
Additional wire mesh shelf, 750 L models	50135246	Wire mesh shelf for General Protocol ovens; incl. 2 shelf supports; 984 x 535 mm
Reinforced shelf, 180 L models	50128880	Shelf with maximum capacity of 70 kg for 180 liter models, gravity convection of Advanced Protocol and Advanced Protocol Security ovens; max total capacity is 250 kg
Additional shelving – mechanical convection		
Additional wire mesh shelf, 60 L models	50127764	Wire mesh shelf for General Protocol; Advanced Protocol; Advanced Protocol Security ovens; incl. 2 shelf supports; 338 x 336 mm
Additional wire mesh shelf, 100 L models	50127765	Wire mesh shelf for General Protocol; Advanced Protocol; Advanced Protocol Security ovens; incl.2 shelf supports; 448 x 336 mm
Additional wire mesh shelf, 180 L models	50127766	Wire mesh shelf for General Protocol; Advanced Protocol; Advanced Protocol Security ovens; incl. 2 shelf supports; 448 x 511 mm
Additional wire mesh shelf, 400 L models	50135245	Wire mesh shelf for Advanced Protocol ovens; incl. 2 shelf supports; 528 x 535 mm
Additional wire mesh shelf, 750 L models	50135246	Wire mesh shelf for Advanced Protocol ovens; incl. 2 shelf supports; 984 x 535 mm
Additional wire mesh shelf, 750 L – 400V model	50135244	Wire mesh shelf Advanced Protocol; only for 400V ovens; incl. 2 shelf supports; 984 x 503 mm
Stainless steel perforated shelf, 60 L models	50127773	Stainless steel perforated shelf for General Protocol oven; incl. 2 shelf supports; 329 x 376 mm
Stainless steel perforated shelf, 100 L models	50127774	Stainless steel perforated shelf for General Protocol oven; incl. 2 shelf supports; 439 x 376 mm
Stainless steel perforated shelf, 180 L models	50127777	Stainless steel perforated shelf for General Protocol oven; incl. 2 shelf supports; 439 x 551 mm
Reinforced shelf, 180 L models	50128881	Shelf with maximum capacity of 70 kg for 180 liter models, mechanical convection of Advanced Protocol and Advanced Protocol Security ovens; max total capacity is 250 kg
Sample Sensor		
Sample Sensor, for select models	50127767	Sample sensor for connection to Advanced Protocol Security table top ovens (60 L; 100 L, 180 L); large capacity Advanced Protocol large capacity ovens (400 L, 750 L): measures exact sample temperature; sample temperature is shown on display as plugged in; cable length: 2200 mm
Silicone free viton door sealing		
Silicone free viton door sealing, 60 L models	50130657	Silicone free viton door sealing for all 60 liter Heratherm ovens
Silicone free viton door sealing, 100 L models	50130658	Silicone free viton door sealing for all 100 liter Heratherm ovens
Silicone free viton door sealing, 180 L models	50130659	Silicone free viton door sealing for all 180 liter Heratherm ovens
Silicone free viton door sealing, 400 L models	50135869	Silicone free viton door sealing for all 400 liter Heratherm ovens
Silicone free viton door sealing, 750 L models	50135870	Silicone free viton door sealing for all 750 liter Heratherm ovens
Fresh air filter		
Fresh air particle filter, all ovens models	50127566	Fresh air particle filter for connection to the fresh air vent (intake); for all ovens models.
Stacking kits		
Stacking kit, all 60 L models	50126665	Stacking kit to stack two 60 liter models
Stacking kit, all 100 L models	50126666	Stacking kit to stack two 100 liter models, or 60 liter on 100 liter
Stacking kit, all 180 L models	50126667	Stacking kit to stack two 100 liter models, or 60 liter/100 liter on 180 liter
Support Stands		
Support stand, all 60 L models	50127741	Support stand with casters for Heratherm 60 liter models; height including casters: 187 mm
Support stand, all 100 L models	50127742	Support stand with casters for Heratherm 100 liter models; height including casters: 187 mm
Support stand, all 180 L models	50127743	Support stand with casters for Heratherm 180 liter models; height including casters: 187 mm

Stacking kit

Support stand with casters

Wire mesh shelves

a.
b.

a. Stainless steel perforated shelves
b. Reinforced shelves

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Rear view of the 100 L Advanced Protocol oven with Smart-Vue

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