



HTMA – High Temperature Modified Atmosphere Ovens

The HTMA range of modified atmosphere high temperature ovens is for use with inert atmospheres.

Separate flow controls for purge and process gases mean that once the chamber has been purged of atmospheric air process gas can be used with lower flow rates. Switching between purge and process gases can either be done manually or by adding the option of an automatic programmable control system. Oxygen levels down to 50 ppm are achievable.



HTMA 6/28 with 3508P1 programmer and automatic gas control options

Standard features

- 400 °C, 500 °C, 600 °C or 700 °C maximum operating temperatures
- Carbolite Gero 301 PID controller with single ramp to setpoint and including over-temperature protection
- 28, 95, 220, 500 & 1000 litre capacities
- Rear mounted fan & side air guides give horizontal 'airflow'
- Fully seam welded to contain modified atmosphere
- Manual gas control via needle valves & flowmeters (nickel brass)
- Corrosion resistant stainless steel interior with perforated shelves & runners
- Stainless steel pipe-work, nickel brass flow-meter & solenoid valves
- Single side hinged door, with metal heat seal & rubber gas tight seal, closed using non slam handle
- Gas inlet connection: bulkhead compression fitting to suit 10 mm outside diameter tube (maximum inlet pressure = 2 bar)

Options (specify these at time of order)

- A range of sophisticated digital controllers, multi-segment programmers and data loggers is available. These can be fitted with RS232, RS485 or Ethernet communications (see pages 106 – 111)
- Automatic gas control (requires a CC-T1, 3508 or Nanodac series programmable controller)
- Stainless steel flow-meter & solenoid valves, instead of nickel brass
- Fixed or castor mounted floor stands
- Oxygen sensor fitted to gas outlet to monitor oxygen level, displayed as percentage. Only available for use with nanodac™ instruments.
- **NEW** Door interlock activated by temperature alarm relay (3216, CC-T1, 3508 or nanodac) or program segment output (CC-T1, 3508 or nanodac)

Technical data

CGH	Max. temp. [°C]	Heat-up time [mins]	Recovery time [mins]	Dimensions: Internal H x W x D [mm]	Dimensions: External H x W x D [mm]	Shelves fitted / accepted	Shelf loading each / total [kg]	Volume [litres]	Max. power [W]	Weight [kg]
HTMA 4/28	400	60	10	305 x 305 x 305	990 x 810 x 885	2 / 2	10 / 20	28	1000	73
HTMA 4/95	400	75	16	455 x 455 x 455	1120 x 1015 x 1120	3 / 4	15 / 30	94	3000	99
HTMA 4/220	400	120	20	610 x 610 x 610	1270 x 1165 x 1280	3 / 4	25 / 50	227	4000	179
HTMA 4/500	400	-	-	800 x 800 x 800	1305 x 1115 x 1450	3 / 5	- / -	500	7500	-
HTMA 4/1000	400	-	-	1000 x 1000 x 1000	1310 x 1530 x 1635	3 / 5	- / -	1000	12000	-
HTMA 5/28	500	60	10	305 x 305 x 305	990 x 810 x 885	2 / 2	10 / 20	28	2000	73
HTMA 5/95	500	75	16	455 x 455 x 455	1120 x 1015 x 1120	3 / 4	15 / 30	94	4500	99
HTMA 5/220	500	120	20	610 x 610 x 610	1270 x 1165 x 1280	3 / 4	25 / 50	227	6000	179
HTMA 5/500	500	-	-	800 x 800 x 800	1305 x 1115 x 1450	3 / 5	- / -	500	9000	-
HTMA 5/1000	500	-	-	1000 x 1000 x 1000	1310 x 1530 x 1635	3 / 5	- / -	1000	15000	-
HTMA 6/28	600	60*	10*	305 x 305 x 305	990 x 810 x 885	2 / 2	10 / 20	28	2000	73
HTMA 6/95	600	75*	16*	455 x 455 x 455	1120 x 1015 x 1120	3 / 4	15 / 30	94	4500	99
HTMA 6/220	600	120*	20*	610 x 610 x 610	1270 x 1165 x 1280	3 / 4	25 / 50	227	9000	179
HTMA 6/500	600	-	-	800 x 800 x 800	1305 x 1115 x 1450	3 / 5	- / -	500	12000	-
HTMA 6/1000	600	-	-	1000 x 1000 x 1000	1310 x 1530 x 1635	3 / 5	- / -	1000	15000	-
NEW HTMA 7/28	700	90	24	305 x 305 x 305	1015 x 860 x 885	2 / 2	8 / 16	28	3000	85
NEW HTMA 7/95	700	95	24	455 x 455 x 455	1145 x 1065 x 1120	3 / 4	10 / 30	94	6000	115
NEW HTMA 7/220	700	120	24	610 x 610 x 610	1295 x 1215 x 1280	3 / 4	15 / 45	227	10000	195

i Please note:

- Minimum operating temperature approximately ambient plus 60 °C
- Uniformity is measured in an empty chamber with vents closed, after a stabilisation period

- Maximum power and heat up time based on a 240 V supply
- External dimensions with door closed

* Nominal values based upon a representative sample of products