

300°C Laboratory Ovens

The SNOL 300LFN series from AML Instruments 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 50 to 300°C, the precision temperature control system provides good stability and uniformity for high quality results.

A digital PID temperature controller, displaying the current temperature and set-point is fitted as standard, with the option of more advanced controllers with additional functionality also available. An independent over-temperature protection device is fitted as standard that prevents the oven exceeding its maximum temperature. Most models have a fan speed controller. All models have a control knob to select internal or external air circulation (or a mixture as desired).

Our ovens are available with optional UKAS (ISO17025) calibration of the temperature controller and thermocouple as a system or also with a 5-point or 9-point thermal survey of the chamber volume.

AML Instruments offers models customised to meet AMS 2750E (aerospace & automotive heat treatment specification), complete with UKAS (ISO17025) calibration and thermal survey meeting NADCAP requirements. For customisation to this specification or others please contact us.



Standard Stocked Models

Normally available from stock or on a short lead time. Options on the following pages normally take a few days longer. Please contact us for a quote with current lead-times.

Model <i>AML Stock Code</i>	Capacity (Litres)	Chamber Size* External Size*	Shelves / Positions	Power / Plug	Weight	Price
SNOL 20/300 LFN <i>FCESNOL20/300LFN</i>	20 L	240 x 280 x 340mm 490 x 700 x 680mm	2 / 5	1 kW UK 13A	36 Kg	£980
SNOL 60/300 LFN <i>FCESNOL60/300LFN</i>	60 L	380 x 380 x 420mm 630 x 740 x 760mm	3 / 6	2 kW UK 13A	50 Kg	£1,380
SNOL 120/300 LFN <i>FCESNOL120/300LFN</i>	120 L	550 x 400 x 580mm 810 x 780 x 920mm	3 / 6	2 kW UK 13A	70 Kg	£1,680
SNOL 220/300 LFN <i>FCESNOL220/300LFN</i>	220 L	730 x 500 x 620mm 975 x 920 x 955mm	3 / 6	4 kW Blue 32A	102 Kg	£2,680

Fan Speed: 1 - 10 or off.

Supply Voltage: 230Vac 50Hz (single phase).

Power Connector: UK 13A = BS1363. Blue 32A = IEC60309.

*As a general rule, a gap of a minimum of 10% of each chamber dimension should be left unused on each side of the load to ensure good air flow. (WxDxH)



Standard Non-stocked Models




Normally available on a 6-9 week lead time. The 420L model has double doors, hinged at each side.

Model	Capacity (Litres)	Chamber Size* External Size*	Power / Voltage / Connector	Weight	Price
SNOL 420/300 LFN	420 L	1000 x 500 x 860 1300 x 1030 x 1300	6.2kW / 400Vac 3P+N+E (Star with N) / IEC60309 Red 16A	178kg	£3,840

Temperature Controller Options

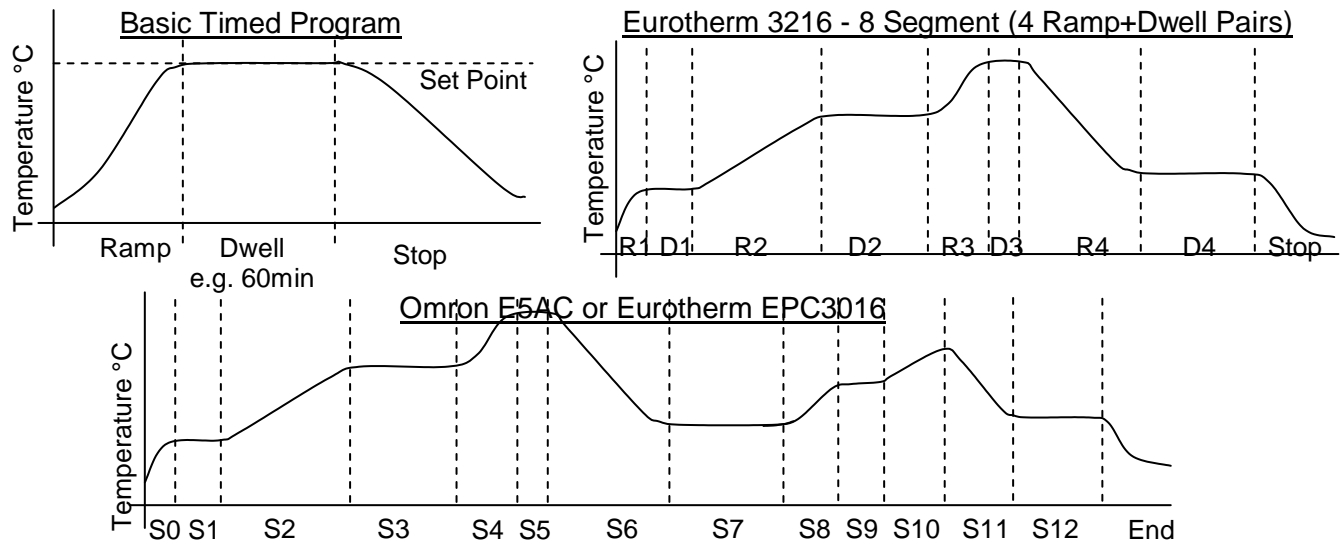
As standard the ovens are fitted with an Omron E5CC temperature controller, but there is the option of other controllers that can be fitted instead at extra cost. All controllers offer display with 0.1°C resolution. All models feature Autotune which can be used to optimise the control terms for the load, but is not necessary for most applications. Omron models operate a buzzer that sounds when the program finishes.

Omron E5CC Fitted as standard.	Omron E5AC-T Programmer, 8 Program Optional at extra cost. +£392
	
1/16 th DIN Size (~48x48mm). Run/Stop Modes. Settable Heating Ramp Rate. Basic Timed Program: Ramp, Dwell, Stop.	1/4 DIN Size (~96x96mm). Large 1" high Reading Run/Stop Modes. Settable Heating Ramp Rate. 8 Timed Programs with 32 Segments each (Ramp, Dwell, Stop).

Eurotherm 3216 Optional at extra cost. +£234	Eurotherm 3216 Programmer, 1 Program, 8 Segments Optional at extra cost. +£332	Eurotherm EPC3016 Programmer, 10 Program, 24 Segments each, RJ45 Ethernet PC Network Port Optional at extra cost. +£652
		
1/16 th DIN Size (~48x48mm). Run/Stop (Auto/Off) Modes. Settable Heating Ramp Rate Basic Timed Program: Ramp, Dwell, Stop.	1/16 th DIN Size (~48x48mm). Run/Stop (Auto/Off) Modes. Settable Heating Ramp Rate. 8 Segment Timed Program: 4 Ramp+Dwell pairs, Stop.	1/16 th DIN Size (~48x48mm). Run/Stop (Auto/Off) Modes. Settable Heating Ramp Rate. 10 Timed Programs with 24 Segments each (Ramp, Dwell, etc).
	Eurotherm 3216 Programmer, 5 Program, 8 Segments each Optional at extra cost. +£452	Connection to a laptop or PC network via Ethernet RJ45 port on front panel. Includes PC software for easier creation, editing and backup of timed programs.

Prices Exclude VAT and Delivery and are correct at the time of writing. Appearance may vary from images shown. Specification and price subject to change without notice. All trade marks acknowledged.

Examples of the timed programs:



Other instruments can be fitted to order, to give features such as timed programs with more segments, audible alarms, remote digital commutations (RS-485 etc), data recording and PC software. Additional metal shelves are available. Whilst most models are normally available from stock, options normally take longer. Please contact us for a quote.

7 Day Timer +£220* *except with E5AC-T or OTP2; contact us for a price

A timer can be fitted to the turn on the controller at a specific time. The controller will then run at its last setting. Featuring: Daily and weekly program, Manual override, Fully automatic daylight saving time.

Over-temperature Protection Options

The ovens are fitted with basic over-temperature protection as standard. A user adjustable option is also offered:

<p>Basic OTP Included</p>	<p>An independent over-temperature protection device is fitted as standard that prevents the oven exceeding its maximum temperature.</p>
<p>OTP 2 +£250* *except with E5AC-T; contact us for a price</p>	<p>A digital temperature limit controller mounted in the front panel. Displays its temperature reading and can be set by the user to protect their load from exceeding their desired temperature. If the oven temperature exceeds the temperature set on the over-temperature protection controller, the oven will be prevented from heating until the user resets the over-temperature protection controller, by pressing a button.</p>

Accessible Thermocouple Connections

We can fit accessible thermocouple connections to save time with regular calibrations.

- Connections at the rear: **+£50**
- Connection in the front panel: **+£90**

Other options

The range is also available with stainless steel exterior (appearance may vary from unit pictured). The lead time is typically 6 – 9 week and the price of the unit and some options are higher. Please contact us for a quote.

We may be able to assist with other bespoke requirements, please contact us with your requirements for further details.



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Additional Shelves

Extra Standard Shelf for SNOL 20/300 LFN	£36	Normally available from stock.
Extra Standard Shelf for SNOL 60/300 LFN	£46	Normally available from stock.
Extra Standard Shelf for SNOL 120/300 LFN	£76	Normally available from stock.
Extra Standard Shelf for SNOL 220/300 LFN	£106	Non-stock, available on long lead time.

After Sales Service & Warranty

AML Instruments has been stocking and selling the SNOL range since 2008. We hold UK stock of a wide range of spares and accessories and can offer service and repairs at our factory if required at a later date. On-site service and repairs may be available subject to location and the nature of the repair. 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 from the date of purchase from AML Instruments and covers normal use of the unit in accordance with its instruction manual. It does not cover excessive 'wear and tear' or rough handling.

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

Under the warranty any manufacturing defects will be rectified by AML Instruments as the agent of the manufacturer at no charge. 'Return to base' means the customer is responsible for return of the unit to AML Instruments's site (Lincolnshire, 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 AML Instruments will provide return shipment of the unit within the UK and Republic of Ireland at no charge. Whilst AML Instruments 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 AML Instruments



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