

# SNOL



# Thermal processing equipment for laboratories



The JSC "Umega" SNOL department has been producing thermal processing equipment since 1960. The company designs and manufactures laboratory and industrial electric furnaces and ovens, as well as high temperature thermal insulation materials. The company pays particular attention to the product development by using advanced technologies and scientific progresses in order to meet individual user needs. Highly qualified personnel and premium materials result in high quality, reliability, and durability of our manufactured products.

SNOL products comply with European Union Directives LVD 2006/95/EC, MD 2006/42/EC, ECD 2004/108/EC, and RoHS 2002/95/EC; and therefore bear the CE Mark, and are also certified in Russia and Belarus, thermal insulation materials are certified by Det Norske Veritas. The company's Quality Management System is certified by Bureau Veritas Quality International in compliance with ISO 9001:2008 / LST EN ISO 9001:2008 standards.

JSC "Umega" runs subsidiaries: "SNOL – TERM" Ltd. in Russia, "SNOL Ukraine" Ltd. in Ukraine, and "SNOLBel" Ltd. in Belarus. The company exports a major part of its products (~90%), to markets in the European Union and the Commonwealth of Independent States, where the sales and service network has been developed.













# 1. Low temperature electric ovens

## 1.1.3. Chamber ovens up to 350 °C

Economical low temperature electric ovens that are intended for the thermal processing of various materials and parts up to a temperature of 350 °C. The products can be used in scientific laboratories, educational institutions, medicine, and industry.

#### **Basic model**

- Natural or forced air circulation
- Regulated air intake and extraction
- Chamber made of mild or stainless steel
- Hermetically closed doors
- Microprocessor-controlled thermoregulator (see page 14)
- Includes standard shelves
- High-quality, ecological thermal insulation material
- Low electric power usage
- Short heating up/cooling down period
- High degree of accuracy
- Exterior painted with powder coating (RAL 7035)
- 1 year guarantee

#### **Options**

- Supplemental shelves
- Reinforced shelves
- Metal tray
- Reinforced bottom
- Digital timer
- Buzzer
- Protection against overheating
- Data recorder
- Computer connection via RS232/RS-485/USB
- Calibration of temperature measurement system
- Furnace exterior made of stainless steel
- Table for supporting the furnace
- Additional 1 year guarantee



SNOL 67/350 LSN01



Model	Vol., I	T <sub>max</sub> °C	Chamber dimensions, mm			Overall dimensions*, mm			Power.	Voltage,	Weigth,		Number of shelves		Chamber material	
			Width	Length	Height	Width	Length	Height	kW	Voltage,	kg	Air flow	sets		Stainless steel	Mild steel
Up to 350 °C																
SNOL 58/350 LSN11	58	350	390	380	360	685	675	615	2	230	40	•	3	7	•	0
SNOL 58/350 LSP11	58	350	390	380	360	685	675	615	2	230	40	•	3	7	0	•
SNOL 67/350 LSN01	67	350	390	445	390	685	625	615	2	230	40	0	3	7	•	0
SNOL 67/350 LSP01	67	350	390	445	390	685	625	615	2	230	40	0	3	7	0	•



# 4. Control devices

### 4.1 Temperature controllers

SNOL products are equipped with high-precision digital microprocessor Omron or Eurotherm temperature controllers fitted with self-tuning and manual PID settings. Temperature measurement is supported by thermocouple. The customer can select a basic or programmable temperature controller whith up to 32 programming segments (rate of temperature rise or decrease control, maintenance of preset temperature, automatic shutdown). A wide range of devices allows to select the most appropriate controller for your process.









Omron E5CC

Omron E5CN-HT

Eurotherm 3208

Eurotherm 3216

Model	Programmable	Number of programs	Number of steps in program	Computer port	Control	metod	Control signal			
					PID	On/Off	Туре		Number of	
					PIV	Oli/Oli	Relay	Voltage 12 VDC	outputs	
Omron E5CC	0	1*	2	•	•	•	•	•	4	
Omron E5CN-HT	•	8	32	•	•	•	•	•	4	
Eurotherm 3216	0	1*	2	0	•	•	•	•	2	
Eurotherm 3208	•	5	8	•	•	•	•	•	2	

<sup>\*</sup> Basic 2-stage software

# 4.2 Touch screen Omron E5CN-HT V1.1 EN

Omron E5CN-HT V1.1\_EN is touch screen panel for programming and controlling processes of furnaces. The main purpose of the device is to relieve, simplify and broaden control of the furnaces. This device also has representation of process data in graphics – text format on the display. The main window shows necessary data of working parameters, auxiliary windows are for observing processes in graphic format in live or remote data.

#### **Main features**

- Full and clear controlling of temperature controller
- Controlling mode choice: programmable task graph or main work with constant temperature
- Multiple language entry (ability to install necessary language)
- Data collection and export to computer via USB (e. g. Microsoft Excel format)



