



Sylab Icecube series 15



Compact, computer-controlled freezing system with integrated, networkcompatible PC and connection to liquid nitrogen (LIN) pressure container.

SY-LAB presents its new series of freezers fitted with the latest EDP components and with a touchscreen monitor as the central control element. This concept is the product of years of experience in refrigeration equipment construction and meets the increasing demands of our customers for the most up-to-date quality requirements. The standard IceCube 15 M system has a chamber volume of 36 l while the IceCube 15 L has double the sampling capacity.

The internal control procedures are managed by a RISC microcontroller which is linked to a PC running MS Windows®. The easily accessed PC is situated in the central part of the system and even the basic model is network-compatible. The sample data is entered into the PC via the touchscreen monitor. Any number of programs can be stored and all processes are documented. This is the first compact controlled rate freezer to have been combined with the EDP components which are now standard in modern system design.

Data entry is carried out at the LCD monitor via the user interface (interactive interface). No need for keyboards or touchpads, the fingertip is the text and graphics input medium. The software runs under practically all variants of MS Windows® operating systems and offers a level of ease, information and customisation options never previously attained.

PRODUCT SPECIFICATIONS

Freezing Chamber		Electronics	
Dimensions	297 x 317 x 378 mm (L x W x H), 36 l, Stainless steel freezing chamber with hinged transparent glass door safety switch with warning light, gas turbulence via turbine, second solenoid valve (option) for auto seeding, vibration element for alternative crystallisation, pressure sensor for LIN supply pressure,	Operated by independent RISC microcontroller, data detection and subsequent processing carried out by integrated PC, 12" Touchscreen colour LCD monitor, fingertip text and graphical input, colour Inkjet printer.	
Temperature range:	+40 bis -180°C	Software, Image Display, Data Output Operating System MS Windows™ 2000 or XP Pro, data entered directly via the Touchscreen monitor, can store practically unlimited number of pre-selectable programs, graphical display of temperature curves of all connected thermal probes along with their demanded profile, zoom, program editor, detailed parameter settings, facilitate operation and monitoring. The program's image display and processing options enable precise monitoring of the processes while generating or running programs, they also allow a rapid optimisation of the chilling and re-thawing processes, program process can be checked at the monitor, documented via the printer and/or data can be transferred within the LAN, restart after power failure.	
Freezing rates:	0,01 – 60°C/min		
Heating rates:	0,01 – 15°C/min		
Display accuracy:	0.01°C.		
Capacity options:	4140 straws 0,25 ml, or 2760 straws 0,5 ml or 1128 ampoules 2 ml or 564 ampoules 5 ml or several blood bags (numbers may vary depending on bag size and fill volume).	Dimensions, Weight, Power Supply 845 x 540 x 785 mm, (L x W x H), ~69 kg incl. PC. Bench area: 1420 x 650 mm 115 V/ 11 A or 230 V/ 5,5 A (please specify)	
Temperature measurement	via 2 Pt-100 (optional up to 4) resistance thermometers in shielded 4 wire measuring technology, diameter 1,5 mm, steel shaft length 65 mm, other lengths on request, 1000 W heating element, thermo fuse overheating protection, variable start temperature.	IceCube 15 L Like IceCube 15 M, but with 77 l chamber capacity: 647 x 317 x 378 mm (L x W x H). Outer dimensions: 1195 x 540 x 785 mm, 86 kg incl. PC.	

Specifications are subject to change without notice.