

ICECUBE 14M AND 14S

COMPACT, COMPUTER CONTROLLED BIOLOGICAL FREEZERS FOR SEMEN AND EMBRYOS

The IceCube is a computer-operated freezer with intuitive interface for controlling and programming of multistage freezing curves. Color coded temperature curves are displayed during freezing and protocolled for later review. Thereby, the crystallisation temperature can be determined and the freezing program can be optimised. The operator is free to use the included standard freezing curves for semen and embryos of several species, and to create customized freezing programs.

The IceCube is available in different sizes and versions to suit the users' specific needs. The freezer software and control is carried out by a connected PC, laptop or tablet computer and it can be equipped with a convenient touch display. Embryo and oocyte freezing can be performed in the Icecube with the autoseeding module and rack.

Your benefits

- Programming of multistage freezing curves
- Variable start temperature
- Data recorded for every single freezing cycle
- Different sizes (M + S), functions (+/- autoseeding for embryos) and technical setups (+/- touchscreen, with PC, laptop or tablet) to suit the users' specific needs
- Temperature curves as well as crystallisation inside straws can be observed during the freezing process
- Compact design
- Easy operation



IceCube 14M with tablet-PC



IceCube 14S with tablet-PC



Technical details

- Operated by independent RISC microcontroller
- Options: Tablet-PC with touch monitor, Windows® or 12" touch screen color LCD monitor
- Temperature measurement via 2 Pt-100 resistance thermometers in shielded 4 wire measuring technology
- Hinged transparent glass door
- Gas turbulence via turbine fan
- Pressure sensor for LN supply
- Thermo fuse overheating protection
- Safety lock and warning light during opened chamber
- Power supply: 115 V / 11 A or 230 V / 5.5 A



		IceCube 14S	IceCube 14M
Freezing chamber size	(mm; L x D x H)	217 x 217 x 348	297 x 317 x 378
	Litres	16.4	36
Temperature range		+40°C to -180°C (104°F to 292°F)	
Cooling rates		0.01°C to 60°C/min	
Heating rates		0.01°C/min to max. 20°C/min from -180°C to -50°C	
		0.01°C/min to max. 15°C/min from -50°C to +20°C	
Display accuracy		0.01°C	
Capacity		900 Straws 0.25 ml or 0.5 ml	3450 Straws 0.25 ml
			2300 Straws 0.5 ml
Outer dimensions (mm; W x D x H)		540 x 420 x 520 (820 H with open lid)	630 x 510 x 550 (860 H with open lid)
Weight		29 kg	39 kg



Order information

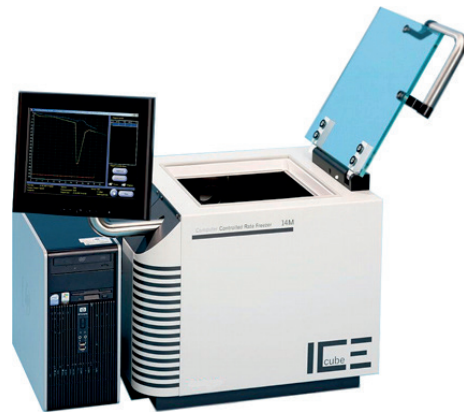
Main unit	+/- 12" touch screen	IceCube 14S		IceCube 14M	
		230 V	115V	230 V	115V
Without PC (requires PC/laptop*)	-	16821/1000	16821/1001	16820/6000	16820/6001
	+	1 16821/2000	16821/2001	2 16820/7000	16820/7001
With Tablet-PC and touch monitor	not required	16821/3000	16821/3001	16820/8000	16820/8001

*PC for IceCube 14

REF.: [16821/5010](#)



1 IceCube 14S with PC and touch display monitor



2 IceCube 14M with PC and touch display monitor

Accessories

- Pressure container for liquid nitrogen, with manometer, security valves, liquid and gas phase withdrawal
- Freezing racks for 0.25/0.5 ml straws (and for macrotube straws 240/280 mm)
- Loading devices for loading the racks
- Spacer for flattening the freezing chamber in case of freezing small amounts of straws
- Autoseeding module and autoseeding racks

Pressure container, 60 l [REF.: 16820/1900](#)

Pressure container, 120 l [REF.: 16150/0120](#)

Pressure container, 189 l [REF.: 16150/0180](#)

Spare Parts

Software upgrade

of IceCube s/w to Windows 7, 8, 8.1

[REF.: 16821/5012](#)

Connector kit for LN2 pressure container

[REF.: 16820/5100](#)

Temperature sensor

[REF.: 16821/5025](#)



Accessory		IceCube 14S	IceCube 14M
Racks	0.25 ml straws	---	16820/1616 <i>(for 138 straws)</i>
	0.5 + 0.25 ml straws	1 16821/5036 <i>(for 36 straws)</i>	5 16820/1614 <i>(for 92 straws)</i>
	Macro tube straws (240 + 280 mm)	---	15040/4540
Loading device for racks	0.25 ml racks	---	16820/1617
	0.5 + 0.25 ml racks	2 16821/5037	16820/1618
Handling rack		3 16821/5030	16820/1610
Pliers for handling of individual racks		16821/5031	---
Spacer		4 16821/5018	6 16820/1621
Preparation for autoseeding		16821/5019	16820/1619
Autoseeding rack	0.25 ml straws	16821/5021 <i>(for 43 straws)</i>	16820/1623 <i>(for 58 straws)</i>
	0.5 ml straws	16821/5020 <i>(for 35 straws)</i>	16820/1620 <i>(for 46 straws)</i>
	0.5 + 0.25 ml straws	16821/5022 <i>(for 43 0.25 ml straws and 35 0.5 ml straws)</i>	---

