

# Water Cooling System

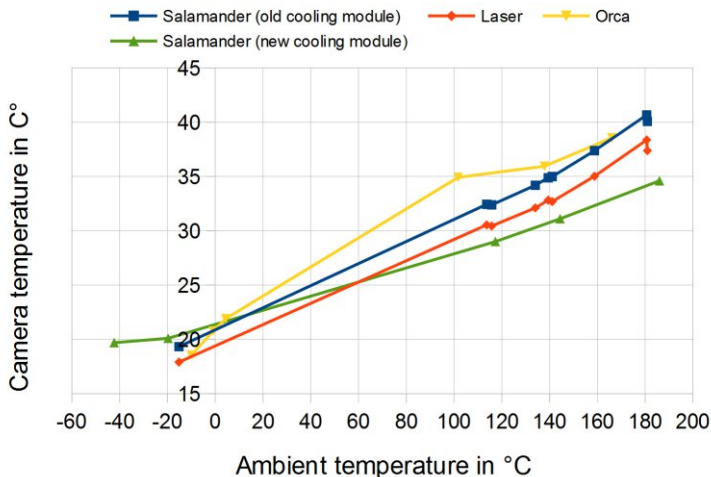
## Benefits:

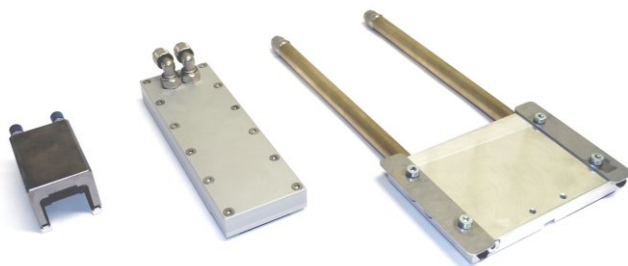
- Extends the temperature range for the use of cameras up to  $-50^{\circ}\text{C}$  to  $+200^{\circ}\text{C}$
- Automatic cooling and heating therefore perfect for the use in clima chambers
- High efficiency
- Cooling or heating of up to five enclos with one single Cooling Unit
- Manifold safety features
- No cooling liquid is pumped through the enclosure (exception: Mammoth cooling module)
- Easy handling



## Camera and Laser temperature with water cooling

all values valid for our testing conditions only!





Laser Cooling Module		Standard Cooling Module		Mammoth Cooling Module	
<b>Tube Connectors</b>	4mm	<b>Tube Connectors</b>	1/4" (~8mm)	<b>Tube Connectors</b>	1/4" (~8mm)
<b>Filling Capacity</b>	Approx. 10ml	<b>Filling Capacity</b>	Approx. 40ml	<b>Filling Capacity</b>	Approx. 40ml
<b>Dimensions (l x w x h)</b>	90 x 28 x 35mm	<b>Dimensions (l x w x h)</b>	115 x 44 x 36mm min. enclosure M	<b>Dimensions (l x w x h)</b>	115 x 64 x 40mm
<b>Weight</b>	Approx. 150g	<b>Weight</b>	Approx. 650g	<b>Weight</b>	Approx. 1250g
<b>Order Number</b>	60.100.030	<b>Order Number</b>	60.100.010	<b>Order Number</b>	60.100.020

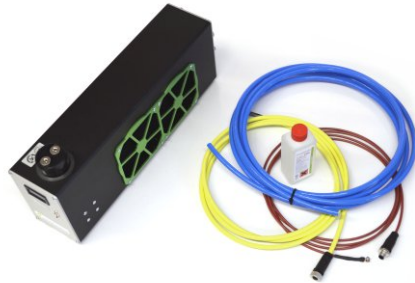


Water Cooling Unit	High Power
<b>Tube Connectors</b>	1/4" (~8mm)
<b>Max. Flow</b>	15l/min
<b>Max. Camera Distance</b>	20m
<b>Max. Pumping Height</b>	5.7m
<b>Input Voltage</b>	12V/DC
<b>Filling Capacity</b>	Approx. 400ml
<b>Max. Power Consumption</b>	Approx. 25W
<b>Max. Switching Power</b>	Approx. 5W
<b>Safety Features</b> (incl. alarm function)	Constant monitoring of: - Camera temperature, flow and fan
<b>Dimensions (l x w x h)</b>	456 x 105 x 203mm
<b>Weight</b>	Approx. 5.40kg
<b>Order Number</b>	60.101.520
<b>Leveling Feet for Cooling Unit Order Number</b>	60.101.521

# Water Cooling System

Included in the system:

- Water Cooling Unit
- 250ml cooling concentrate
- 6m Polyurethane tube
- 3m high temp. thermometer cable incl. sensor
- 3m DC power cable



## Accessories:

Product	Image	Order Number
8 x 1mm Polyurethane (PU) water tube, -20 to +80°C, filling capacity ~50ml/m, price per meter		60.101.478
6.35 x 9.5mm Polyurethane (PU) water tube, drag chain usable, -20 to +60°C, filling capacity ~40ml/m, price per meter		60.101.474
8 x 1mm Teflon high temperature water tube, -40 to +200°, filling capacity ~50ml/m, price per meter		60.101.477
Fitting to connect two 8 x 1mm water tubes		60.100.501
Quick disconnect coupling for two 8 x 1mm water tubes, 0 – 71°C, max. 8.3bar		60.101.480
Pressure control valve (TÜV safety valve) with connectors		60.101.479
Divider for parallel cooling of camera (8mm tube) and laser (4mm) enclosures		60.100.071
4 x 1mm Polyethylene (PE) water tube (Laser), -30°C to +80°C, price per meter		60.101.476
250ml cooling concentrate		60.101.333
Thermometer cable extension (>3m), price per meter		60.100.500
Power supply 12V/DC, 40W, Din rail mount		60.101.422

**Benefits:**

- Controlled heating
- No overheating possible
- Up to two plates with one controller
- Easy handling
- Usable in combination with the sun roof

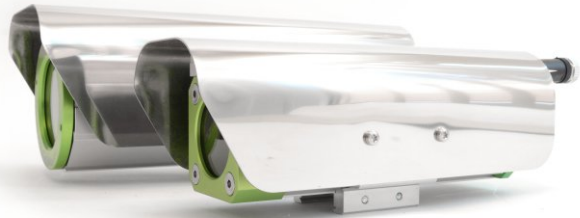


Product	Image	Order Number
Controlled heating plate for Orca/Gecko/Salamander from size M, IP65, incl. controller, temperature sensor and 5m cable, heats to max. 20°C, 39W, 24V/DC		70.100.011
Set of two heating plates for Orca/Gecko/Salamander from size M, IP65, with one controller and temperature sensor, heats to max. 20°C, 78W, 24V/DC		70.100.012

## Sun Roof

**Benefits:**

- Highly reflective stainless steel
- Insulated to enclosure
- Easy assembly
- Adjustable position
- Usable in combination with electric heating plate



	Sun roof for Salamander and Gecko			Sun roof for Orca		
Size	S	M	L	S	M	L
<b>Length</b>	192mm	245mm	275mm	187mm	237mm	307mm
<b>W x H</b>	108 x 78mm	108 x 78mm	108 x 78mm	140 x 90mm	140 x 90mm	140 x 90mm
<b>Weight</b>	400g	480g	550g	490g	600g	770g
<b>Order Number</b>	20.010.001	20.010.002	20.010.003	20.011.001	20.011.002	20.011.003