#### Laser Electronics

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# Heat Sink COOL30





With peltier elements, temperature sensor, heat spread plate and with 30W laser diode

## Features

- Up to 80W heat load
- High temperature accuracy
- Peltier driven, air cooling
- Available with or without peltier elements, temperature sensor and heat spread plate
- LD- and Cooler-cable included

## Applications

• Temperature stabilization of passively cooled high power laser diodes and laser arrays up to about 30W optical power

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# Description

The heat sink COOL30 was designed for temperature stabilization of high power laser diodes and laser arrays of about 30W optical power. Depending from the temperature difference between laser diode and ambient air the max. heat load is up to 80W.

A heat sink includes the metal block, fans for the heat dissipation, the peltier elements (TEC's), a heat spread plate with a temperature sensor, the laser diode cable and the cooler cable.

For using laser diodes with integrated peltier elements and temperature sensor the heat sink is available without peltier elements, temperature sensor and heat spread plate for a reduced price.

### Specifications

Thermal Characteristics	COOL30
Heat Load (max) with a temperature difference between laser diode module and ambient air of	
0 K	80 W
5 K	60 W
10 K	40 W
T <sub>max</sub> (hot side)	50°C
Temperature Difference	40 K
Thermal Resistance	0.15 K/W
Electrical Characteristics	
Temperature Sensor	NTC 10 kOhm
Peltier Current	0±10 A
Peltier Voltage	0±15 V
Fan Current	500 mA
Fan Voltage	12 V
General Characteristics	
Ambient Temperature	030°C
Relative Humidity	3070 %
Weight	2 kg
Dimension (w x d x h) in $mm^3$	230 x 148 x 95