

Cooling Methods

RF-LINKS employs a modular form of construction. Modules are cooled by conduction to a heatsink. Thermal compound is applied to ensure minimum thermal resistance at the interface. Thermal overload protection is supplied on most amplifiers.

Here below the table of the parameters used in the heatsinks reworking.

Construction method	Average degree of roughness Ra [μm]		
	Min.	Average	Max.
Milling	0,500	0,80÷6,00	12,000
Lapping	0,010	0,05÷0,40	0,800
Grinding	0,025	0,10÷1,50	6,000
Turning	0,500	0,80÷6,00	12,000

Cooling can be accomplished four ways:

- **Conduction** - The amplifier baseplate is mounted to the heatsink. The heatsink must be designed such that the maximum specified baseplate temperature is not exceeded, normally +71°C.
- **Convection** - The amplifier contains a very large finned heatsink. The surface area is large enough to dissipate the heat in a still air environment.
- **Forced Air** - Cooling air is directed through a finned heatsink in the amplifier.
- **Liquid** - The cooling fluid is pumped through a chill plate in the amplifier. The cooling heat exchanger is external to the amplifier.