





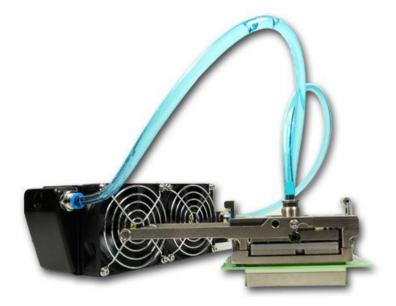






## **Water Cooled Thermal Sockets**

Ironwood Electronics has released a new product group called, Thermal Socket, specifically supporting the test of high power devices. These thermal sockets utilize water-cooled solutions. There are a few different types of water-cooled solutions. Closed-loop all in one coolers is the better choice since they are pre-assembled and sealed units that include a pump, water block, radiator, and fans. Water-cooled solutions can provide significant benefits in terms of cooling performance and aesthetics, but they require careful consideration, planning, and maintenance to ensure successful implementation. Water cooled solutions are typically used when the device power is greater than 300 watts. Ironwood is familiar with a wide variety of radiator and pump solutions on the market and can pair the correct solution to any given application based on extensive simulation along with experimental validation. Figure shown above is one such solution for a 52 x 42mm device, 0.9mm pitch, 300W, and a 80mm x 160mm radiator



Thermal simulation capabilities include:

- Natural convection heatsinks
- Forced convection heatsink + fans
- Heat pipes
- Cold plates
- Water blocks for radiators
- Water blocks for chillers
- TEC based systems

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