

# SPRAYCOOL™ TECHNOLOGY REPLACES FANS AND HEAT SINKS USED IN ELECTRONIC COOLING

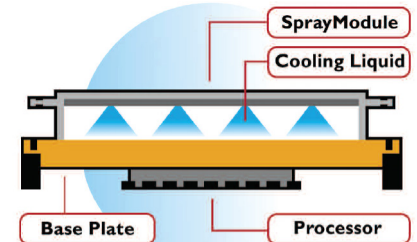
## OPPORTUNITY

Increased processor speeds and new, compact design of electronic components have created an environment in which standard fan cooling of electronics is no longer sufficient. Isothermal Systems Research, Inc. (ISR) developer of SprayCool™ Technology, uses the process of liquid evaporation to cool electronics. Since this closedloop, liquid cooling system is more sophisticated than a traditional fan cooling system, ISR needed to optimize the design to make it easy to install and maintain.



## SOLUTION

Replacing a traditional heatsink with the new SprayCool Technology greatly reduces ambient temperature inside a server chassis. In this closedloop cooling system it is critical that proper levels of dielectric fluid can be easily maintained. ISR chose CPC's quick disconnect couplings to meet the strict requirements of this critical application. The integration of a quick disconnect coupling not only simplifies the connection of the fluid supply and return lines, the high-integrity of the automatic shutoff valves insures minimal loss of system fluid.



- 1 Fluid enters the SprayModule
- 2 Fluid is sprayed on the SprayModule base plate and evaporates
- 3 Vapor exits the SprayModule and is recondensed in the heat exchanger
- 4 Fluid is circulated back to the SprayModule

## RESULTS

ISR continues to partner with CPC for their modular rack cooling solutions, allowing the hottest and highest performance processors to be efficiently cooled in smaller and smaller form factors. The ease-of-use and reliability of CPC's couplings combined with the SprayCool Technology from ISR make it easy to incorporate worry-free liquid cooling into all types of electronic applications.

**COLDER PRODUCTS COMPANY**  
U.S.A.

PHONE +1 651-645-0091  
FAX +1 651-645-5404  
TOLL FREE 800-444-2474

**COLDER PRODUCTS COMPANY GMBH**  
Germany

PHONE +49-6026-9973-0  
FAX +49-6026-9973-173

**COLDER PRODUCTS COMPANY LIMITED**  
Hong Kong

PHONE +852-2987-5272  
FAX +852-2987-2509