

# Liquid Cooling with iStarUSA's D-400 Chassis

*iStarUSA has teamed up with CoolIT Systems to offer leading-edge liquid cooling technology in our D-400 chassis*

**iStarUSA**  
Powered by iStarUSA Group

**CoolIT**  
SYSTEMS



## *Heat, Disperse!*

CoolIT's maintenance-free liquid cooling systems move thermal energy much more efficiently than air solutions do. CoolIT's direct contact liquid cooling technology transfers computer component heat more effectively by using patented copper split-flow micro-channel cold plates and low profile pump design. The CPU heat is transferred directly into the liquid and moved to the high-efficiency radiator where a fan cools things down.

## *Available for High Performance Systems*

Liquid cooling has proven itself to be the standard in high performance desktop computing and that same performance is now available to the high performance computing server. This adds up to great value for system integrators. Through the increased ability to effectively dissipate heat, this chassis platform can accommodate much higher compute density and deliver the performance that the market needs. Now you can rely on a validated high performance Chassis/Thermal solution to support any AMD or Intel platform.

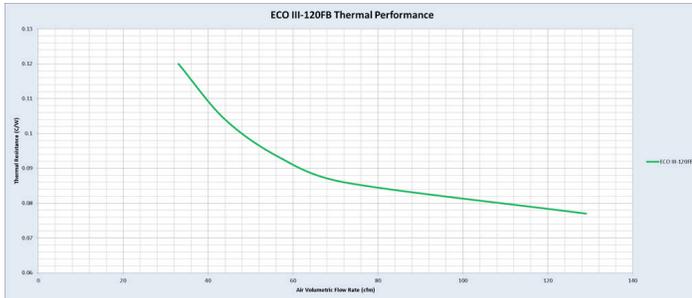
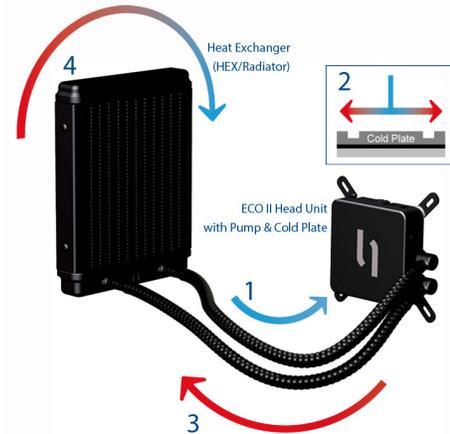
# Introducing CoolIT Liquid Cooling Technology for Your iStarUSA Chassis

## ECO III-120FB



Using a 120 x 45mm radiator along with a 120 x 38mm fan of 4000 RPM max while installed into the D-400 4U Server Rackmount Chassis, the thermal performance was able to achieve 0.080 C/W at 170W load. More information can be obtained through iStarUSA and CoolIT.

### How the ECO Sealed System Works



General Specifications	
Model	ECO III-120FB
Part Number	900-00191
Description	120mm Class Liquid Cooling Solution
Thermal Resistance	~0.080 °C/W (with default fan at maximum speed)
FHE Base	Copper Micro-channel
Tubing	Flexible corrugated FEP 8mm OD, 6mm ID
Tubing Length	~ 280 mm
Coolant	Low toxicity propylene glycol/water mixture with anticorrosion/antifungal package
Thermal Interface Materials	Dow Corning TC-5026
Total Weight	725g (w/o fan)

Pump Specifications	
Pump Motor	Electronically commutated, brushless DC
Nominal Voltage	12 VDC
Nominal Current	0.12 A
Power	1.44 W
Typical Flow Rate	0.94 L/min
Speed	2150 RPM +/- 10%

Environmental Specifications	
Operating Range	Temperature (0 °C ~ 50 °C)
	Humidity (35% ~ 85%)
Storage Range	Temperature (-40 °C ~ 85 °C)
	Humidity (35% ~ 85%)

### External Dimensions (LCS)\*

