



**Active Thermal Management**

*The trusted name in thermal protection*

**Parts list** – before proceeding, check that you have received all of the following:

- (1) Cool-stack I main chassis (Intake or Exhaust)
- (1) Remote thermal probe
- (1) Power supply

**Instructions for installation of the Cool-stack I™ rack-mount ventilators, INTAKE & EXHAUST models.  
(For units built after 9/2011)**

The Cool-stack I ventilators, both intake & exhaust, are controlled by a 90° thermal control. *Older units (made before September 2011) had provisions for 12 volt trigger control; this feature was eliminated to allow the use of a more precise and faster-responding electronic thermal control system.*

**INSTALLATION**

The Cool-stack I is suitable for cooling a small rack or a portion of a larger rack.

- Mount the intake version of the Cool-stack I low in a small rack, with the fans facing UP. It will draw room air in & force it up. If used in a larger rack, mount it below the section to be cooled, with a passive vent panel at the top of the section.
- Mount the exhaust-type Cool-stack I high in a small rack, fans facing DOWN; it will draw heated air up and out of the rack. If used in a larger rack, mount it above the section to be cooled, with a passive vent panel at the bottom of the section.

Mount the thermal probe on the equipment being monitored, or position it so that it can sense the hottest air in the enclosure. (This might be at the highest point in the cabinet or just above the hottest component.)

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Connect the output of the wall-type power supply to the DC input jack on the rear panel of the Cool-stack I. Plug the thermal probe into the other jack on the rear panel. Plug the power supply into a non-switched outlet.

To test the Cool-stack I quickly, unplug the thermal probe; the fans should turn. If a hair dryer is available, it can be used to heat the thermal sensor which will activate the fans after a short delay.

*Note that as a fail-safe feature, the fans will operate if the thermal probe should be accidentally disconnected, regardless of temperature.*

### **Optional constant idle operation**

If desired, the Cool-stack I can run at a constant idle speed, increasing to full speed when the temperature at the remote probe reaches 90 degrees. To activate this mode of operation, disconnect the power supply from the Cool-stack I, remove the 2 screws at the top rear of the unit, and slide the cover back until it can be lifted off. On the printed circuit board, find the 2 pin header marked "IDLE JMPR" next to capacitor C1. Lift the shorting jumper, shipped mounted on 1 pin, and replace it so that it connects both pins. Replace the cover and reconnect the power supply.

The Cool-stack I will now run at a low idle speed below 90 degrees. Should the temperature at the probe reach 90 degrees or the probe become disconnected, the fans will increase to full speed.

### **WARRANTY**

Active Thermal Management ("ATM") warrants its products against defects in materials and workmanship for a period of one year from date of purchase. We will repair or replace, at our option, any ATM product which has a defect in materials or workmanship. The product must be properly packaged and returned prepaid with an ATM return authorization number clearly written on the outside of the shipping carton and with a copy of the bill of sale or ATM invoice to verify the original purchase date.

#### **Our warranty does NOT apply to:**

- 1. Shipping damage, either concealed or visible. Claims must be filed with the carrier.**
- 2. Damage caused by improper installation or improper electrical voltage.**
- 3. Any product which has been modified, unless authorized by ATM.**
- 4. Damage caused by corrosion, abrasion, immersion, or severe temperatures.**
- 5. Products which have been subject to abuse, misuse, abnormal usage, or accident.**

**These warranties give you specific legal rights, and are subject to any applicable consumer protection legislation. You may also have additional rights which vary from state to state.** No other warranties, expressed, implied, or written, shall apply to this product. ATM will not be responsible for any consequential or incidental damages, loss of property, revenues, or profit, cost of removal, installation, or reinstallation, personal injury, or for any breach of warranty, regardless of how caused.

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