

## Active Cooling Solution is **4x** more efficient at *Thermal Convection* than Passive!

### ■ Comparison of Active / Passive Cooling Solution (LED Power 20W, 2000lm)

Active Cooling (LA002-003A99DN)		Passive Cooling (RA002-002999DN)
Tc=45°C <b>Win</b> →	Tcase Temperature reduce <b>6°C</b>	Tc=51°C
85x85x35.5 mm <b>Win</b> →	Volume Reduce over <b>62%</b>	φ 170x30 mm
153 g <b>Win</b> →	Weight Reduce over <b>73%</b>	570 g
Aluminum Less material = less cost <b>Win</b> →	Cost Down more than <b>60%</b>	Aluminum Large size = high cost

### ■ Advantages



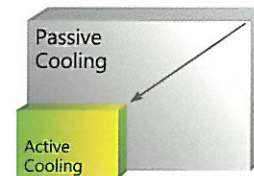
#### High Lumen

MR16 up to 520lm (13W)  
A19 up to 1300lm (20W)  
Spot light up to 5000lm (75W)



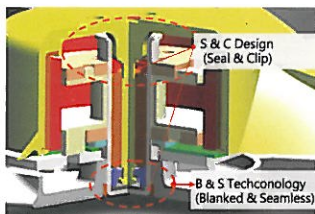
#### Meet MR16 / A19 standard size

Sunon's active cooling solution is four times more effective than passive cooling. It has developed the best high lumen and the space cooling requirement for the MR16 and A19.



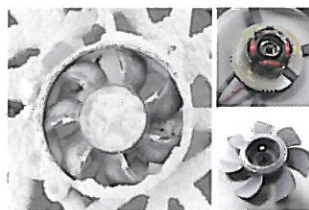
#### Lower Cost

Active cooling can be significantly reduced size, weight, metallic materials use, less cost up to 60%.



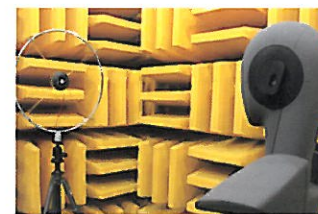
#### Long Life

DR Maglev motor fan with better dust-resistance, super silence advantages, and cooling module life of up to 70,000 hours (60° C). Warranty may be extended to 5 years on demand.



#### Dust-proof (\*) The dust settlement is equal to a 5-year and 2-month dust fall

After a test of 72 hours operation according to the IEC60529 dust test standard (\*), the results show that the Sunon fan motor functioned normally. When the fan was disassembled, no dust was found inside the fan motor or along the fan axis.



#### Super Silence

Sunon has brought acoustic engineering to our fan products so that they have superior sound quality, even below the 20 phon curve. As a result, the use of Sunon products can create a more agreeable and comfortable environment.

### ■ Features

- Sunon LED cooling modules have been adopted by many international LED module manufacturers, including Philips, Osram, Vossloh, Xicato, Tridonic, GE, and others.
- Sunon products are widely applied to LED bulb lamp (A19), MR16, down light, and spot light.
- Over 300 patents related to LED lighting cooling around the world.
- Successfully solves LED light decline, color rolling, overheat, and other problems.
- Active cooling solution allows lamps to be more lightweight and compact.
- Bearings designed with patented DR MagLev motors can effectively extend motor life.

The use of Sunon's Super Silence fan design results in a sound lower than can be detected by the human ear (below the 20 phon curve).