

Super Tornado

The advanced choice for gamers & over-clockers



ATX 12V POWER SUPPLY



120mm fan



Seasonic[®]
Since 1975

Silent--Ultra Quiet

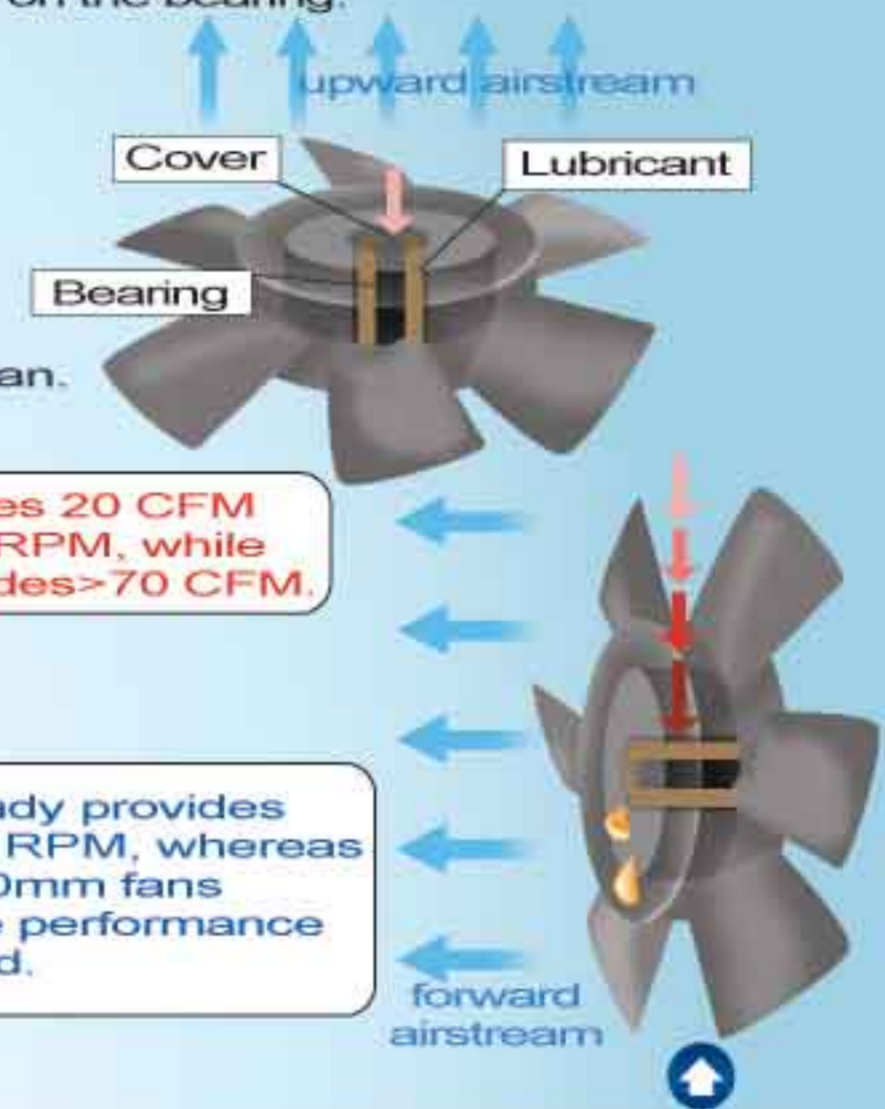


120mm Cyclone Cooling Fan (>70CFM)

Double airflow with half the RPM & noise

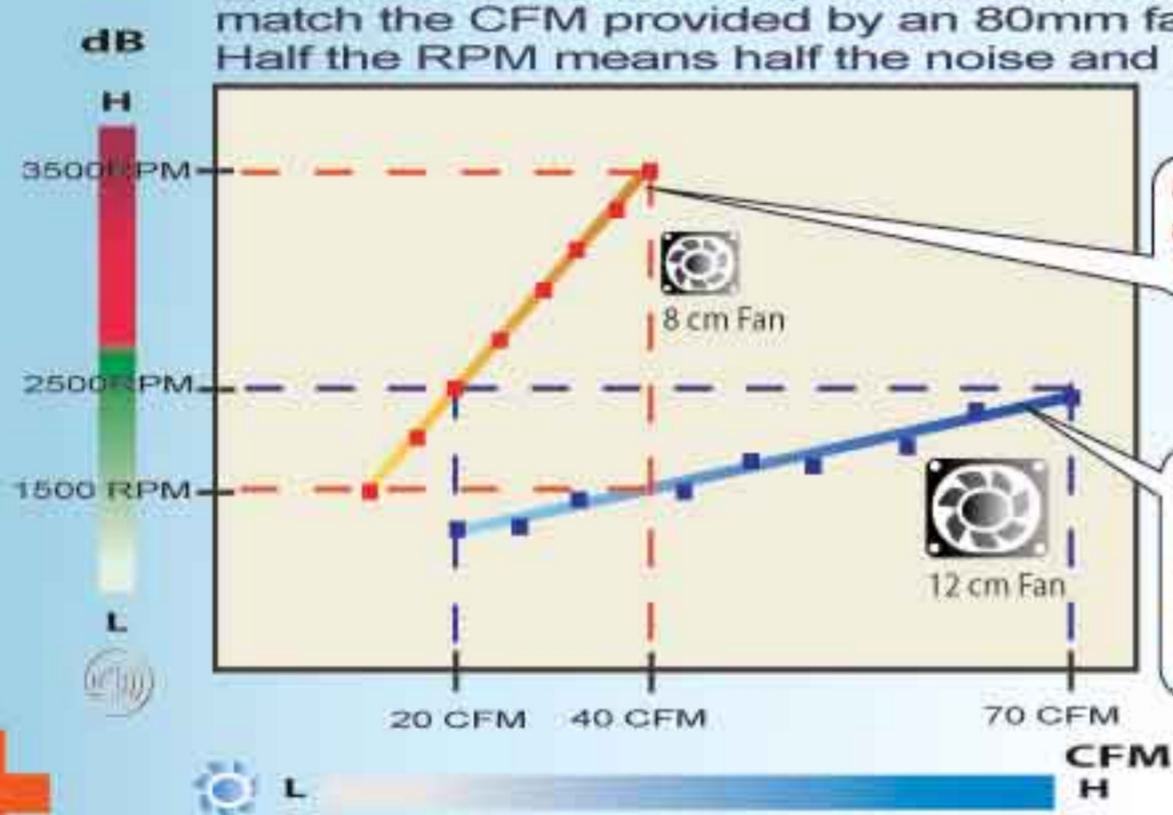
- Outperforms all dual-fan units on the market
- Cools your system more quickly and quietly
- Longer lifespan due to high CFM, lower RPM and strategic fan placement

The strategic, horizontal location of the 120mm fan prevents lubricant leakage, and makes sure that there is 0% chafe on the bearing.



How the 120 mm fan outperforms the 80 mm fan

120mm fan requires only half (50%) the RPM to match the CFM provided by an 80mm fan. Half the RPM means half the noise and double the life span.



80mm fan provides 20 CFM at a rate of 2500 RPM, while 120mm fan provides >70 CFM.

120mm fan already provides 40 CFM at 1500 RPM, whereas the majority of 80mm fans cannot reach the performance even at full speed.

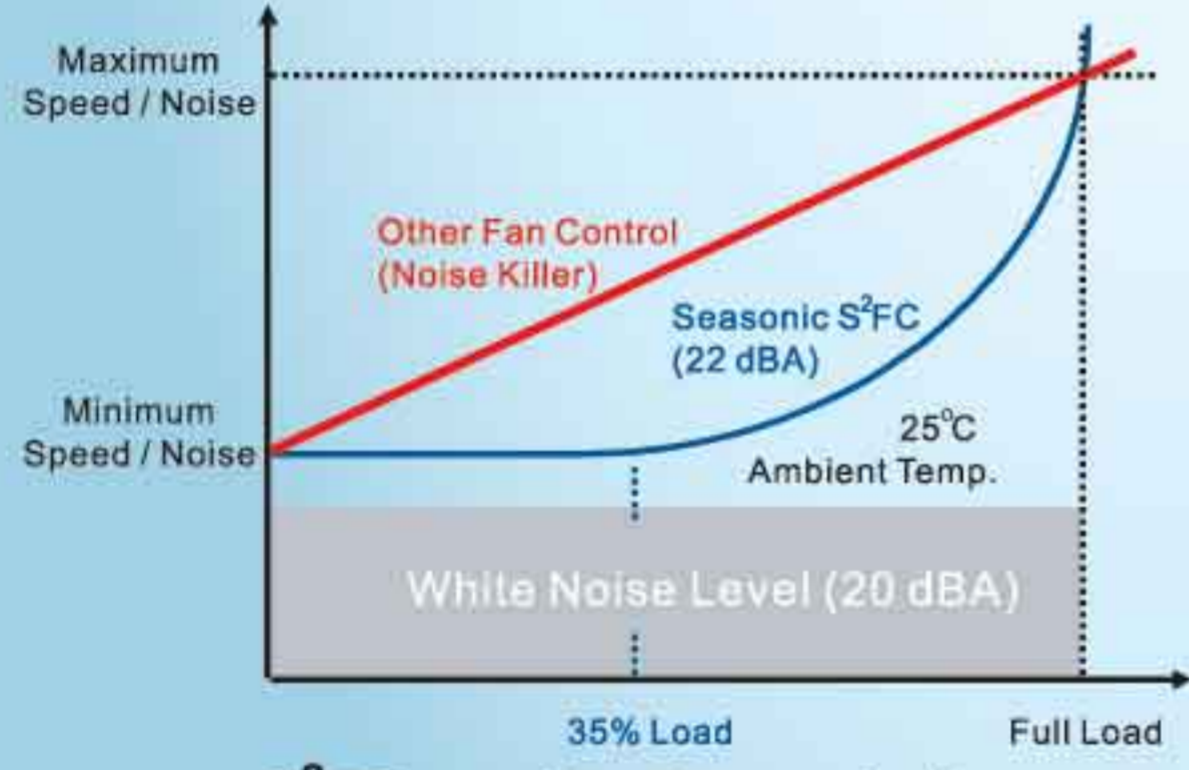
The traditional vertically placed 80 mm fan has a greater possibility of lubricant leakage and early failure. In addition, the location of the fan causes a 50% chafe on the bearing.



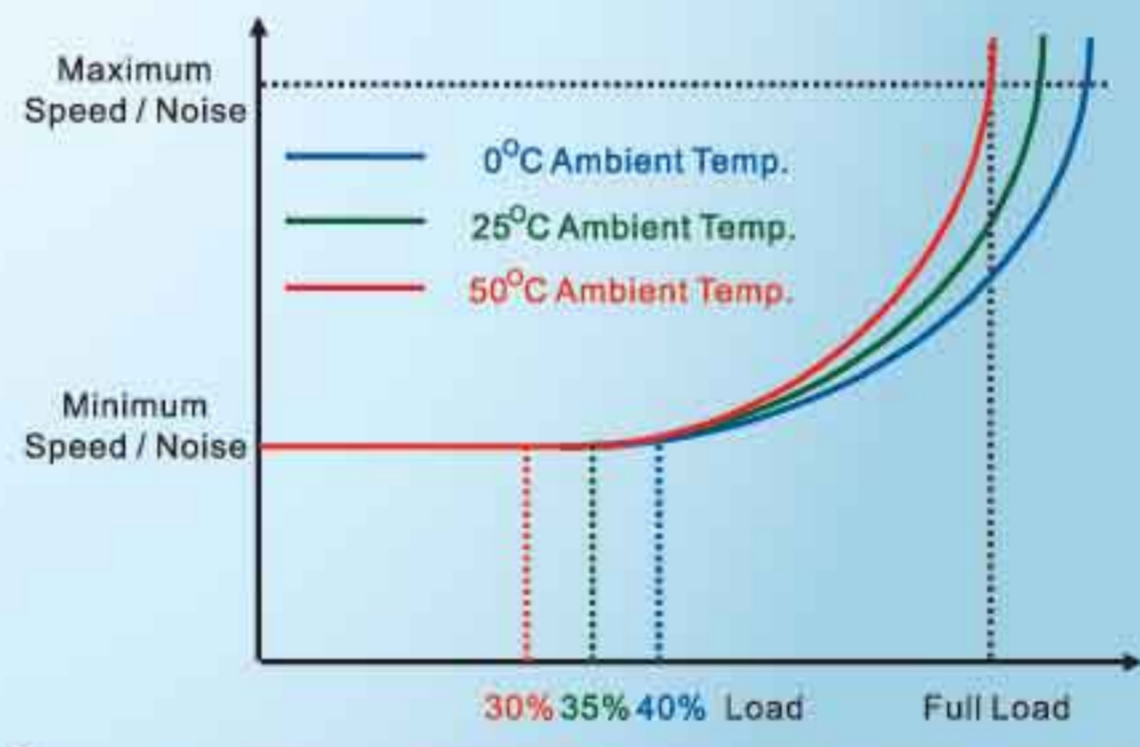
Smart & Silent Fan Control (S²FC)

Silent enthusiast's best choice

- Reduces noise without increasing temperature
- Extends fan life by eliminating unnecessary rotation
- Automatic temperature adjustment prevents manual errors



S²FC vs. other fan control



S²FC adapts different ambient temperature



Ultra Ventilation (Honey Comb Structure)

Maximum ventilation & minimum air resistance

- Optimum-balanced structure for strength and ventilation
- Enhances airflow to solve thermal and noise problems

Airflow comparison under different chassis constructions



Energy Saving--Environment Friendly



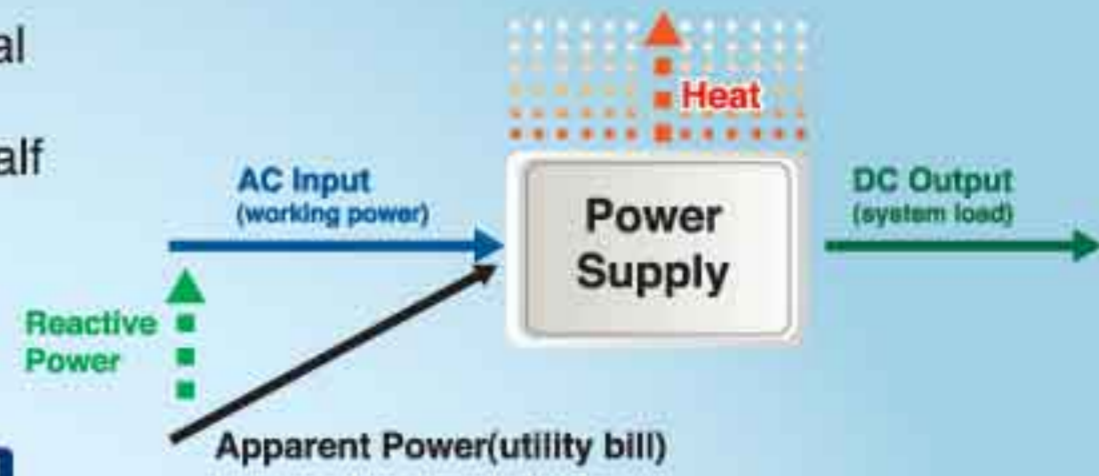
Active Power Factor Correction (99% PFC)

Conserve electricity & our environment

- Improves working power factor from the typical 50% to a near-perfect 99%
- Improves energy utilization to cut your bill in half
- Environment friendly technology



$$\text{Power Factor} = \frac{\text{Working Power}}{\text{Apparent Power}}$$



Super High Efficiency (up to 80%)

Cool, quiet, reliable & energy saving

- Surpasses the market average efficiency of 68%
- Saves 15% energy; runs 40% cooler
- Optimal solution for low noise, thermal & high reliability



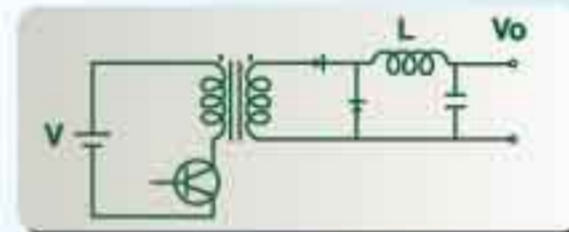
$$\text{Efficiency} = \frac{\text{DC Output}}{\text{AC Input}}$$



Forward Converter

Advanced design for reliable power

- More reliable
- More efficient



Power Factor & Efficiency

Item	Super Silencer 300Watts (Active PFC)	Generic 300Watts (Passive PFC)	Generic 300Watts (Non PFC)	Description
PSU efficiency (%)	80%	70%	68%	= DC output / AC input
PSU power factor (%)	99%	75%	50%	= Working power / Apparent power
System loading (W)		300W		= DC output watts
Working power (W)	375.0W	428.6W	441.2W	= AC input watts
Electrical bill (VA)	378.8VA	571.4VA	882.4VA	= Apparent Power (VA)
Hours per year (Hrs)		8760Hrs		= 24Hrs * 365 Day
Average utility rate (\$)		\$0.11		= Rate per KVA*Hrs (USD)
Power consumption (year)	3318KVA*Hrs	5006KVA*Hrs	8086KVA*Hrs	= KVA*Hrs per year (KW*Hrs)
Electrical bill per year	\$365	\$551	\$850	Bill per year (USD)
The extra bill per year		\$186	\$485	Bill difference (USD)

For reference only, billing structure may vary from country to country.

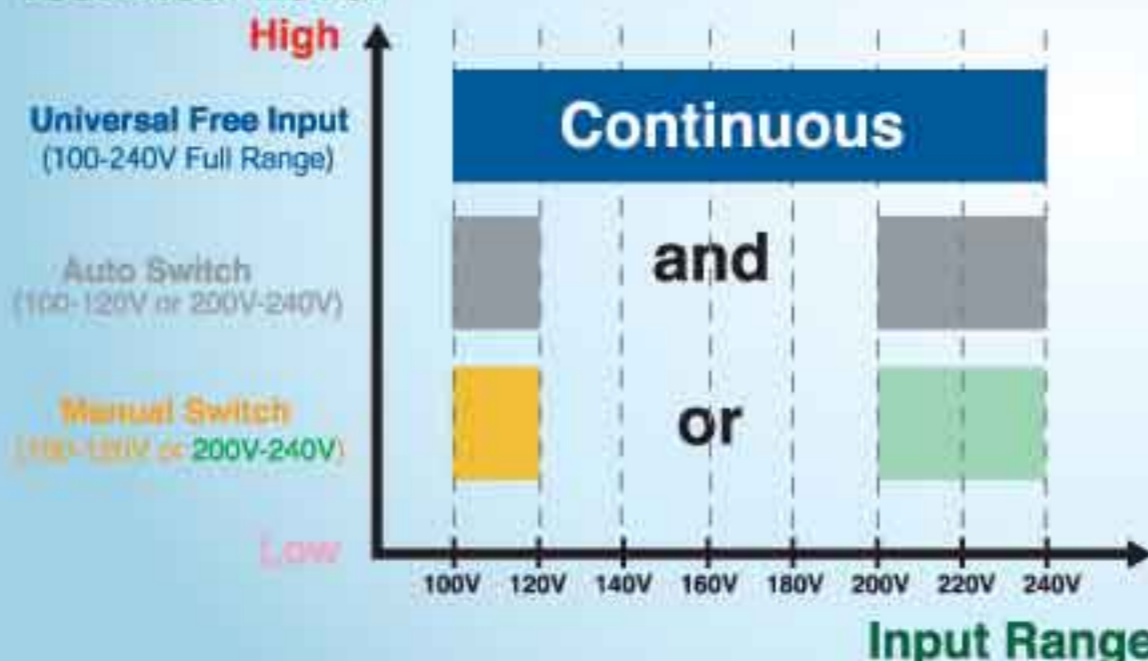


Universal Free Input (100-240V full range)

Plug & run safely anywhere in the world

- Eliminates manual voltage selector
- Eliminates potentially harmful mistakes

Technical Level



Universal Free Input



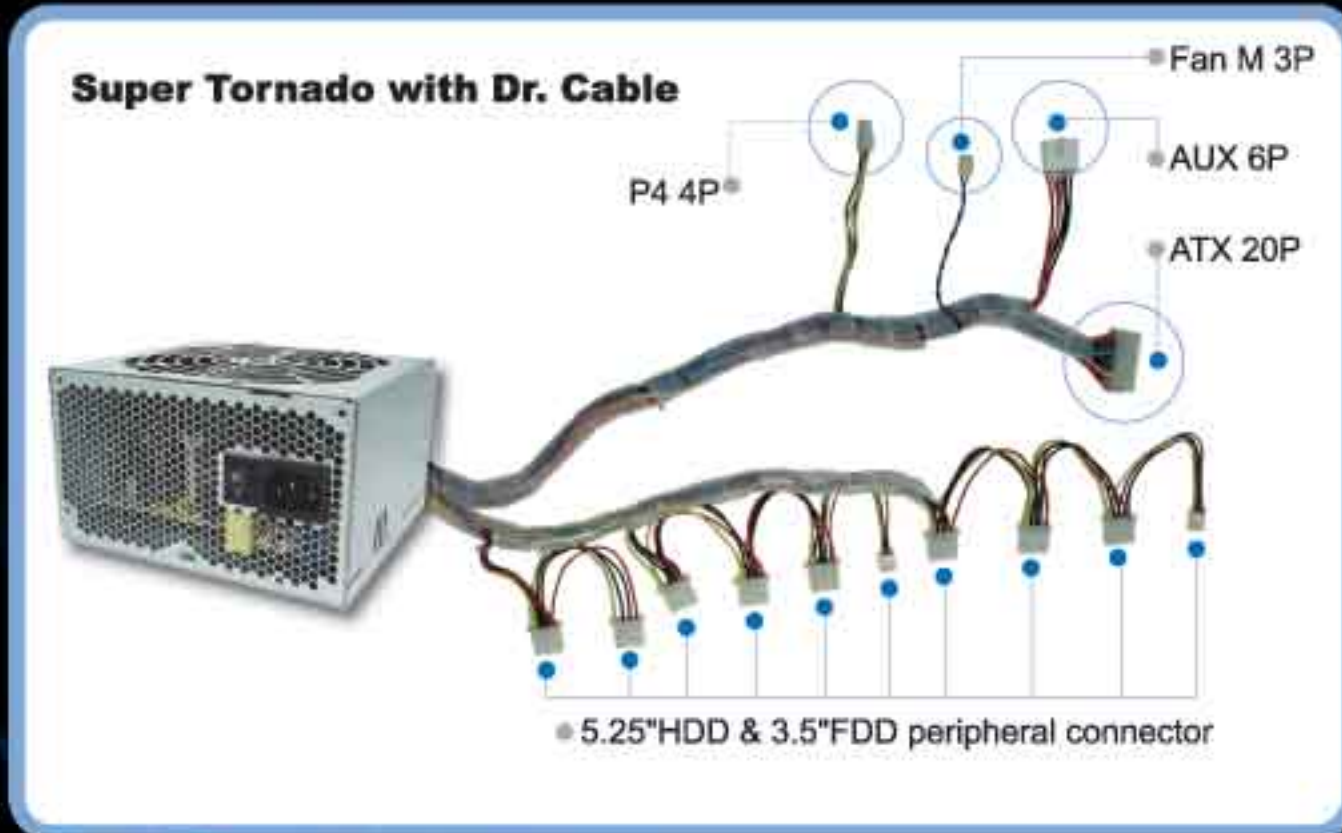
Manual Switch



Cable Management Kit [Dr. Cable]

Make your PC tidy & neat

- * Tidy up messy wires quickly
- * Eases access to the connectors
- * Smooths airflow to improve cooling



300Watts (340W peak)					
AC INPUT 100-240V ~ 5A 50/60Hz					
+3.3V	+5V	+12V	-12V	+5Vsb	
28A	30A	18A	0.8A	2A	
200W(46A) Max.					



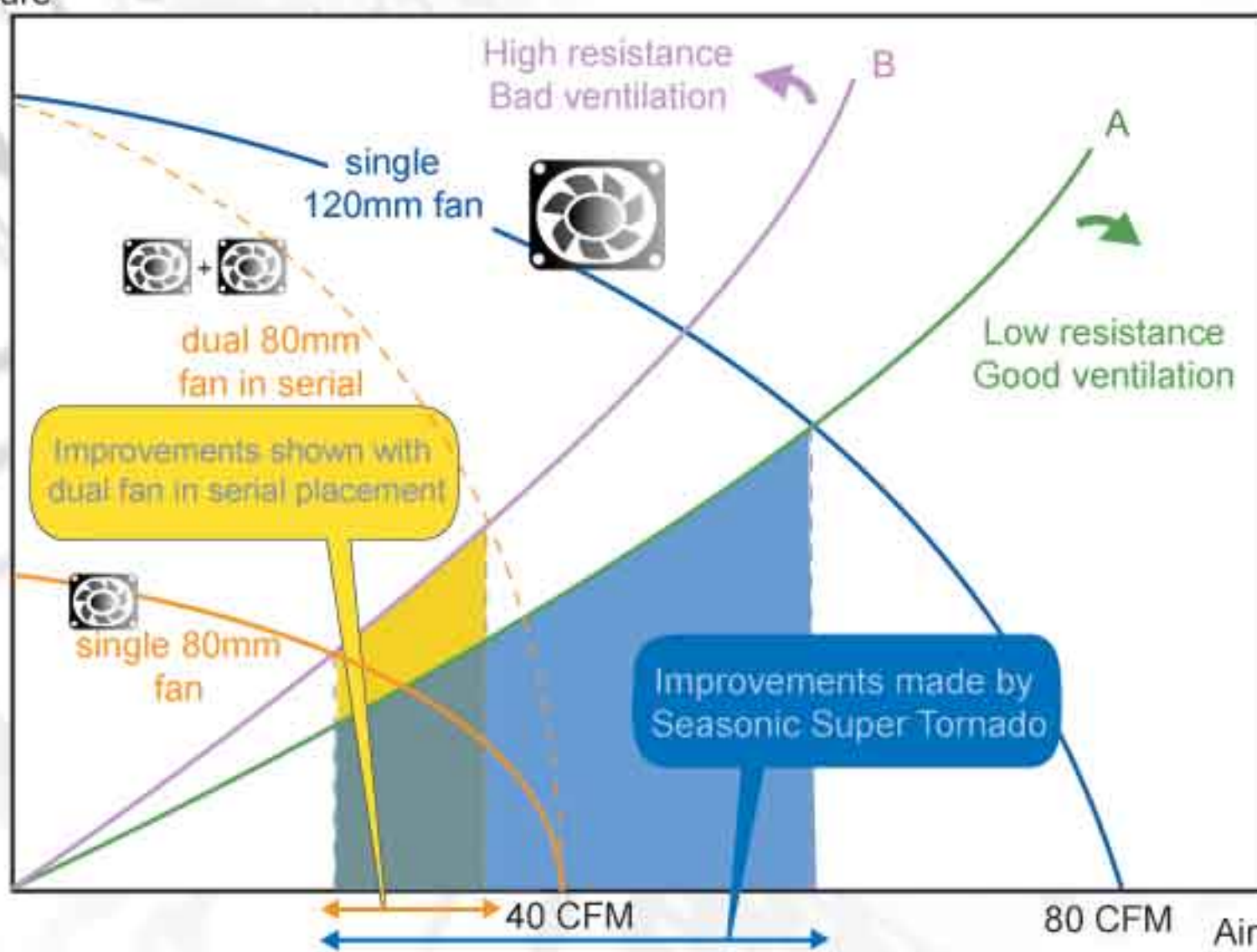
350Watts (390W peak)					
AC INPUT 100-240V ~ 6A 50/60Hz					
+3.3V	+5V	+12V	-12V	+5Vsb	
28A	30A	19A	0.8A	2A	
200W(46A) Max.					



400Watts (450W peak)					
AC INPUT 100-240V ~ 7A 50/60Hz					
+3.3V	+5V	+12V	-12V	+5Vsb	
28A	30A	22A	0.8A	2A	
200W(46A) Max.					



Pressure



The advanced Seasonic Super Tornado with its strategic, high-airflow 120mm fan with low resistance and a honeycomb ultra ventilation structure.

The traditional ATX PSU with dual 80mm fans in serial still shows a high resistance.

The traditional ATX PSU with single 80mm fan shows a high resistance.



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