BLDC HVLS Fan

*All products are RoHS compliant.
Natural, Comfort Experience
SUNON, with 40 years of experience in BLDC motor technology and manufacturing capability. In 2017, SUNON launched the HVLS fans, which adopts brushless DC (BLDC) energy-efficient motors. Aerodynamics was used to optimize the airflow, which enables SUNON HVLS fans to generate large airflow with low turning speeds, achieving optimal performance that HVLS industrial fans couldn’t reach.

SUNON Powerful HVLS Fan series got a light and stylish design and its airfoil combines aircraft-grade aluminum with a patented winglet design, reducing the air resistance and noise, reaching optimal performance of high volume at low speed. We committed to providing you with superior HVLS fans and offer you the best energy-saving, cooling, moisture-proof, and ventilation solutions. The entire series of SUNON HVLS fans is unparalleled, and unlike anything else you’ve experienced.

**Pre-Sale Service**
- Site Survey
- Airflow Simulation
- Optimized Consulting
- Cost Saving Analysis

**Professional Skills**
- Simulation & Validation
- Aerodynamic Optimization
- Automated Production
- Product Traceability

**Installation Work**
- Cost Saving Analysis
- Safety Regulations
- Efficient Installation

**After-Sale Service**
- Intensive Distribution
Powerful HVLS Fan

- Energy Saving 90%
- Airflow Increase 20%
- A/C Cost Saving 30%
- Safety First
- Air Smoothly
- Silence Design
Modern HVLS Fan
The Simplicity of Breeze

With the Earth’s axis tilted at 23.5°, it created the beautiful sceneries of the 4 seasons. With the 31° curvilinear design of the SUNON Modern HVLS Fan airfoil, it creates not only a massive airflow, but also an ultra silent operation. The 6 speed rotation ensured you a silent natural breeze, the unique airfoil gently running through the air revitalizing your space with a rustic breeze.

Stylish and Elegant
Lozenge pattern surface with elegant and large curvilinear airfoil, decorative and pure white design, show more of your taste to shape your lifestyle.

Massive Airflow
The ultra-high torque motor can generate massive air at low speed by the curvilinear airfoil, creating a relaxing and peaceful atmosphere in your house.

Ultra Slow Rotation
Slow rotate speed will be visually leisure and less oppressive, let the breeze gently run through your space.

BLDC Motor
High-Efficiency BLDC motor saves up to 50% and more energy than BLDC motor. 6-Speed control adjust optimized temperature.

Facility Type
exhibition hall, bookstore, cafe, library, museum, office, meeting room, hotel lobby, hospital, fitness center, home
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### The Placement & Clearance between Fan and Obstructions

- **Spacing between fans**: at least 5ft (1.5m) of the fans apart
- **Extension tube**: 1.7ft (525mm) (standard)
- **Obstacle**
  - **>0.98ft (0.3m)**
  - **>8.17ft (2.5m)**
- **>2ft (0.6m)**
SUNON Powerful HVLS series 1 has a lighter and stylish look. The airfoil combines aircraft-grade aluminum with a patented Airfoil design, it reduces the wind resistance and wind noise.

**Specifiction**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>5 ft (1.5 m)</th>
<th>6.5 ft (2 m)</th>
<th>8 ft (2.5 m)</th>
<th>10 ft (3 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>14 kg</td>
<td>16 kg</td>
<td>18 kg</td>
<td>20 kg</td>
</tr>
<tr>
<td>Speed</td>
<td>180 RPM</td>
<td>130 RPM</td>
<td>95 RPM</td>
<td>70 RPM</td>
</tr>
<tr>
<td>Max Airflow</td>
<td>17,500 CFM</td>
<td>21,000 CFM</td>
<td>24,500 CFM</td>
<td>28,000 CFM</td>
</tr>
<tr>
<td></td>
<td>29,711 m³/h</td>
<td>35,654 m³/h</td>
<td>41,596 m³/h</td>
<td>47,538 m³/h</td>
</tr>
<tr>
<td>Noise</td>
<td>&lt;35 dB(A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power source</td>
<td>220-240 VAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Indoor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Air Volume

<table>
<thead>
<tr>
<th>Fan Diameter</th>
<th>Max Affected Area*</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ft / 3 m</td>
<td>2,153 ft² / 200 m²</td>
</tr>
<tr>
<td>8 ft / 2.5 m</td>
<td>1,722 ft² / 160 m²</td>
</tr>
<tr>
<td>6.5 ft / 2 m</td>
<td>1,292 ft² / 120 m²</td>
</tr>
<tr>
<td>5 ft / 1.5 m</td>
<td>861 ft² / 80 m²</td>
</tr>
</tbody>
</table>

*Data Test without Obstacles

The Placement & Clearance between Fan and Obstructions

Facility Type

exhibition hall, bookstore, cafe, library, museum, office, meeting room, hotel lobby, hospital, fitness center, home, factory, warehousing
Powerful HVLS Fan series 3 is suitable for cooling a large space, it reduces body temperature efficiently and heat dissipation evenly. The high–efficiency BLDC direct–drive motor shows remarkable results and does not require regular oil change for long–term use. This is your top choice for long–term investment in commercial space.

**BLDC Motor**
More than 90% of motor efficiency, gearless direct drive motor, no need for regular lubrication maintenance.

**Energy Saving**
Series 3 is achieve carbon neutrality by saving more than 43,212 trees. (Compare with 3M HVLS fans)

**Silence Design**
Patented airfoil design, it reduces the wind noise and provides smooth airflow.

**Safety First**
Sunon applied one–pieced shaping hanging base to prevent those potential risks about cracked, rusty, or loosen parts.

### Specification

<table>
<thead>
<tr>
<th>Diameter</th>
<th>8 ft (2.5m)</th>
<th>10 ft (3m)</th>
<th>12 ft (3.6m)</th>
<th>14 ft (4.2m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight*</td>
<td>27.39 kg</td>
<td>29.77 kg</td>
<td>32.57 kg</td>
<td>35.44 kg</td>
</tr>
<tr>
<td>Speed</td>
<td>150 RPM</td>
<td>100 RPM</td>
<td>70 RPM</td>
<td>56 RPM</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>335 W</td>
<td>232 W</td>
<td>176 W</td>
<td>171 W</td>
</tr>
<tr>
<td>Max Airflow</td>
<td>48,087 CFM</td>
<td>58,154 CFM</td>
<td>71,224 CFM</td>
<td>77,555 CFM</td>
</tr>
<tr>
<td>Noise</td>
<td>&lt;40 dB(A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power source</td>
<td>200-240 VAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>Indoor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Weight: fan unit only, the mount and the extension tube are not included.

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### Air Volume

<table>
<thead>
<tr>
<th>Fan Diameter (ft/m)</th>
<th>Max Affected Area (ft²/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 ft / 4.2 m</td>
<td>5,340 ft² / 496 m²</td>
</tr>
<tr>
<td>12 ft / 3.6 m</td>
<td>4,380 ft² / 407 m²</td>
</tr>
<tr>
<td>10 ft / 3 m</td>
<td>3,380 ft² / 314 m²</td>
</tr>
<tr>
<td>8 ft / 2.5 m</td>
<td>2,760 ft² / 256 m²</td>
</tr>
</tbody>
</table>

*Data Test without Obstacles

### The Placement & Clearance between Fan and Obstructions

- >2ft (0.6m)
- spacing between fans at least 2.5x diameter of the fans apart
- Extension tube 1.3ft (1m) (standard)
- >2.8ft (0.84m)
- >10ft (3.05m)
- >2ft (0.6m)

### Facility Type

- exhibition hall, bookstore, cafe, library, museum, office, meeting room, hotel lobby, hospital, fitness center, home, factory, warehousing
Storm but Uniform Airflow

Different from most large industrial ceiling fans on the market that rely on rapid turning speeds to generate unsteady and uneven airflows, Powerful HVLS Fan series 10 large industrial ceiling fans wield outstanding motor control to generate even and gentle winds. In addition, the unique expanded air flow design of the series 10 allows for even better internal and external air circulation in large areas.

**Specification**

<table>
<thead>
<tr>
<th>Diameter</th>
<th>13 ft (4m)</th>
<th>16 ft (5m)</th>
<th>18 ft (5.5m)</th>
<th>20 ft (6.1m)</th>
<th>24 ft (7.3m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight*</td>
<td>90.01 kg</td>
<td>99.36 kg</td>
<td>104.03 kg</td>
<td>110.16 kg</td>
<td>120.86 kg</td>
</tr>
<tr>
<td>Speed</td>
<td>115 RPM</td>
<td>90 RPM</td>
<td>65 RPM</td>
<td>60 RPM</td>
<td>50 RPM</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>825 W</td>
<td>1,100 W</td>
<td>585 W</td>
<td>765 W</td>
<td>1,050 W</td>
</tr>
<tr>
<td>Max Airflow</td>
<td>166,536 CFM</td>
<td>224,824 CFM</td>
<td>192,441 CFM</td>
<td>234,859 CFM</td>
<td>338,127 CFM</td>
</tr>
<tr>
<td></td>
<td>282,744 m³/h</td>
<td>381,704 m³/h</td>
<td>326,725 m³/h</td>
<td>398,742 m³/h</td>
<td>574,069 m³/h</td>
</tr>
<tr>
<td>Noise</td>
<td>&lt;50 dB(A)</td>
<td>&lt;50 dB(A)</td>
<td>&lt;46 dB(A)</td>
<td>&lt;46 dB(A)</td>
<td>&lt;46 dB(A)</td>
</tr>
<tr>
<td>Power source</td>
<td>220-240 VAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment*</td>
<td>Indoor / Outdoor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Weight – fan unit only, the controller, the mount and the extension tube are not included.
*Environment – This product is not suitable for salt air environments.

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Air Volume

<table>
<thead>
<tr>
<th>Fan Diameter</th>
<th>Max Affected Area*</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 ft / 7.3 m</td>
<td>28,110 ft² / 2,612 m²</td>
</tr>
<tr>
<td>20 ft / 6.1 m</td>
<td>19,630 ft² / 1,823 m²</td>
</tr>
<tr>
<td>18 ft / 5.5 m</td>
<td>15,960 ft² / 1,483 m²</td>
</tr>
<tr>
<td>16 ft / 5 m</td>
<td>17,222 ft² / 1,600 m²</td>
</tr>
<tr>
<td>13 ft / 4 m</td>
<td>13,950 ft² / 1,296 m²</td>
</tr>
</tbody>
</table>

*Data Test without Obstacles

The Placement & Clearance between Fan and Obstructions

- Spacing between fans: at least 3x diameter of the fans apart
- Extension tube: 3.3ft(1m) (standard)
- Obstacle: >3.3ft(1m)
- The distance between the center of the ceiling fan and HVAC equipment needs to be at least <1.5x
- The distance from the ceiling fan extends: >2ft(0.6m)
- The distance from the obstacle extends: >10ft(3.05m)

Facility Type

- factory, ranch, greenhouse, hangar, gymnasium, warehouse, hypermarket, supermarket, exhibition hall
100% R&D and Manufacturing by SUNON

With 40 years of experience in BLDC motor technology and manufacturing capability, SUNON’s HVLS fan solution mastered the core technology of motor and the optimal characteristics of the airfoil. The product is 100% under SUNON controlled from design to manufacture, eliminating the problems of buying motors, airfoil, drive and parts separately from the market and then reassemble. Achieving a performance no other HVLS fans achieved.

Successful Story

Modern HVLS Fan
- Mumbai, India
Located in the tropics, Mumbai is hot and humid. Using Modern HVLS Fan can dissipate the heat and humidity, as well as generate indoor circulation, providing a natural and comfortable cooling.

Powerful HVLS Fan series 1
- Tainan, Taiwan
This 24-hour running factory needs precise control of their cost and capacity. The series 1 delivers the lowest cost but provides the maximum ventilation, optimizing the space between people and equipment in this working environment, and maintaining high productivity (1 kWh can be used continuously for 12 hours).

Powerful HVLS Fan series 3
- Kaohsiung, Taiwan
Taiwan lies in the subtropics. A hot environment reduces milk production and milk quality. The highly-diffused airflow of series 3 ceiling fans accelerate air circulation both inside and outside the farmhouse, keeping the cows’ enclosure dry and reducing the chances of cows getting sick. The quiet BLDC motor lowers the overall temperature and is quiet enough so as to not disturb the cows, thereby improving milk production and milk quality.

Powerful HVLS Fan series 1
- Okinawa, Japan
This island resort has created a brand-new restaurant with comfortable air conditioning. To make every guest feel cozy and relaxed during their mealtime. The high-ceilinged roof is equipped with the series 1. Not only balance the room temperature and reach the better ventilation, it also makes every guest to dine in with the island breeze.
Safety First

- **One-piece Shaping Yoke**
  Auto-stop when detect motor heat, voltage or loading over limitations.

- **Redundant Conjunction**
  The mount tube adopts three sets of upper and lower screws to ensure a firm shockproof, low sloshing, and crosswind resistance of the whole structure.

- **Double Suspensions**
  Main safety cable wrapping around the I-beam and four-directed guy wire to strengthen stability and construction safety of the ceiling fan.

- **Fatigue testing**
  The airfoil bolt kit has passed million-times of fatigue tests– SUNON Powerful HVLS Fan utilizes reinforced airfoil. The equipped airfoil frame passed millions of high-strength back and forth bending fatigue tests to avoid the risk of airfoil frame breaking or fan airfoil falling due to long-term use.

("Only for powerful HVLS Fan series 3, series10")

6 Process Steps for Quality Assurance

- Motor stator assembly check
- Motor rotor assembly check
- Motor shaft assembly check
- Motor drive compatibility check
- Airfoil balancing check
- Finished goods package with QR Code record

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