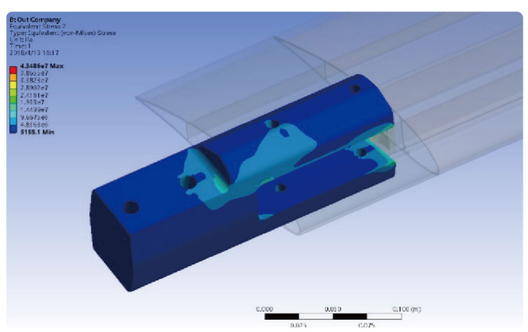
SuperWing

High Performance and Energy Saving

SUPERWING SERIES

PMSM GEARLESS MOTOR HVLS FANS

Motor Free Maintenance | Noise Level 39dBA | Smart Controller | Efficency IE4



Design

- PMSM gearless direct drive Motor,Maintenance Free
- Fan size from 16-24ft,motor max torque 300N.m
- World's strongest rare earth magnets (NdFeB,Grade N38SH),high electrical efficiency >84%
- High performance:energy saving
- Advanced smart controller provides easy integration to BMS and fire alarm system
- Ultra-efficient Aluminum Aerofoils blades and Robust construction

Construction & Mounting

- Designed with user's comfort and safety in mind
- Static load components with unlimited life design
- Blends well into different construction profiles
- Multiple protections secure the fan to the mounting structure
- Fans are tested and simulated for best performance
- Double pivot adjustable mounting hardware

CE | TUV | ERP | IP55 | ISO | UL

Human-body Cooling | Natural Air Ventilation | Dehumidification | Large Airflow Coverage

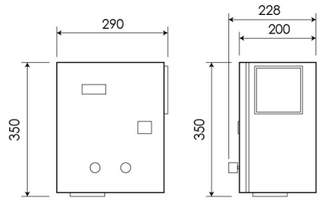
BENEFITS

Perfect ceiling fan for any residential or commercial space

1. PMSM gearless DD motor with freer maintenance,lower cost investment and less power consumption than most traditional cooling methods.
2. Very quiet with noise level less than 39dBA,ideal for sounds concerns environment.
3. Assit in the removal of thermal stratification,help reduce humidity and condensation on floors and equipment.
4. One unit 24ft fan equal to 50 sets small size fans,up to 92% cost saving of energy bills.
5. Substantial energy savings on your air conditioning costs,up to 50% cost saving of energy bills.
6. Warranty (Whole fans 2 years,fan blades lifetime).

CONTROL SYSTEM

Multi-function control

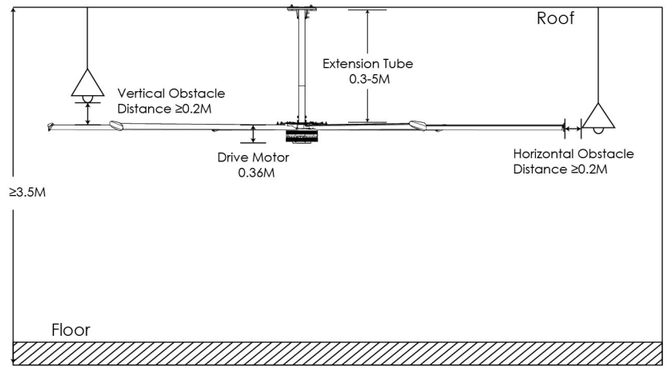


SMART CONTROLLER FEATURES

central control
BMS system
fire alarm system

BMS

FAN DIMENSION



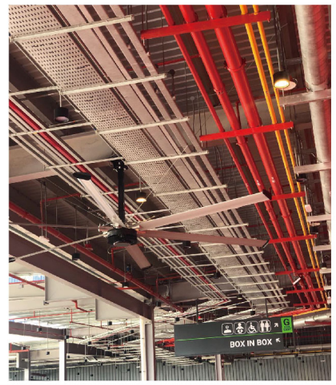
Technical Specification

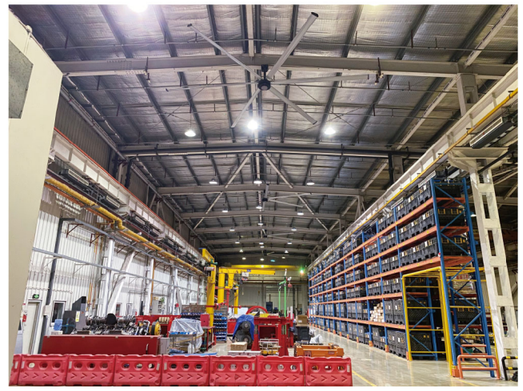
Diameter (FT/M)	Model	Voltage (V)	Current (A)	Speed Range (RPM)	Rated Power (kW)	Air Volume (CMM)	Weight (KG)
16ft(4.9m)	PMSM-16	220 1Φ	3.6	10-74	0.8	11,800	109
18ft(5.5m)	PMSM-18	220 1Φ	4.1	10-64	0.9	12,500	112
20ft(6.1m)	PMSM-20	220 1Φ	3.27	10-60	1.1	13,200	115
24ft(7.3m)	PMSM-24	220 1Φ	4.69	10-50	1.5	15,000	121

***Weight does not include mounting hardware or extension tubes.**

APPLICATION

- Agriculture& Dairy
- Warehouse
- Manufacturing
- Public &Commercial area
- Food Court
- Metro Station
- Aviation
- Fitness Center





SuperWing Series

PMSM Direct-drive HVLS Ceiling Fans

Diameter: 16-24FT

Advantage 1: Motor drive rate is greatly improved

Common asynchronous motor

PMSM motor

Advantage 2: Adjustable speed range is larger

other fans

Superwing Series

Advantage 3: Low noise and ultra quiet

The Superwing series uses the latest PMSM technology to reduce noise to 39dBA for the first time, truly low noise. The noise of the asynchronous motor deceleration machine mainly comes from the excitation noise of the motor casing and the friction of the gear of the reducer. The noise standard is usually about 45-50dB.

Noise standard
PMSM motor technology ≤39 dBA

Noise standard
Asynchronous motor gearbox ~~45-50~~ dBA

Advantage 4: Powerful motor，Big air volume

The Superwing series adopts the latest PMSM technology, low-speed high-torque drive motor, which can meet any torque recovery or auxiliary braking within the peak torque, eliminating the friction energy consumption of the gear reducer, and the maximum torque reaches 300N.m. The most powerful advantage of the Superwing series is its air volume, which reached 528,675 CFM at full load, surpassing the market's common product air volume by 30%, which has been unanimously recognized by customers and highly evaluated by the market.

300 N.m
Maximum torque

528,675 CFM
Maximum air volume

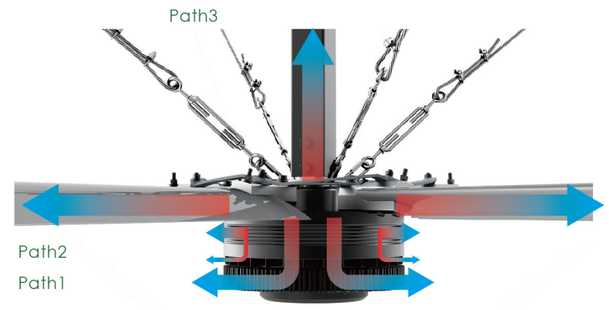
Advantage 5: Thermal design

Efficient cooling system (heat dissipation surface area up to 2.16m²), perfect solution to the contradiction between performance and heat in PMSM technology.
In the heat dissipation system, through the two methods of contact heat dissipation and radiation heat dissipation, the ingenious structural design selects the high-density alloy aluminum material of the high heat conduction system to achieve the perfect heat dissipation effect and ensure the longer life characteristics of the motor.

Path 1: Contact heat dissipation

Path 2: Heat transfer through the radiation to the rotor disk and the connection structure

Path 3: Passing heat through the fixed axial upper structure



Advantage 6: Maintenance free

The Superwing series PMSM motor adopts the principle of electromagnetic induction, double-bearing transmission, completely sealed, and truly maintenance-free. The products commonly used in the market with gear transmission technology need to replace the gearbox lubricating oil regularly, and the professional climbs up and disassembles the work. The cost will add.

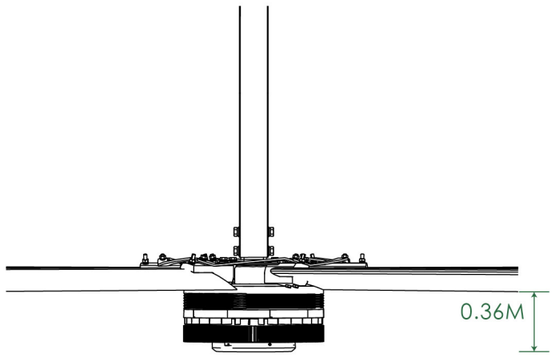
Electromagnetic induction

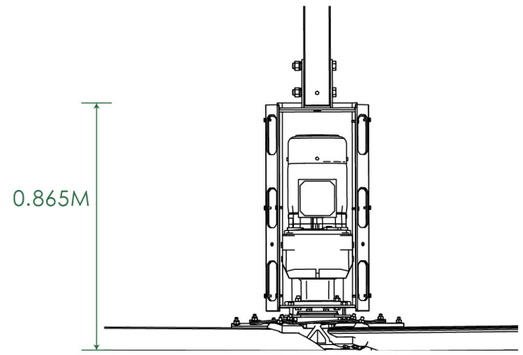
Double bearing

Completely sealed

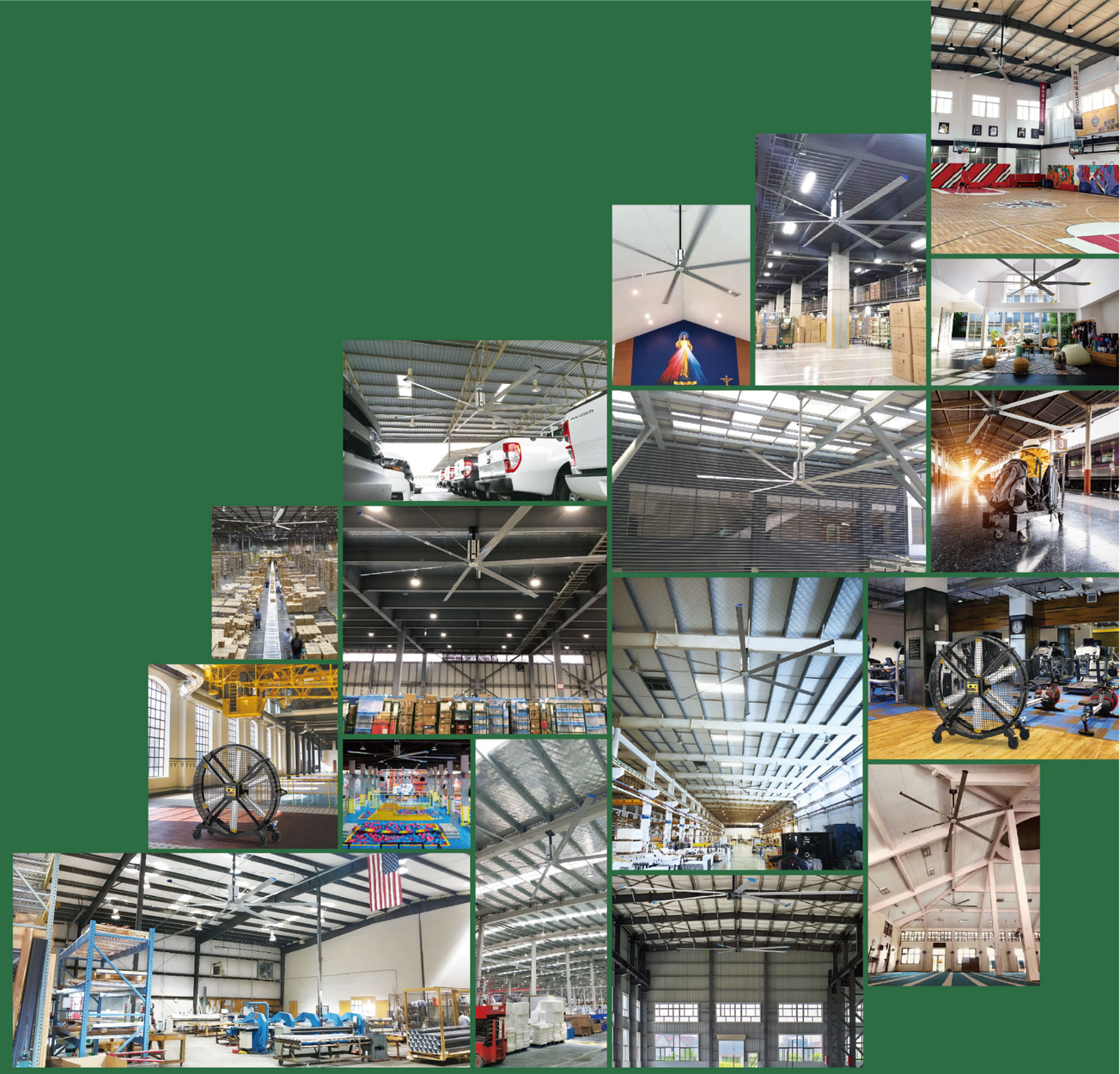
Advantage 7: The motor is small and exquisite

The Superwing series mainframe is small and exquisite, the height of the main unit is only 0.36M, which greatly reduces the installation space requirements. Only 0.8M can install a "super wing" series fan. The common industrial fan host on the market is large, and the installation space needs to be more than 1.2M, which limits its installation.





Cooperative partners



Application

- Food courts
- Shopping Malls
- Discotheques
- Sports Halls
- Multipurpose Halls
- Athletic Stadiums
- Community Centers
- Exhibition Halls
- Schools
- Places of Worships
- Warehouses/ Workshops
- Manufacturing Facilities
- Airports
- Military Facilities
- Aircraft Hangars
- Hotel Foyers
- MRT Stations
- Bus Interchanges
- Large Tents
- Gymnasiums
- Country Clubs
- Restaurants
- Wineries
- Agriculture/ Dairy
- Pet Care Centers
- Temporary Shelters
- Distribution Centers
- Defence Shelters