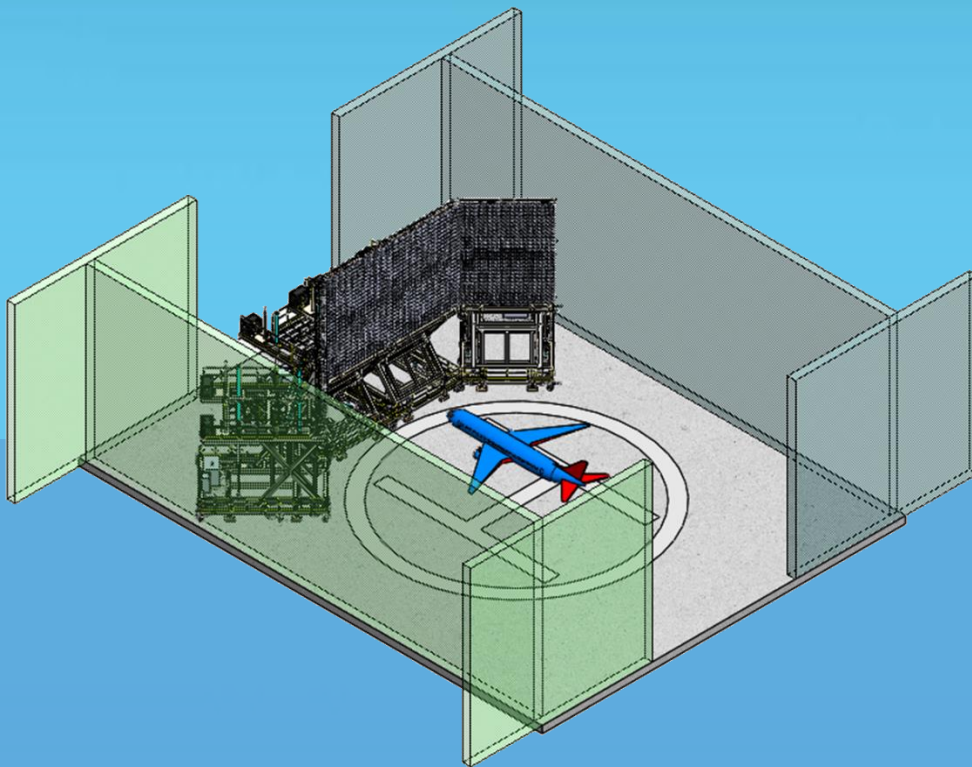


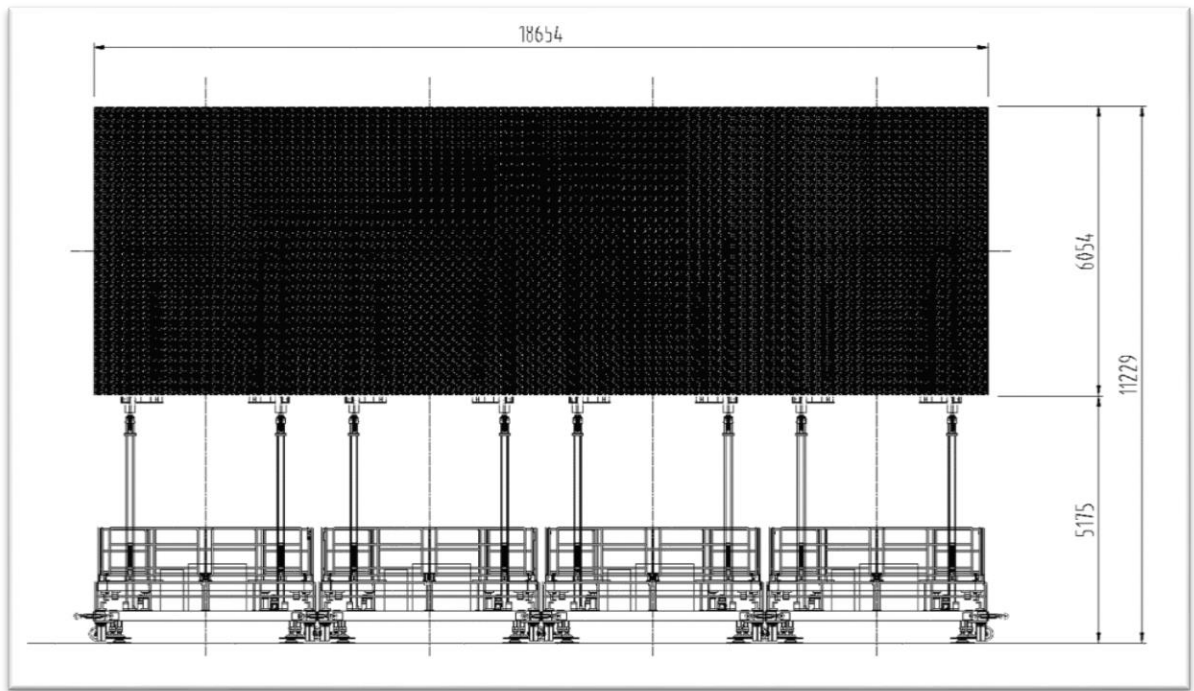
Flying Quality System For UAM & Large-Scale Drone



Construction of an Indoor Test System
Simulating Wind Conditions Similar to
Actual Field Conditions

Flying Quality System

Wind Simulator Equipment Layout



Division	Specification	Note
Wind Simulator Quantity	4ea	
Wind Simulator Size	6.4m(L) * 4.6m(W) * 11.2(H)	
Wind Simulator Weight	14,998 kg / 1ea	Total Weight : 59,992 Kg
Module Set Configuration	9 Fans (3 tall * 3 wide)	
Panel Configuration	63 Modules(9 tall * 7 wide)	
Panel Size	4.662m(W) * 6.034m(H) * 0.757m(T)	
Total Module Quantity	63 Modules * 4ea = 252 Modules	252 Modules * 9 Fans = 2,268 Fans
Maximum Lift Height (from floor level)	5,000 mm	

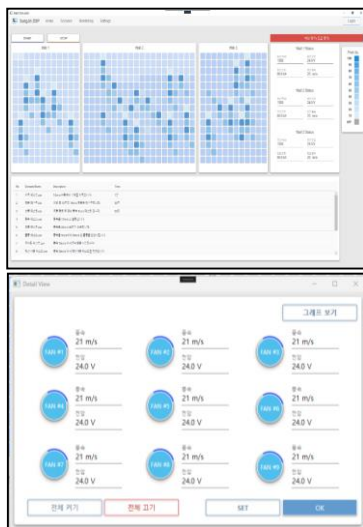
* It may vary depending on the installation environment and product specifications.

Flying Quality System

Implementation of Wind Simulation

Wind Speed Control

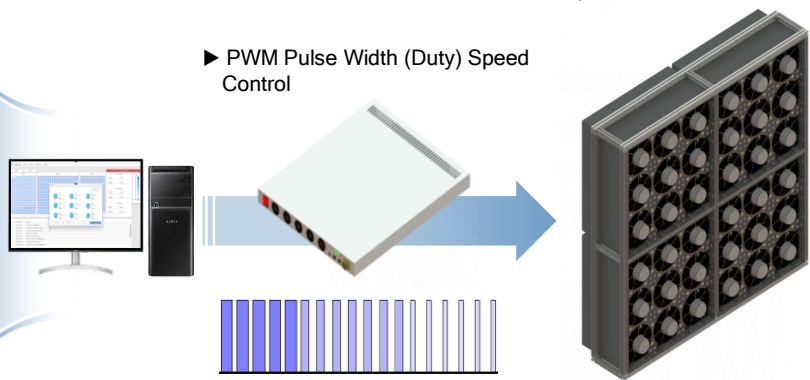
Wind Speed Control



► Individual Control of Operational Program

► PWM Pulse Width (Duty) Speed Control

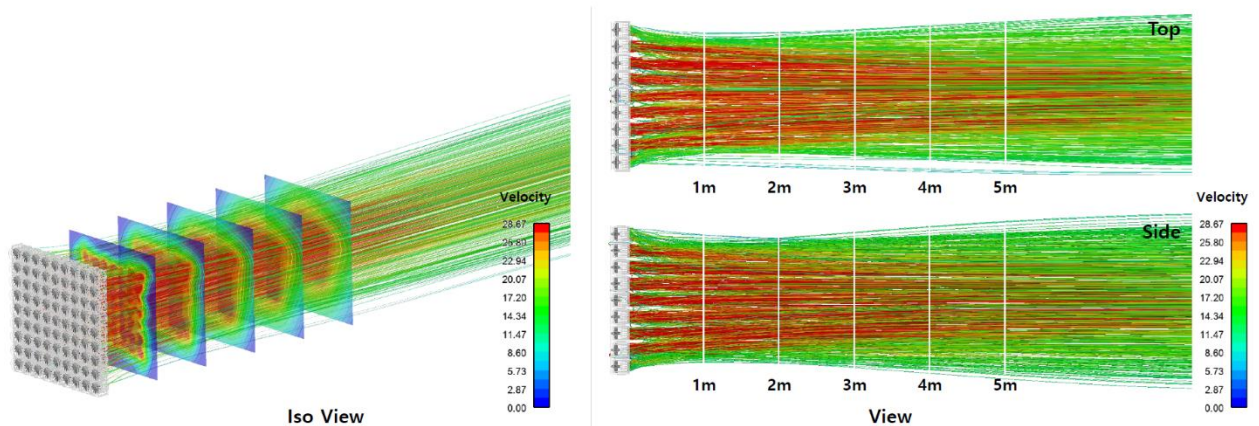
► Wind Simulation and Wind Speed Generation



[Wind Simulation and Wind Speed Test Configuration]

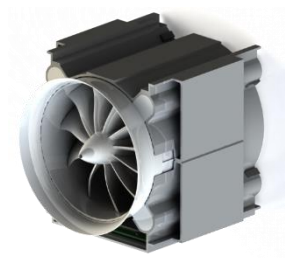
- **Wind Speed(streamline)**

- Speed distribution at 1m, 2m, 3m, 4m, and 5m by measurement location

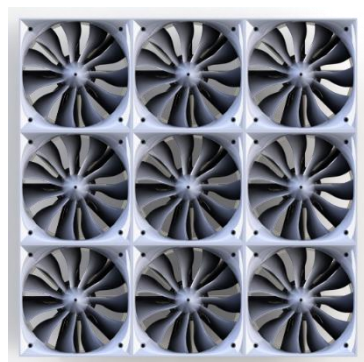


Flying Quality System

Single EDF Performance



[Single EDF Specification]



[Module(3x3) Specification]

Single EDF Performance	
Model	180mm EDF(SJ-EDF-35A)
Operating Voltage	48V
Operating Maximum Current	Max. 35A(1.68 kw)
Maximum Wind Speed At the Outlet (based on 6,500 RPM)	AVG 49.0 m/s
RPM	Max 7,500 RPM / MIN 1,500 RPM
Maximum Flow (@ Zero Static Pressure)	2,950 m ³ /h (6,500 RPM, 32.2 m/s)
Motor Temp. (1 hour operation at room Temperature)	Motor Heat 44.9°C after 1 hour of operation at room temp.
Noise(AVG.)	1,500 RPM (63.31 dB), 6,500 RPM (89.61 dB)
Dimension	231 * 220 * 223 mm(L*W*H)
Weight	4.07 Kg

Module(3x3)	
Model	Module(SJ-9DEF-35A)
Component	180mm EDF 9 Module, ESC Board 9EA, Busbar and Fixed Guide
Weight	40.4 Kg
Dimension	231 * 660 * 671 mm(L*W*H)
Features	Movable and Assemblable / Disassemblable

* The product specifications are subject to change due to performance improvements and other reasons



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