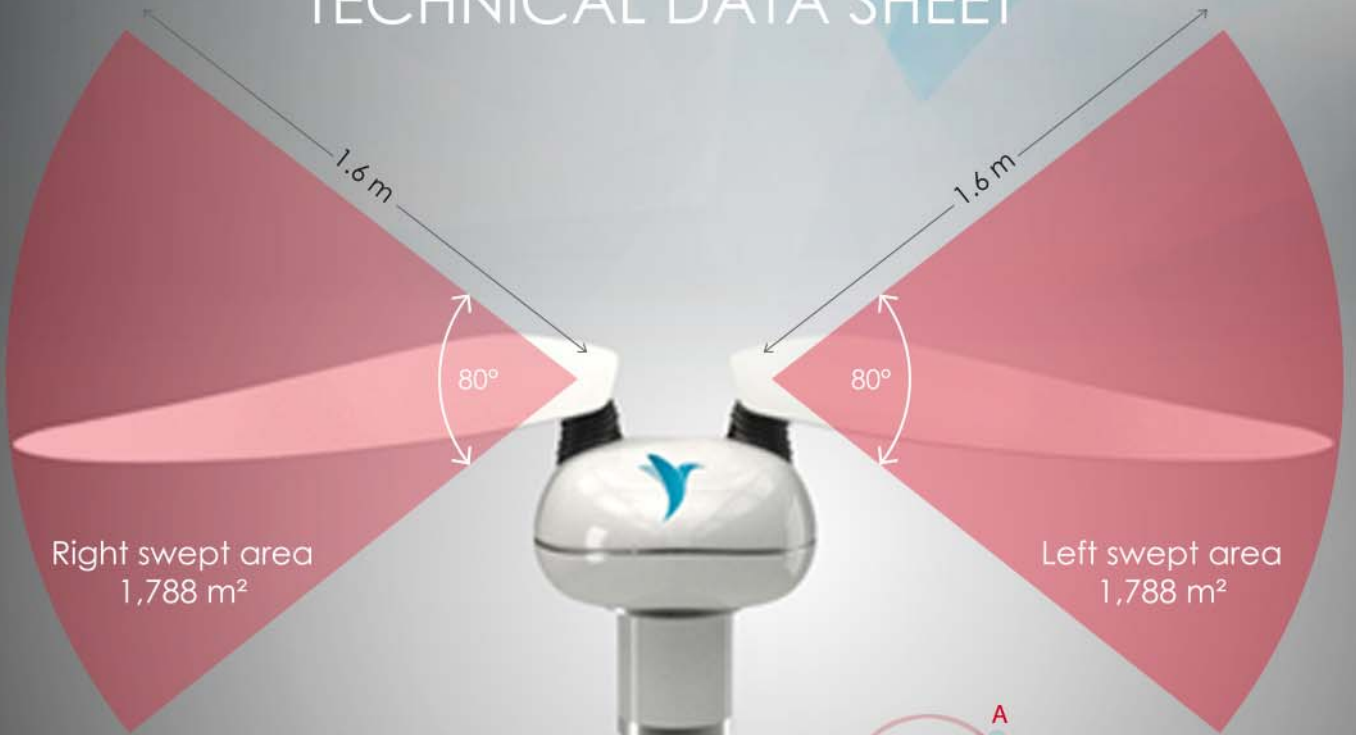


TECHNICAL DATA SHEET



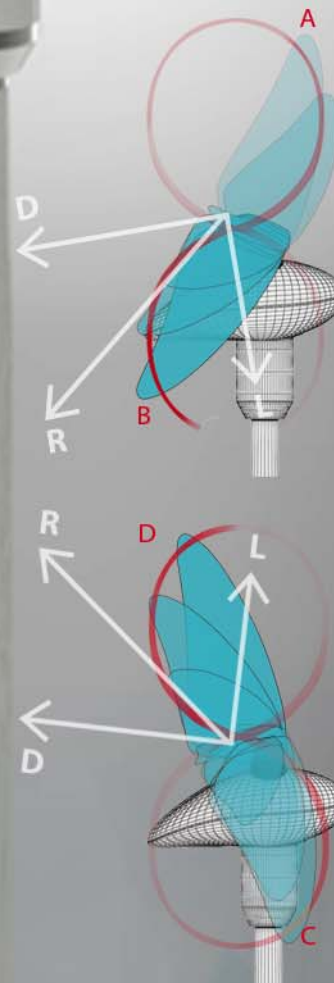
Machine TW 2 Himilce (pre-industrial version)

Rated Power Output	1 kW
Type	2 wings, vertical axis
Generator	permanent magnet
Swept Area (m ²)	3,56
Wing Length (m)	1,6
Wing Material	Carbon fiber - ABC composite*
Nacelle Dimensions (cm)	145x75x55
Upstroke/Downstroke cycle	+40° -40°
Nbr 3D Aouinian kinematics used	2

Operational Data

Rated Wind Speed	10 m/s (36 km/h)
Start-up Wind Speed	⁽¹⁾ 3.8 m/s (13,6 km/h)
RPM at Rated Power	450 RPM
Survival Wind Speed	*under test in real environment

⁽¹⁾ under improvement



During downstroke phase (A to B) & upstroke phase (C to D), the wing moves following 8 figure trajectory & converts the totality of the resultant R (Drag+Lift) thanks to the new 3D Aouinian Kinematics. The resultant R remains always tangent to the wing's trajectory.

During the 2 short phases (D to A) & (B to C), the aerodynamic resistance is quasi nil since the angle of attack (AoA) ≈ 0

D: Drag force L: Lift force R: Resultant