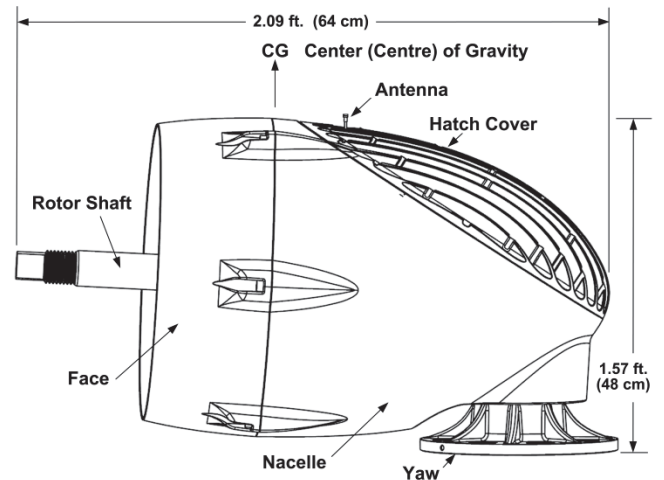


Skystream 3.7[®] Technical Specifications

Model	Skystream 3.7
Rated Power¹	2.1 kW at 11 m/s (24.6 mph)
Nominal Power	2.4 kW at 13 m/s (29 mph)
Weight	170 lbs. / 77 kg
Rotor Diameter	12 feet / 3.72 metres
Swept Area	115.7 ft ² / 10.87 m ²
Type	Downwind rotor with stall regulation control
Direction of Rotation	Clockwise looking upwind
Blades	3 Fiberglass reinforced composite
Rotor Speed	50 - 330 rpm
Shutdown Speed	370 rpm
Tip Speed	66 - 213 f/s / 9.7 - 63 m/s
Alternator	Slotless permanent magnet brushless
Yaw Control	Passive



North America - Grid Feeding	120 / 240 Volt, 60 Hz, 2 Phase (split single phase); 120 / 208 Volt, 60 Hz, 3 Phase
Europe - Grid Feeding	230 Volt, 50 Hz, 1 Phase
Braking System	Electronic stall regulation w/redundant relay switch control
Cut-in Wind Speed	3.0 m/s (6.7 mph)
User Monitoring	Wireless 2 way interface remote system
Survival Wind Speed	140 mph / 63 m/s
Total Harmonic Distortion	2.7% at 2400W, meets UL1741 and IEEE1547.1 requirements IEC/EN 61000-3-2; Class A EU Limits; IEC 61400-21
Maximum output fault current (ac) and duration	720 A, Instantaneous
Maximum output overcurrent protection	25 A, Fused
Normal operation temperature range	-40° C to +50° C (-40° F to +122° F)
Maximum (continuous) output power @ +25° C (+77° F)	2.3 kW
Maximum (continuous) output power @ +50° C (+122° F)	1.5 kW
Limits of accuracy of frequency measurement	+ 0.05 Hz
Limits of accuracy of Voltage measurement	+/-2.0 V L-N
Trip Time Accuracy	+/- 32 ms
Surge Rating	IEEE 1547 Surge Rating B European Requirement IEC 61000-4-5
Sound Pressure Level	46.4 dB at 60 m, 8 m/s

¹ Power performance testing by WINDTEST, Kaiser-Wilhelm-Koog, Germany; November 14, 2008 - March 22, 2009. With Combined Standard Uncertainty. Reference air density: 1.22 kg/ m³.

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North America

Voltage and Frequency Trip Points (North American)

Utility Interconnection VAC trip limits and times.	240 / 120 V Mode		208 / 120 V Mode	
	Magnitude	Max Time	Magnitude	Max Time
Overvoltage / Fast (120%)	288 / 144	0.16 sec	249.6 / 144	0.16 sec
Overvoltage / Slow (110%)	264 / 132	1 sec	228.8 / 132	1 sec
Undervoltage / Slow (88%)	211.2 / 105.6	2 sec	183 / 105.6	2 sec
Undervoltage / Fast (59%)	120 / 60	0.16 sec	104 / 60	0.16 sec
High	60.5 Hz	0.16 sec	60.5 Hz	0.16 sec
Low	59.3 Hz	0.16 sec	59.3 Hz	0.16 sec

Refer to production test result printout included with shipment.

Tower Data (Loads calculated at 145 mph - 65 m/s)

Note: Loads do not include safety factor. XZERES Wind recommends minimum safety factor of 1.5

Shaft Thrust	630 lbs (2802 N)
Downward	210 lbs (932 N)
Bending Moment	1130 lb-ft (1532 N·m)

Europe

Voltage and Frequency Trip Points

Condition	Configuration				
	UK	Italy	France	Germany	Units
Voltage Stop, minimum	207.0	184.0	194.0	184.0	Volts
Voltage Stop, maximum	264.0	276.0	266.0	264.5	Volts
Voltage Fast Stop, minimum	115.0	115.0	195.5	184.0	Volts
Voltage Fast Stop, maximum	276.0	277.0	264.5	276.0	Volts
Voltage Start, minimum	208.0	185.0	196.5	185.0	Volts
Voltage Start, maximum	263.0	275.0	263.5	252.0	Volts
Frequency Stop, minimum	47.0	49.3	49.5	47.5	Hz
Frequency Stop, maximum	50.5	50.3	50.5	50.2	Hz
Frequency Start, minimum	47.1	49.4	49.6	47.4	Hz
Frequency Start, maximum	50.4	50.2	50.4	50.1	Hz
Minimum Start Time after fault	180.0	180.0	180.0	180.0	Seconds

Tower Data (Loads calculated at 145 mph - 65 m/s)

Note: Loads do not include safety factor. XZERES Wind recommends minimum safety factor of 1.5

Shaft Thrust	630 lbs (2802 N)
Downward	210 lbs (932 N)
Bending Moment	1130 lb-ft (1532 N·m)