The EOX S-16

The S-16's extraordinary simple design - with very few moving parts and superior efficiency - results in high reliability and maximum return.

With no gearbox, your turbine will operate quietly, reliably and with minimal maintenance for its 30-year life.

The S-16 wind turbine has been recognized by the Solar Impulse Foundation as one of the top 1,000 solutions in the world that can protect the environment in a profitable way.

eocycle

	CHARACTERISTIC	SPECIFICATION
Main Data	Model	EOX S-16
	Design class	IEC Class IIIA wind turbine
	Design life	30 years without major component replacement
	Rated power	20 kW to 30 kW depending on version
	Rated wind speed	Average annual wind speed: 7.5 m/s (27 km/h) (17 mph)
	Cut-in | Cut-out wind speed	2.75 m/s (9.9 km/h) (6 mph) | 20 m/s (72 km/h) (45 mph)
	Extreme wind speed	52.5 m/s (189 km/h) (118 mph), 3-second average
	Operating temperature	-20 °C to 40 °C (-4 °F to 104 °F)
	Lightning protection	Lightning rod, surge protection devices, grounding system
	Certifications	IEC 61400-2, MCS, AWEA 9.1, UL1741, CE, CSA 22.2, G59/3
Rotor	Rotor diameter	15.8 m (51.8 ft)
	Swept area	196 m² (2112 ft²)
	Rotor speed	Variable, up to 53 rpm
Generator	Type	Transverse flux synchronous permanent magnet generator Eocycle-C5000
	Model	3-phase
	Generator	25 kW, 415 V, 42.4 Hz, 1.25 service factor
	Drivetrain	Direct drive (no gearbox)
	Generator enclosure and insulation	Totally enclosed, weather-proof, class F insulation, IP56, maintenance free
Power Converter	Type	Grid-tied / utility-interactive
	Converter output	3-phase, 380 V to 500 V, 50/60 Hz, 60A, Power Factor 0.99
Control System	Controller model	MitaTeknik WP130 MK II
	Advanced features	Data logging and direct integration with safety system
	SCADA/Monitoring system	MiScout, web and mobile application
	Control strategy	Maintenance free active stall-regulated
	Weather sensors	Wind speed, wind direction, temperature
Yaw System	Type	Active hydraulic slew drive
Materials	Steel components	High quality, as per ASTM standards
	Corrosion protection	Hot-dip galvanized or zinc-coated, as per ASTM standards
Braking System	Normal operation	Combination: 1) generator 2) stall blade design 3) yaw-assist
	Emergency rotor brake	Fail-safe hydraulic disk brake
Blade	Model	Eocycle
	Design	Fixed-pitch (no moving parts)
	Length	7.6 m (24.9 ft)
Tower	Hydraulic tower - hub height	16.8 m (55.1 ft) or 23.8 m (78.1 ft)
	Finish	White paint

AVERAGE WIND SPEED (M/S)	GROSS OUTPUT (MWH/YEAR)
4.0	41.140
4.5	55.910
5.0	70.920
5.5	85.460

AVERAGE WIND SPEED (M/S)	GROSS OUTPUT (MWH/YEAR)
6.0	99.000
6.5	111.200
7.0	121.860
7.5	130.870

Note: Measured and certified per IEC 61400-12 standard.