



## **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.



		ARIMPO	
	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	Туре	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	Туре	Grid-tied / utility-interactive	
Converter	Converter output	3-phase, 380 V to 500 V, 50/60 Hz, 60A, Power Factor 0.99	
	Controller model	MitaTeknik WP130 MK II	
	Advanced features	Data logging and direct integration with safety system	
Control 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	Туре	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)	
<b>T</b>	Hydraulic tower - hub height	16.8 m (55.1 ft) or 23.8 m (78.1 ft)	
Tower	Finish	White paint	

AVERAGE WIND SPEED (M/S)	GROSS OUTPUT (MWH/YEAR)	AVERAGE WIND SPEED (M/S)	GROSS OUTPUT (MWH/YEAR)
4.0	41.140	6.0	99.000
4.5	55.910	6.5	111.200
5.0	70.920	7.0	121.860
5.5	85.460	7.5	130.870

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