

E3120

Endurance

E Series

3120-3 50kW



secure additional revenue from proven technology

The durable design and reliable performance of the E3120 has made Endurance the recognized global brand behind one of the world's largest distributed wind fleets. We are proud to be a Canadian company growing a global renewables business and to be recognized as a leader in Canadian Clean Technology.

The E3120 is instantly recognizable for its sleek aesthetic design but is known for its proven performance in over 14 million operating hours. Powerful and efficient, the E3120 delivers the lowest cost of energy in its class providing attractive returns on investment. Its large rotor enables strong production in lower average annual wind speeds than competing machines thus delivering superior results.

Using high quality parts, seamlessly integrated into an elegant assembly, the E3120 provides a lifetime of quiet, reliable operation. The result of years of advanced engineering and technological refinement is a durable powerhouse that works as beautifully as it looks.

PERFORMANCE ADVANTAGES OF THE ENDURANCE E3120

- > PROVEN TECHNOLOGY;
OVER 600 WORLDWIDE
- > RELIABLE DOWNWIND
DESIGN OPTIMIZES
PRODUCTION
- > PROVIDES RELIABLE
REVENUE

Endurance[®]
wind power

E3120

Endurance[®]
wind power

E Series Specs

E3120-3 50kW

Turbine

Configuration	Three blade, horizontal axis, downwind
Rated Power (kW)	50kW at 10 m/s
Application	Direct Grid Tie
Rotor Speed (RPM)	42
IEC 61400-1 Turbine Class	IIIA except annual average wind speed can be up to 8.5 m/s
Maximum Average Wind Speed (m/s)	8.5
Survival Wind Speed (m/s / mph)	52.5 / 117
Cutout Wind Speed (m/s)	25
Overall Weight (kg / lbs)	4060 / 8950

Rotor

Rotor Diameter (m)	19.2
Swept Area (m ²)	290
Blade Length (m)	9
Blade Material	Fiberglass Composite
Power Regulation	Stall control

Generator

Generator Type	Asynchronous, Induction
Configuration	3-phase, 600 VAC, 60 Hz

Brake & Safety Systems

Main Brake System	Rapid Fail-Safe dual mechanical brakes
Secondary System	Spring-loaded pitch mechanism for over-speed regulation
Automatic Shutdown triggered by	High wind speed, grid failure, over-speed, all other fault conditions

Controls

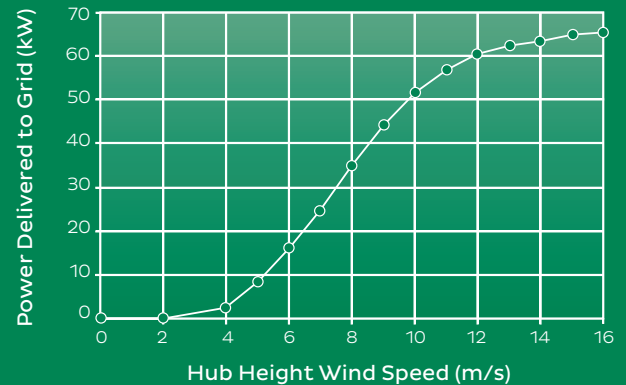
Control System User Interface	Programmable Logic Controller (PLC)
	ERIC™ Endurance Remote Interface Centre

Towers

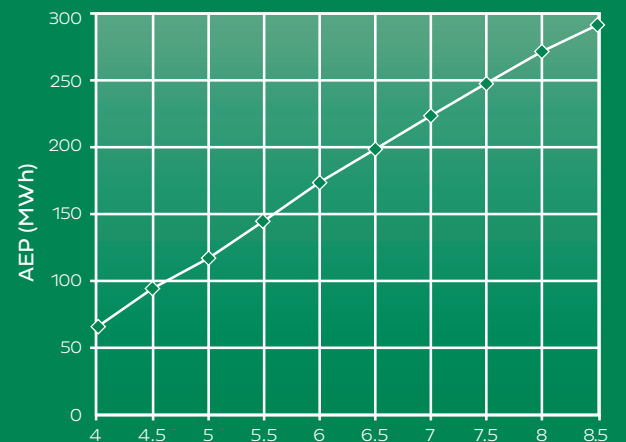
Available Hub Heights (m)	36.6 and 42.6
Tower Type	Free Standing Monopole, Safe climbing system

Warranty

Standard – 5 year parts and labour



Certified Power Performance Test per IEC 61400-12-1, assumes standard air density and no turbulence



Assumes standard Rayleigh wind speed distribution and 100% availability

Annual Average Hub Height Wind Speed (m/s)	Annual Energy Production (kWh)
4.0	64,000
4.5	90,500
5.0	117,000
5.5	144,900
6.0	172,800
6.5	199,200
7.0	225,600
7.5	249,100
8.0	272,600
8.5	292,500

DISCLAIMER: while statements made regarding the performance of Endurance products and comparisons to other manufacturers' equipment are based on the cited data and the information of Endurance at the time of publishing, such data, information, test conditions and other factors may change at any time without notice, and therefore Endurance does not represent or warrant that any such statements are necessarily accurate.
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