

wind turbines



XL.1



Raum 1.3



Proven 7

	XL.1	Whisper 200	1.3	e300i	Proven 7
Manufacturer	Bergey Windpower	Southwest Windpower	Raum	Kestrel	Proven Energy
Website	bergey.com	windenergy.com	raumenergy.com	kestrelwind.co.za	provenenergy.co.uk

Specs

Swept area (sq. ft.)*	53.0	63.5	73.0	76.0	103.6
Warranty (years)*	5	5	5	5	5
SWCC certification application	No	No	No	No	No

Predicted Annual Energy Output (kWh)*

8 mph	420	794	908	973	1,704
9 mph	610	1,121	1,110	1,315	2,438
10 mph	840	1,483	1,539	1,726	3,494
11 mph	1,110	1,865	2,004	2,131	4,417
12 mph	1,400	2,254	2,479	2,551	5,627
13 mph	1,710	2,637	2,940	2,966	6,614
14 mph	2,040	3,005	3,365	3,356	7,842

Survey of North American Wind Installers

Number of responses	5	0	0	0	2
Turbines installed by respondents	26	0	0	0	4
Manufacturer presales response	B+				C-
Product quality	B+				B
Completeness of order	A-				B
Ease of serviceability	A-				B
Post sales tech support	A-				C-
System reliability	B+				A-
Average overall grade	B+				B-

Would you sell or install this turbine to another customer?

Yes	Maybe	No	4-1-0			1-0-1
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Would you buy & install this turbine for yourself?

Yes	Maybe	No	3-0-2			2-0-0
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*Manufacturers' data from 2010

Whisper 200



56

e300i



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Xzeres 110





	Xzeres 110	Skystream 3.7	e400i	3.5	Whisper 500	Montana	R9000	
	Xzeres	Southwest Windpower	Kestrel	Raum	Southwest Windpower	Fortis	Evance	
	xzeres.com	windenergy.com	kestrelwind.co.za	raumenergy.com	windenergy.com	fortiswind.com	evancewind.com	
	110.0	113.0	135.0	135.0	176.0	211.0	246.0	
	10	5	5	5	5	5	5	
	No	Yes	Yes	No	No	No	Yes	
	1,629	914	2,010	2,021	1,474	3,459	3,500	
	2,274	1,373	2,781	3,213	2,139	4,438	5,030	
	3,039	1,925	3,807	4,380	2,907	5,443	6,670	
	3,894	2,594	5,050	5,811	3,749	6,444	9,012	
	4,801	3,216	5,996	7,447	4,637	7,410	10,590	
	5,728	3,898	7,230	8,631	5,544	8,315	12,530	
	6,643	4,575	8,285	10,272	6,445	9,132	14,500	
	8	5	0	0	1	0	1	
	13	30	0	0	1	0	1	
	B	B			B		A-	
	B-	B-			C		A-	
	B-	A			A		A	
	C+	C			C		B	
	C	C-			C		A-	
	C+	C			C		A	
	C+	B-			B-		A-	
	1-3-4	2-1-2			0-1-0		1-0-0	
	1-2-5	2-1-2			0-0-1		1-0-0	



wind turbines



Proven 11



S-343



Excel-S

	Proven 11	Scirocco	S-343	Excel-R	Excel-S
Manufacturer	Proven Energy	Eoltec	Endurance Windpower	Bergey Windpower	Bergey Windpower
URL	provenenergy.co.uk	eoltec.com	endurancewindpower.com	bergey.com	bergey.com

Specs

Swept area (sq. ft.)*	255.6	265.0	343.0	415.0	415.0
Warranty (years)*	5	5	5	10	10
SWCC certification application	No	No	Yes	No	Yes

Predicted Annual Energy Output (kWh)*

8 mph	2,773	3,496	5,249	3,600	5,000
9 mph	3,973	4,997	7,293	5,400	7,100
10 mph	5,752	6,746	9,498	7,500	9,600
11 mph	7,358	8,687	11,781	9,700	12,700
12 mph	9,526	10,751	14,065	12,100	15,900
13 mph	11,331	12,870	16,282	14,500	19,500
14 mph	13,606	14,983	18,375	16,800	23,300

Survey of North American Wind Installers

Number of responses	3	3	8	1	18
Turbines installed by respondents	4	6	40	3	110
Manufacturer presales response	C+	C+	B+	B	B+
Product quality	B	A	B+	B	A-
Completeness of order	B+	B+	B+	A	A-
Ease of serviceability	C	B	B	A	B+
Post sales tech support	D+	C	A-	A	B+
System reliability	C	B	B	B	B+
Average overall grade	C+	B	B+	A-	B+

Would you sell or install this turbine to another customer?

Yes	Maybe	No	1-0-2	1-0-2	7-0-1	1-0-0	17-1-0
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Would you buy & install this turbine for yourself?

Yes	Maybe	No	0-0-3	1-0-2	6-0-2	1-0-0	15-1-2
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*Manufacturers' data from 2010



Scirocco

58



Excel-R

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Alize



Xzeres 442SR



31-20



E-3120

	Alize	Xzeres 442SR	Proven 35	31-20	133-11	E-3120	Northwind 100	
	Fortis	Xzeres	Proven Energy	WTIC	Gaia-Wind	Endurance Windpower	Northern Power Systems	
	fortiswind.com	xzeres.com	provenenergy.co.uk	windturbine.net	gaia-wind.com	endurancewindpower.com	northernpower.com	
	426.0	442.0	684.5	754.0	1,425.0	3,120.0	3,725.0	
	5	10	5	5	5	5	2 (5 optional)	
	No	Yes	No	No	Yes	Not applicable	Not applicable	
	11,098	7,081	10,759	7,295	11,535	48,145	49,099	
	14,659	9,910	14,826	10,689	17,004	68,890	69,742	
	18,456	13,198	20,400	14,966	22,962	91,758	98,996	
	22,344	16,819	25,057	20,066	29,127	115,746	124,508	
	26,156	20,628	30,895	25,836	35,263	139,955	158,135	
	29,728	24,483	35,448	32,070	41,167	163,647	185,796	
	32,925	28,267	40,863	38,552	48,676	186,254	220,558	
	0	8	9	6	3	4	6	
	0	16	18	39	4	33	20	
		A-	B	B+	B+	B	A	
		C+	C	B	A	B-	A	
		C	C	A-	A	C+	A-	
		C+	D	C+	A	B	A-	
		B-	C	B-	A	B+	A-	
		C	C	B	A	C+	B+	
		C+	C	B	A	B-	A-	
		3-1-4	2-1-6	4-1-1	3-0-0	2-1-1	6-0-0	
		3-1-4	1-1-7	2-2-2	2-1-0	2-0-2	4-1-1	



Proven 35



133-11



Northwind 100