

Photon Magazine Yield Measurement July & August 2011

ZNSHINE SOLAR - award winning monocrystalline solar modules



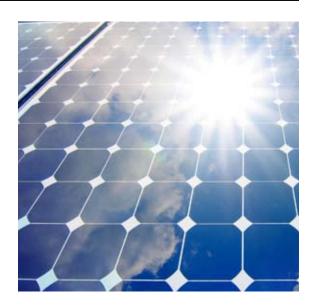
ZNSHINE SOLAR achieves top ranking in the **Photon yield measurement**

Two months in a row solar modules from ZNSHINE SOLAR achieved top results in the yield measurement of the German Photon magazine. In the July 2011 measurement¹ the ZX250-module with a power of 250 Watt (plus 3 %-tolerance) was ranked first out of all crystalline modules. And again, the result of the August 2011 measurement² puts ZNSHINE SOLAR's monocrystalline module on the first place!

With constant innovation and quality supervision in all processing steps ZNSHINE SOLAR ensures state-of-the-art and high quality products for an adequate price.

Buy award winning modules, buy ZNSHINE SOLAR!

- ¹ See September 2011-issue of the German Photon Profi magazine.
- $^{\rm 2}$ Results will be published in the October 2011-issue of the German Photon Profi.



Rank	Manufacturer	Module type	Cell type	Power	Yield [kWh/kW]		
			Cell type	[W]		August	Total
1	ZNSHINE PV-Tech Co. Ltd.	ZX250(48)MS	mono	252,3	117,9	127,9	245,8
1	Upsolar (Shanghai) Co. Ltd.	UP-M220P	poly	219,2	117,9	127,9	245,8
3	Sunerg Solar S.r.l.	XP 60/156-230	poly	226,0	117,2	127,7	245,0
4	REC ASA	Premium 210	poly	212,2	117,2	127,6	244,8
5	Ferrania Solis S.r.l.	AP 60-230	poly	228,8	117,3	127,0	244,3
6	BP Solar International Inc.	BP 3220 T	poly	232,5	114,4	128,9	243,4
7	Solon SE	SOLON Blue 230/07(225)	poly	226,9	116,5	126,6	243,1
8	REC ASA	REC230AE	poly	237,6	117,0	125,9	242,9
9	Kinmac Solar Corp.	KSS-6P6A-230	poly	234,1	116,1	126,2	242,3
10	Axitec GmbH	AC 236P/156-60S	poly	232,9	116,1	125,9	242,0
11	Nelumbo spol. s r.o.	NEI 230-3VA	poly	228,5	115,9	125,7	241,6
12	Solar Modules Nederland BV	TC245-MO	mono	246,7	115,5	125,8	241,3
12	ET Solar Industry Ltd.	ET-P660240	poly	236,1	116,1	125,2	241,3
14	KENMEC Mechanical Engineering Co. Ltd	TKSA-23001	poly	235,0	115,9	124,7	240,6
15	Shenzhen Topray Solar Co. Ltd.	TPS105T-180W	mono	184,8	114,3	126,1	240,4
	Siliken SL	SLK60P6L 230W	poly	229,7	116,7	123,4	240,1
17	Solarworld AG	Sunmodule Plus SW 225 poly	poly	228,6	114,8	125,2	240,0
17	Bisol d.o.o.	BMU-215-2/233	poly	234,2	115,1	124,8	240,0
19	REC ASA	REC230PE	poly	228,6	116,1	123,8	239,8
19	MAGI Solar Energy Technology CO. Ltd	MGSM-295-D	mono	294,0	115,4	124,4	239,8
21	Linsun Renewable Energy Corporation Ltd.	SK60P6	poly	228,3	113,0	126,3	239,2
22	Hareon Solar Technology Co. Ltd.	HR-230P-18/Bb	poly	230,6	112,5	126,7	239,2
23	Solaria Energía y Medio Ambiente S.L.	S6P2G225	poly	232,7	114,8	124,3	239,1
24	Risen Energy Co. Ltd.	SVP185S-M	mono	191,7	115,2	123,8	239,1
	Zhejiang Sunflower Light Energy Science & Tech.	SF125x125-72-M(180)	mono	176,6	114,3	124,6	238,9
26	Scheuten Solar Systems BV	Multisol P6-60	poly	238,1	114,2	124,6	238,8
27	Suntech Power Co. Ltd.	STP205-18/Ud	poly	213,8	114,1	124,4	238,5
28	Vikram Solar PVT. Ltd.	ELDORA 220	poly	233,3	112,2	126,2	238,4
29	CNPV Solar Power SA	CNPV-190M	mono	197,4	114,9	123,4	238,3
29	Jinko Solar Co. Ltd.	JKM190M-72	mono	191,1	111,4	126,9	238,3
31	Zentralsolar Deutschland GmbH	Genius SDM 185-10004-185	mono	190,6	114,6	123,6	238,2
32	Galaxy Energy GmbH	GS260m-96	mono	252,9	113,6	124,6	238,1
	Ningbo Solar Electric Power Co. Ltd.	Sun Earth TDB125x125-72-P 180W	mono	179,2	113,9	124,2	238,1
	CEEG (Shanghai) Solar Science & Technology	SST 240-60M	mono	239,0	114,0	123,9	238,0



				Power Yield [kWh/kW]			
Rank	Manufacturer	Module type	Cell type	[W]		August	
				[,	2317		
35	SWAT International	SWAT-240-PS	poly	245,1	113,7	124,2	237,9
36	Bosch Solar Energy AG	Bosch c-Si M 60 230	mono	233,2	114,0	123,7	237,8
37	BP Solar International Inc.	BP 3280 T	poly	287,4	113,7	124,1	237,8
38	Evergreen Solar Inc.	ES-E-210-fc3	ribbon	211,2	113,8	123,9	237,7
39	Sunage S.A.	SAM 96/5	mono	256,6	114,0	123,7	237,7
40	IBC Solar AG	IBC MonoSol 240 TT	mono	246,0	113,7	123,7	237,4
	Evergreen Solar Inc.	ES-A-210-fa2	ribbon	210,0	113,6	123,8	237,4
	MAGI Solar Energy Technology CO. Ltd	MGSM-240D-60	mono	246,1	114,0	123,3	237,4
	Mage Solar	230/6PH-US	poly	231,8	111,8	125,5	237,4
	CNPV Solar Power SA	CNPV-240P	poly	224,2	111,6	125,6	237,2
	Shanghai Topsolar Green Energy Co. Ltd.	TSM72-125M-190W	mono	185,9	111,8	125,4	237,2
	Solarwatt AG	M220-60 GET AK (230)	mono	231,5	113,7	123,3	237,0
	CEEG (Shanghai) Solar Science & Technology	SST 265-72P	poly	281,0	113,3	123,7	237,0
	Linuo Group Co. Ltd	LN240(30)P-225	mono	191,8	111,1	125,5	236,6
	Changzhou Eging Photovoltaic Technology Co. Ltd.	EGM-185	mono	188,4	113,1	123,4	236,5
	Luxor Solar GmbH	LX-185M/125-72+	mono	188,4	113,3	123,2	236,5
	CH Solar GmbH & Co. KG	CH Solar 180 mono	mono	184,4	114,3	121,8	236,1
	PV Power Technologies Pvt Ltd.	PVQ 3220	poly	223,6	115,0	121,1	236,0
	Sunlink PV Co. Ltd.	SL220-20M230	mono	237,9	111,5	124,3	235,8
	CSG PVTech Co. Ltd.	CSG180S1-36	mono	184,1	114,2	121,6	235,8
	Ningbo Solar Electric Power Co. Ltd.	Sun Earth TDB125x125-72-P 160W	mono	161,6	112,9	122,7	235,7
	CNPV Solar Power SA Upsolar (Shanghai) Co. Ltd.	CNPV-220P UP-M180M	poly	243,1 189,2	110,5 113,4	125,1 122,2	235,6 235,6
	Zytech Engineering Technology Co. Ltd.	ZT 230P	mono	230,8	112,5	122,2	235,5
	Solarworld AG	Sunmodule Plus SW 225 mono	poly mono	233,4	114,5	123,0	
	CNPV Solar Power SA	CNPV-185M	mono	193,8	114,3	120,9	235,3
	Win Win Precision Technology Co. Ltd.	Winaico WSP-235P6	poly	240,1	114,1	121,2	235,2
	Lilie Energie GmbH	Lilie SPL 185	mono	185,3	112,0	122,8	234,8
	Calrays GmbH	CPM 250-A-96	mono	244,0	112,7	122,1	234,8
	Linuo Group Co. Ltd	LN180(36)M-185	poly	236,5	111,0	123,7	234,7
	Jinko Solar Co. Ltd.	JKM255M-96	mono	259,7	110,7	123,8	234,5
	Kioto Photovoltaics GmbH	KPV PE 210 Q6LTT	poly	206,6	114,1	120,5	234,5
	Baoding Tianwei Yingli New Energy Resources	YL210P-29b	poly	214,3	111,8	122,4	234,2
	Lilie Energie GmbH	Lilie SPL 185-I	mono	187,1	111,9	122,2	234,2
	CSG PVTech Co. Ltd.	CSG230M2-30	poly	228,3	113,3	120,4	233,7
	Bisol d.o.o.	BMU-215-2/221	poly	229,1	113,8	119,7	233,5
71	Hanwha SolarOne Co. Ltd.	SF160-24-1M180	mono	178,6	111,4	121,6	233,0
	Trina Solar Energy Co. Ltd.	TSM-180DC01	mono	176,2	112,9	120,1	233,0
	S-Energy Co. Ltd.	SM-220PA8	poly	224,4	113,2	119,7	233,0
74	Win Win Precision Technology Co. Ltd.	Winaico WSP-230P6	poly	234,4	113,2	119,3	232,6
	CNPV Solar Power SA	CNPV-240M	mono		109,2		
76	Trina Solar Energy Co. Ltd.	TSM-225PC05	poly	233,0	112,8	119,6	232,3
77	Upsolar (Shanghai) Co. Ltd.	UP-M185M	mono		111,8		
	Hanwha SolarOne Co. Ltd.	SF160-24-1M175	mono		112,6	119,5	
	Day4 Energy Inc.	Day4 48MC 185	poly	186,5	111,1	120,9	
	Conergy AG	Conergy PowerPlus 220P	poly	224,2	112,5	119,5	
	Aleo Solar AG	aleo S_18 225	poly	230,5	112,4	119,5	231,9
	Sunpeak-Vertrieb Unternehmensgruppe Ratio-Data	ALP235W	mono	233,0	112,8	118,9	231,7
	Schott Solar GmbH	SCHOTT POLY TM 220	poly	224,7	110,9	120,5	
	Sovello AG	SV-X-205-fa1	poly	206,1	111,0	120,3	231,3
	Solar-Fabrik AG	Premium L poly (225) Typenschild SF 200-225	poly	223,6	110,3	121,1	231,3
	Frankfurt Solar GmbH	FS215W-POLY	poly	221,3	112,3	118,8	231,2
	Sharp Corp.	NU-185E1	mono	186,1	110,4	120,0	230,4
	Sonalis GmbH	SL-180CE-36M	mono	185,1	111,5	118,3	229,9
	Sunrise Solartech Co. Ltd.	SRM-180DGE	mono	181,5	111,8	117,8	229,7
	Suntech Power Co. Ltd.	STP190-18/Ub	poly	182,9	109,9	119,5	229,4
	Perfectenergy (Shanghai) Co. Ltd.	PEM-180/185-72M-SCC	mono	191,3	110,4	118,0	228,4
	Emmvee Photovoltaics GmbH	ES-230P60	poly	234,0	110,6	117,6	228,2
	Shell Solar GmbH (jetzt bei Solarworld)	Shell SQ 150-C	mono	155,8	110,9	117,2	228,0
	Solarworld AG	Sunmodule Plus SW 210 poly	poly	212,2	110,3	117,4	227,7
	Jiangyin Jetion Science & Technology Co. Ltd.	JT230(30)P1655x992	mono	102,5	114,4	112,2	226,7
	Alex Solar	ALM-190D-24	mono	187,8	106,5	120,1	226,6
	Sovello AG	Pure Power SV-X-200 (LV)	ribbon	205,0	108,8	115,9	224,7
	Photowatt International SAS	PW 1650-175W	poly	171,4	109,2	115,4	224,7
	Evergreen Solar Inc.	EC-120	ribbon	121,0	108,8	115,0	223,9
100	Canadian Solar Inc.	CS6A-170P	poly	174,4	107,3	113,5	220,8



The Photon yield measurement

Manufactureres measure their power-indications under standard testing conditions which only exist in the laboratories. For the user of solar modules these indications are very im-

portant. Sometimes hoton you know the power, sometimes also the

efficiency or further technical details of the module. In the end, all that counts is the question how much kWh you'll get for your kW. And this is what Photon figures out with the yield measurement, month by month under real conditions on the open field.



About ZNSHINE SOLAR

ZNSHINE SOLAR was founded in 2006 as a member of the ZNSHINE group in Jintan, Jiangsu Province.

ZNSHINE SOLAR is a vertically integrated manufacturer of mono- and polycrystalline solar modules. From the raw silicon to the completed solar module, the whole manufacturing process is done in-house at ZNSHINE SOLAR and reaches an annual capacity of 500 MW. Due to the vertical integration we can ensure a high quality product. All modules are tested by independent institutions like TÜV Rheinland, TÜV Süd and other international certificationagencies.

Furthermore, a strong international research and development team is constantly working on new techniques to improve both the efficiency and the reliability of the solar modules to offer state-of-theart technology.

ZNSHINE SOLAR has several reference projects in China and Europe, where ZNSHINE SOLAR is also bankable. ZNSHINE SOLAR is covered by international insurance angencies, which support manufacturer-insurance as well as product-insurance.