

PHOTON Lab's outdoor module tests: Results for June 2011

Manufacturer	Model	Cell type	Origin	STC power in W	Yield in kWh/kW		Deviation from test winner (%)	Installed in
					June	January - June		
REC	REC230AE*1	Multi	Sweden	228.6	135.7	621.4	0.0	2010
Siliken	SLK60P6L 230Wp	Multi	Spain	229.7	135.2	617.3	0.7	2009
NexPower	NT-125AX *1	µc-Si / a-Si	Taiwan	125.4	140.5	617.3	0.7	2010
CH Solar	CH Solar 180 mono*1	Mono	China	184.4	132.9	610.0	1.8	2010
CNPV Solar	CNPV-185M	Mono	China	193.8	133.1	609.3	1.9	2010
CSG PV Tech	CSG180S1-35/36*3	Mono	China	184.1	132.8	608.9	2.0	2010
Win Win Precision	Winaico WSP-235P6	Multi	Taiwan	240.1	132.2	607.6	2.2	2010
SolarWorld	Sunmodule Plus SW 225 mono	Mono	USA	233.4	132.3	606.3	2.4	2010
Bisol	BMU-215-2/221	Multi	Slovenia	229.1	131.4	605.4	2.6	2010
CSG PV Tech	CSG230M2-30*4	Multi	China	228.3	131.4	604.0	2.8	2010
Upsolar	UP-M180M	Mono	China	181.5	131.7	602.1	3.1	2010
S-Energy	SM-220PA8	Multi	South Korea	224.4	131.4	602.0	3.1	2009
Trina Solar	TSM-180DC01	Mono	China	176.2	131.2	601.6	3.2	2009
Trina Solar	TSM-225PC05	Multi	China	233.0	130.9	601.1	3.3	2010
Conergy	Conergy PowerPlus 220P	Multi	Germany	224.2	130.5	601.0	3.3	2010
PV Power Technologies	PVQ3 220	Multi	India	223.6	133.2	600.5	3.4	2009
Aleo Solar	aleo S_18 225	Multi	Germany, Spain	230.5	130.4	600.0	3.4	2010
Kioto Photovoltaics	KPV 210 PE*1	Multi	Austria	206.6	132.0	599.8	3.5	2009
Win Win Precision	Winaico WSP-230P6	Multi	Taiwan	234.4	131.2	599.3	3.6	2009
Solarfun (now Hanwha SolarOne)	SF160-24-1M175 (scac)	Mono	China	183.0	131.4	598.4	3.7	2010
Sunpeak-Vertrieb	ALP235W*1	Mono	India	233.0	130.5	597.6	3.8	2010
Mage Solar	Mage Powertec Plus 225/6PJ	Multi	China	232.0	130.1	596.7	4.0	2009
Frankfurt Solar	FS215W-POLY	Multi	China	221.3	130.3	595.9	4.1	2009
Sonalis*2	SL-180CE-36M	Mono	China	185.1	129.4	592.6	4.6	2010
Shell Solar (now SolarWorld)	Shell SQ 150-C*1	Mono	Portugal	155.8	128.8	590.1	5.0	2006
Emmvee Photovoltaics	ES-230P60*6	Multi	India	234.0	128.7	590.1	5.0	2010
Sunrise Solartech	SRM 180D72-GE	Mono	China	181.5	129.8	589.8	5.1	2009
Perfectenergy	PEM-180/185-72M-SCC	Mono	China	191.3	128.6	589.2	5.2	2010
Shell Solar (now SolarWorld)	Shell PowerMax Eclipse 80-C*1	CIS	USA	90.8	127.8	586.7	5.6	2007
Sovello	Pure Power SV-X-200 (LV)	Ribbon	Germany	205.0	126.9	586.0	5.7	2011
Evergreen	EC-120*1	Ribbon	USA	121.0	126.3	585.0	5.9	2006
First Solar	FS-265	CdTe	USA	65.4	130.0	584.9	5.9	2007
Photowatt	PW 1650-175W	Multi	France	171.4	127.2	583.6	6.1	2006
SolarWorld	Sunmodule Plus SW 210 poly*5	Multi	Germany	212.2	122.0	581.5	6.4	2006
Solar-Fabrik	SF 130/4-130*1	Mono	Germany	130.7	124.6	568.0	8.6	2010
Canadian Solar	CS6A-170P	Multi	China	174.4	124.4	567.2	8.7	2007
Isototon	I-110/24*1	Mono	Spain	102.5	123.6	565.5	9.0	2006
Solarfun (now Hanwha SolarOne)	SF160 M5-24 (175 W)*1	Mono	China	174.6	123.2	563.9	9.3	2007
Isototon	IS-170/24*1	Mono	Spain	172.8	123.9	562.8	9.4	2009
Kyocera	KC170GT-2*1	Multi	Japan	178.4	122.1	560.7	9.8	2006
Evergreen	ES-180-RL*1	Ribbon	Germany	185.4	119.1	553.4	10.9	2007
Schott Solar	ASE-300-DG-FT (300 W)*1	Ribbon	USA	308.1	120.2	551.4	11.3	2007
Solar-Fabrik	SF 145A*1	Ribbon	Germany	145.8	120.8	551.1	11.3	2005
Sunways	MHH plus 190 (190 Wp)*1	Multi	Germany	199.5	120.5	549.3	11.6	2005
BP Solar	BP 7185 S*1	Mono	Spain, India	185.1	119.0	548.0	11.8	2005
Sharp	NT-R5E3E*1	Mono	Japan	187.9	116.9	534.9	13.9	2005

The following modules were installed after January 2011 (sorted alphabetically)

Axitec	AC-236P/156-60S	Multi	Germany	232.9	138.5	-	-	2/2011
Yingli	YL210P-29b	Multi	China	214.3	133.7	-	-	2/2011
Bisol	BMU-215-2/233	Multi	Slovenia	234.2	137.4	-	-	2/2011
Bosch Solar	Bosch c-Si M 60 230	Mono	Germany	233.2	135.7	-	-	2/2011
BP Solar	BP 3280 T	Multi	-	287.4	137.0	-	-	5/2011
CEEG	SST 240-60M	Mono	China	239.0	135.9	-	-	2/2011
CEEG	SST 265-72P	Multi	China	281.0	135.2	-	-	2/2011
Changzhou Eging	EGM-185	Mono	China	188.4	135.8	-	-	2/2011
Day4 Energy	Day4 48MC 185	Multi	Canada	186.5	132.9	-	-	2/2011
Evergreen	ES-A-210-fa2	Ribbon	USA	210.0	136.1	-	-	3/2011
Evergreen	ES-E-210-fc3	Ribbon	USA	211.2	137.1	-	-	2/2011
Galaxy Energy	GS260m-96	Mono	Germany	252.9	135.9	-	-	2/2011