

California Energy Commission						
List of Approved Photovoltaic Modules for the Solar or Wind Energy System Credit						
2004 Tax Year						
Note: The presence or absence of any particular component or system from this list should not be construed as a statement of the quality or applicability of such hardware for any particular use.						
CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV003	ASE Americas, Inc.	ASE-100-ATF/17-34	100W/17V EFG Module, framed	89.7	11/23/1999	current
PV004	ASE Americas, Inc.	ASE-300-DGF/17-285	285W/17V EFG Module, framed	255.4	11/23/1999	current
PV005	ASE Americas, Inc.	ASE-300-DGF/17-300	300W/17V EFG Module, framed	269.1	11/23/1999	current
PV006	ASE Americas, Inc.	ASE-300-DGF/17-315	315W/17V EFG Module, framed	283.0	11/23/1999	current
PV006a	ASE Americas, Inc.	ASE-300-DGF/25-145	145W/25V EFG Module, framed	128.5	3/25/2003	current
PV006b	ASE Americas, Inc.	ASE-300-DGF/34-195	195W/34V EFG Module, framed	173.5	3/25/2003	current
PV006c	ASE Americas, Inc.	ASE-300-DGF/42-240	240W/42V EFG Module, framed	214.0	3/25/2003	current
PV007	ASE Americas, Inc.	ASE-300-DGF/50-260	260W/50V EFG Module, framed	232.6	11/23/1999	current
PV007aa	ASE Americas, Inc.	ASE-300-DGF/50-265	265W/50V EFG Module, framed	237.0	3/25/2003	current
PV007a	ASE Americas, Inc.	ASE-300-DGF/50-285	285W/50V EFG Module, framed	255.4	1/15/2002	current
PV008	ASE Americas, Inc.	ASE-300-DGF/50-300	300W/50V EFG Module, framed	269.1	11/23/1999	current
PV008a	ASE Americas, Inc.	ASE-300-DGF/50-315	315W/50V EFG Module, framed	282.8	3/25/2003	current
PV009	AstroPower, Inc.	AP-100	100W Single Crystal Module (was AP-1006)	88.9	12/21/2000	current
PV010	AstroPower, Inc.	AP-1006	100W Single Crystal Module	88.9	12/21/2000	current
PV011	AstroPower, Inc.	AP-110	110W Single Crystal Module (was AP-1106)	97.9	12/21/2000	current
PV012	AstroPower, Inc.	AP-1106	110W Single Crystal Module	97.9	11/23/1999	current
PV013	AstroPower, Inc.	AP-120	120W Single Crystal Module (was AP-1206)	107.0	12/21/2000	current
PV015	AstroPower, Inc.	AP-1206	120W Single Crystal Module	107.0	11/23/1999	current
PV015a	Astropower	AP-50-GA	50W Single Crystal Module x	44.0	7/8/2003	current
PV015b	Astropower	AP-50-GT	50W Single Crystal Module	44.0	1/31/2003	current
PV015c	Astropower	AP-55-GA	55W Single Crystal Module x	48.5	7/8/2003	current
PV015d	Astropower	AP-55-GT	55W Single Crystal Module	48.5	1/31/2003	current
PV016	AstroPower, Inc.	AP-6105	65W Single Crystal Module	58.8	11/23/1999	current
PV017	AstroPower, Inc.	AP-65	65W Single Crystal Module (was AP-6105)	58.8	12/21/2000	current
PV018	AstroPower, Inc.	AP-7105	75W Single Crystal Module	68.0	11/23/1999	current
PV019	AstroPower, Inc.	AP-75	75W Single Crystal Module (was AP-7105)	68.0	12/21/2000	current
PV019a	Astropower	APx-130	130W Apex Silicon Film Module	112.0	1/31/2003	current

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PV019b	Astropower	APx-140	140W Apex Silicon Film Module	121.0	1/31/2003	current
PV019c	Astropower	APx-45	45W Apex Module	38.8	9/28/2003	current
PV019d	Astropower	APx-50	50W Apex Module	43.2	9/28/2003	current
PV019e	Astropower	APx-65	65W Apex Module	56.0	9/28/2003	current
PV020a	AstroPower, Inc.	APX-75	75W APex Module (old)	64.8	9/28/2003	current
PV021	AstroPower, Inc.	APX-80	80W APex Module	69.2	11/23/1999	current
PV022	AstroPower, Inc.	APX-90	90W APex Module	77.8	11/23/1999	current
PV022a	Astropower	AP6-160	160W Single Crystal Module	141.1	7/8/2003	current
PV022b	Astropower	AP6-170	170W Single Crystal Module	150.1	7/8/2003	current
PV022ba	AstroPower, Inc.	APi-030-MNA	30W Single Crystal Module w/o connectors (was AP-30)	26.5	1/23/2004	current
PV022bb	AstroPower, Inc.	APi-030-MNB	30W Single Crystal Module w/o connectors (was AP-30) B	26.5	1/23/2004	current
PV022bc	AstroPower, Inc.	APi-045-MNA	45W Single Crystal Module w/o connectors (was AP-45)	39.7	1/23/2004	current
PV022bd	AstroPower, Inc.	APi-045-MNB	45W Single Crystal Module w/o connectors (was AP-45) B	39.7	1/23/2004	current
PV022be	AstroPower, Inc.	APi-050-MNA	50W Single Crystal Module w/o connectors (was AP-50)	44.2	1/23/2004	current
PV022bf	AstroPower, Inc.	APi-050-MNB	50W Single Crystal Module w/o connectors (was AP-50) B	44.2	1/23/2004	current
PV022bg	AstroPower, Inc.	APi-055-GCA	55W Single Crystal Module w/MC connectors (was AP-55-GT)	48.9	1/23/2004	current
PV022bh	AstroPower, Inc.	APi-055-GCB	55W Single Crystal Module w/MC connectors (was AP-55-GA)	48.9	1/23/2004	current
PV022bi	AstroPower, Inc.	APi-065-MNA	65W Single Crystal Module w/o connectors (was AP-65)	57.7	1/23/2004	current
PV022bj	AstroPower, Inc.	APi-065-MNB	65W Single Crystal Module w/o connectors (was AP-65) B	57.7	1/23/2004	current
PV022bk	AstroPower, Inc.	APi-070-MNA	70W Single Crystal Module w/o connectors (was AP-70)	62.2	1/23/2004	current
PV022bl	AstroPower, Inc.	APi-070-MNB	70W Single Crystl Module w/o connectors (was AP-70) B	62.2	1/23/2004	current
PV022bm	AstroPower, Inc.	APi-100-MCA	100W Single Crystal Module w/MC connectors (was AP-100)	88.7	1/23/2004	current
PV022bn	AstroPower, Inc.	APi-100-MCB	100W Single Crystal Module w/MC connectors (was AP-100) B	88.7	1/23/2004	current

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PV022bo	AstroPower, Inc.	APi-100-MNA	100W Single Crystal Module w/o connectors (was AP-100)	88.7	1/23/2004	current
PV022bp	AstroPower, Inc.	APi-100-MNB	100 W Single Crystal Module w/o connectors (was AP-100) B	88.7	1/23/2004	current
PV022bq	AstroPower, Inc.	APi-110--MNB	110W Single Cyrstal Module w/o connectors (was AP-110) B	97.8	1/23/2004	current
PV022br	AstroPower, Inc.	APi-110-MCA	110W Single Cyrstal Module w/MC connectors (was AP-110)	97.8	1/23/2004	current
PV022bs	AstroPower, Inc.	APi-110-MCB	110W Single Cyrstal Module w/MC connectors (was AP-110) B	97.8	1/23/2004	current
PV022bt	AstroPower, Inc.	APi-110-MNA	110W Single Crystal Module w/o connectors (was AP-110)	97.8	1/23/2004	current
PV022bu	AstroPower, Inc.	APi-165-MCA	165W Single Cyrstal module w/MC Connectors (was AP-165)	146.7	1/23/2004	current
PV022bv	AstroPower, Inc.	APi-165-MCB	165W Single Crystal Module w/MC Connectors (was AP-165) B	146.7	1/23/2004	current
PV022bw	AstroPower, Inc.	APi-173-MCA	173W Single Crystal Module w/MC Connectors (was AP-173)	154	1/23/2004	current
PV022bx	AstroPower, Inc.	APi-173-MCB	173W Single Crystal Module w/MC Connectors (was AP-173) B	154	1/23/2004	current
PV022by	AstroPower, Inc.	APx-045-MNA	45W Apex Module w/o connectors (was APx-45)	38.6	1/23/2004	current
PV022bz	AstroPower, Inc.	APx-045-MNB	45W Apex Module w/o connectors (was APx-45) B	38.6	1/23/2004	current
PV022bza	AstroPower, Inc.	APx-050-MNA	50W Apex Module w/o connectors (was APx-50)	42.9	1/23/2004	current
PV022bzb	AstroPower, Inc.	APx-065-MNA	65W Apex Module w/o connectors (was APx-65)	55.7	1/23/2004	current
PV022bzc	AstroPower, Inc.	APx-065-MNB	65W Apex Module w/o connectors (was APx-65) B	55.7	1/23/2004	current
PV022bzd	AstroPower, Inc.	APx-070-MNA	70W Apex Module w/o connectos (was APx-70)	60.1	1/23/2004	current
PV022bze	AstroPower, Inc.	APx-070-MNB	70W Apex Module w/o connectos (was APx-70) B	60.1	1/23/2004	current
PV022bzf	AstroPower, Inc.	APx-075-MNA	75W Apex Module w/o connectors (was APx-75)	64.4	1/23/2004	current
PV022bzg	AstroPower, Inc.	APx-075-MNB	75W Apex Module w/o connectors (was APx-75) B	64.4	1/23/2004	current
PV022bzh	AstroPower, Inc.	APx-130-MCA	130W Apex Silicon Film module w/MC connectors (was APx-130)	111.6	1/23/2004	current

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PV022bzi	AstroPower, Inc.	APx-130-MCB	130W Apex Silicon Film module w/MC connectors (was APx-130) B	111.6	1/23/2004	current
PV022bj	AstroPower, Inc.	APx-130-MNA	130W Apex Silicon Film module w/o connectors (was APx-130)	111.6	1/23/2004	current
PV022bzk	AstroPower, Inc.	APx-130-MNB	130W Apex Silicon Film module w/o connectors (was APx-130) B	111.6	1/23/2004	current
PV022bzl	AstroPower, Inc.	APx-140-MCA	140W Apex Silicon Film module w/MC connectors (was APx-140)	120.4	1/23/2004	current
PV022bzm	AstroPower, Inc.	APx-140-MCB	140W Apex Silicon Film module w/MC connectors (was APx-140) B	120.4	1/23/2004	current
PV022bzn	AstroPower, Inc.	APx-140-MNA	140W Apex Silicon Film module w/o connectors (was APx-140)	120.4	1/23/2004	current
PV022bzo	AstroPower, Inc.	APx-140-MNB	140W Apex Silicon Film module w/o connectors (was APx-140)B	120.4	1/23/2004	current
PV022bzp	AstroPower, Inc.	APx050-MNB	50W Apex Module w/o connectors (was APx-50) B	42.9	1/23/2004	current
PV023	AstroPower, Inc.	LAP-425	425W Single Crystal Large Area Panel, frameless	378.0	12/21/2000	current
PV024	AstroPower, Inc.	LAP-440	440W Single Crystal Large Area Panel, frameless	391.8	11/23/1999	current
PV025	AstroPower, Inc.	LAP-460	460W Single Crystal Large Area Panel, frameless	409.9	11/23/1999	current
PV026	AstroPower, Inc.	LAP-480	480W Single Crystal Large Area Panel, frameless	428.2	11/23/1999	current
PV027	AstroPower, Inc.	LAPX-300	300W APex Large Area Panel, frameless	259.2	11/23/1999	current
PV028	Atlantis Energy, Inc.	AP-F	11.8W Shingle Module (Astropower cells)	10.7	11/23/1999	current
PV029	Atlantis Energy, Inc.	AP-G	12.0W Shingle Module (Astropower cells)	10.8	11/23/1999	current
PV030	Atlantis Energy, Inc.	AP-H	12.2W Shingle Module (Astropower cells)	11.0	11/23/1999	current
PV031	Atlantis Energy, Inc.	SM-II	12.2W Shingle Module (Siemens cells)	11.0	11/23/1999	current
PV031a	Atlantis Energy, Inc.	SP-A	13.3W Shingle Module (Sharp cells)	11.4	6/24/2002	current
PV031b	Atlantis Energy, Inc.	SP-B	12.7W Shingle Module (Sharp cells)	10.9	6/24/2002	current
PV031c	Atlantis Energy, Inc.	SP-C	11.9W Shingle Module (Sharp cells)	10.2	6/24/2002	current
PV032	Atlantis Energy, Inc.	SX-D	11.6W Shingle Module (Solarex cells)	10.5	11/23/1999	current
PV033	Atlantis Energy, Inc.	SX-E	11.0W Shingle Module (Solarex cells)	9.9	11/23/1999	current

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PV033a	Baoding Yingli New Energy Resources Co. Ltd.	110(17)P1447X663	110W Crystalline Silicon Solar Cells	96.6	8/30/2004	current
PV033b	Baoding Yingli New Energy Resources Co. Ltd.	120(17)P1447X663	120W Crystalline Silicon Solar Cells	105.6	8/30/2004	current
PV033c	Baoding Yingli New Energy Resources Co. Ltd.	30(17)P754X350	30W Crystalline Silicon Solar Cells	26.3	8/30/2004	current
PV033d	Baoding Yingli New Energy Resources Co. Ltd.	40(17)P516X663	40W Crystalline Silicon Solar Cells	35.1	8/30/2004	current
PV033e	Baoding Yingli New Energy Resources Co. Ltd.	50(17)P974X453	50W Crystalline Silicon Solar Cells	43.9	8/30/2004	current
PV033f	Baoding Yingli New Energy Resources Co. Ltd.	75(17)P1172X541	75W Crystalline Silicon Solar Cells	65.9	8/30/2004	current
PV033g	Baoding Yingli New Energy Resources Co. Ltd.	85(17)P1172X541	85W Crystalline Silicon Solar Cells	74.9	8/30/2004	current
PV034a	BP Solar	BP SM3 150S	150W 24V Single Crystal Module, New AR, Multicontact conn. (now BP4150S)	132.6	1/7/2003	current
PV035a	BP Solar	BP SM3 160S	160W 24V Single Crystal Module, New AR, Multicontact conn. (now BP4160S)	141.7	1/7/2003	current
PV036	BP Solar	BP SX 140S	140W 24V Polycrystalline Module w/Multicontact conn.	122.1	8/6/2001	current
PV037	BP Solar	BP SX 150S	150W 24V Polycrystalline Module w/Multicontact conn.	131.1	8/6/2001	current
PV038a	BP Solar	BP SX3 150S	150W 24V Polycrystalline Module, New AR, Multicontact conn. (now BP3150S)	133.0	1/7/2003	current
PV039a	BP Solar	BP SX3 160B	160W 24V Polycrystalline Module, New AR, Multicontact, Bronze frame	142.1	1/7/2003	current
PV040a	BP Solar	BP SX3 160S	160W 24V Polycrystalline Module, New AR, Multicontact conn.	142.1	1/7/2003	current
PV041	BP Solar	BP2140S	140W 24V Single Crystal Module w/Multicontact conn.	122.1	5/11/2001	current
PV042	BP Solar	BP2150S	150W 24V Single Crystal Module w/Multicontact conn.	131.1	5/11/2001	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV043	BP Solar	BP270U	70W BP Solar Single Crystal Module (universal frame)	61.0	5/11/2001	current
PV044a	BP Solar	BP270UL	70W Single Crystal Module	61.0	1/1/2002	current
PV045	BP Solar	BP275U	75W Single Crystal Module (universal frame)	65.5	5/11/2001	current
PV046_02	BP Solar	BP275UL	75W Single Crystal Module	65.5	1/1/2002	current
PV046_1a	BP Solar	BP3115S	115W 12V Polycrystalline Module w/Multicontact conn.	101.7	9/28/2003	current
PV046_1b	BP Solar	BP3115U	115W 12V Polycrystalline Module, universal frame	101.7	9/28/2003	current
PV046a	BP Solar	BP3123XR	123W Polycrystalline Module w/Multicontact conn.	108.2	4/12/2002	current
PV046ab	BP Solar	BP3125S	125W 12V Polycrystalline Module w/Multicontact conn.	110.8	9/3/2003	current
PV046ac	BP Solar	BP3125U	125W 12V Polycrystalline Module, universal frame	110.8	9/3/2003	current
PV046b	BP Solar	BP3126XR	126W Polycrystalline Module w/Multicontact conn.	110.8	9/19/2002	current
PV046ba	BP Solar	BP3140B	140W 24V Polycrystalline Module, New AR w/Multicontact; Bronze frame	123.8	3/29/2004	current
PV046c	BP Solar	BP3140S	140W 24V Polycrystalline Module, New AR, Multicontact conn.	123.8	10/15/2002	current
PV046da	BP Solar	BP3150B	150 W 24V Polycrystalline Module, New AR, Multicontact; Bronze frame	132.9	1/31/2003	current
PV046da	BP Solar	BP3150S	150W 24V Polycrystalline Module, New AR, Multicontact conn.	133.0	1/7/2003	current
PV046ea	BP Solar	BP3160B	160W 24V Polycrystalline Module, New AR, Multicontact, Bronze framex	142.1	1/7/2003	current
PV046eb	BP Solar	BP3160QS	160W 16V Polycrystalline Module w/Multicontact conn.	142.0	9/3/2003	current
PV046fa	BP Solar	BP3160S	160W 24V Polycrystalline Module, New AR, Multicontact conn.	142.1	1/7/2003	current
PV046fb	BP Solar	BP360U	60W 12V Polycrystalline Module, universal frame	53.0	9/3/2003	current
PV046fc	BP Solar	BP365U	65W 12V Polycrystalline Module, universal frame	57.6	9/3/2003	current

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PV046ga	BP Solar	BP375S	75W Polycrystalline Module (universal frame), new AR, Multicontact conn.	66.4	1/7/2003	current
PV046ha	BP Solar	BP375U	75W Polycrystalline Module (universal frame), new AR	66.4	1/7/2003	current
PV046ia	BP Solar	BP380S	80W Polycrystalline Module (universal frame), new AR, Multicontact conn.	71.0	1/7/2003	current
PV046ja	BP Solar	BP380U	80W Polycrystalline Module (universal frame), new AR	71.0	1/7/2003	current
PV046jb	BP Solar	BP4150H	150W 24V Single Crystalline Module (universal frame), new AR	132.5	1/31/2003	current
PV046ka	BP Solar	BP4150S	150W 24V Single Crystal Module, New AR, Multicontact conn.	132.6	1/7/2003	current
PV046kb	BP Solar	BP4160H	160W 24V Single Crystalline Module (universal frame), new AR	141.6	1/31/2003	current
PV046la	BP Solar	BP4160S	160W 24V Single Crystal Module, New AR, Multicontact conn.	141.7	1/7/2003	current
PV046laa	BP Solar	BP4165B	165W 24V Monocrystalline Module, Multicontact; Bronze frame	146.1	6/28/2004	current
PV046lab	BP Solar	BP4165S	165W 24V Monocrystalline Module w/ Multicontact Conn.	146.1	12/13/2004	current
PV046lb	BP Solar	BP4170H	170W 24V Single Crystalline Module (universal frame), new AR	150.7	1/31/2003	current
PV046lc	BP Solar	BP4170S	170W 24V Single Crystal Module (universal frame), new AR, Multicontact	150.7	1/31/2003	current
PV046ld	BP Solar	BP4175B	175W 24V Monocrystalline Module, Multicontact; Bronze frame	155.2	6/28/2004	current
PV046le	BP Solar	BP4175I	175W 24V Monocrystalline Module w/Multicontact conn.; Integral frame	155.2	12/13/2004	current
PV046lf	BP Solar	BP4175S	175W 24V Monocrystalline Module w/Multicontact conn.	155.2	12/13/2004	current
PV046ma	BP Solar	BP475S	75W Single Crystal Module (universal frame), new AR, Multicontact conn.	66.3	1/7/2003	current
PV046na	BP Solar	BP475U	75W Single Crystal Module (universal frame), new AR	66.3	1/7/2003	current
PV046oa	BP Solar	BP480S	80W Single Crystal Module (universal frame), new AR, Multicontact conn.	70.8	1/7/2003	current

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PV046pa	BP Solar	BP480U	80W Single Crystal Module (universal frame), new AR	70.8	1/7/2003	current
PV046q	BP Solar	BP485H	85W Single Crystal Module (universal frame), new AR	75.3	1/31/2003	current
PV046r	BP Solar	BP485S	85W Single Crystal Module (universal frame), new AR, Multicontact	75.3	1/31/2003	current
PV046s	BP Solar	BP485U	85W Single Crystal Module (universal frame), new AR	75.3	3/29/2004	current
PV047a	BP Solar	BP5160S	160W 24V Buried Grid Single Crystal Module w/Multicontact conn.	141.3	1/7/2003	current
PV048a	BP Solar	BP5170S	170W 24V Buried Grid Single Crystal Module w/Multicontact conn.	150.4	1/7/2003	current
PV049aa	BP Solar	BP580U	80W Buried Grid Single Crystal Module (universal frame)	70.6	1/7/2003	current
PV049ab	BP Solar	BP585DB	85W Buried Grid Single Crystal Module, Multicontact; Bronze frame	75.1	3/18/2003	current
PV049b	BP Solar	BP585KD	85W Buried Grid Single Crystal Module (frameless) with special fasteners	75.1	1/7/2003	current
PV049c	BP Solar	BP585S	85W 12V Buried Grid Single Crystal Module w/Multicontact conn.	75.1	9/3/2003	current
PV050a	BP Solar	BP585U	85W Buried Grid Single Crystal Module (universal frame)	75.1	1/7/2003	current
PV051a	BP Solar	BP585UL	85W Buried Grid Single Crystal Module	75.1	1/7/2003	current
PV052aa	BP Solar	BP590UL	90W Buried Grid Single Crystal Module	79.7	1/7/2003	current
PV052ab	BP Solar	BP7170S	170W 24V Saturn Single Crystal Module w/Multicontact conn.	151.1	9/3/2003	current
PV052aba	BP Solar	BP7175S	175W 24V Saturn Single Crystal Module w/Multicontact conn.	154.9	12/13/2004	current
PV052ac	BP Solar	BP7180S	180W 24V Saturn Single Crystal Module w/Multicontact conn.	160.2	9/3/2003	current
PV052aca	BP Solar	BP7185S	185W 24V Saturn Single Crystal Module w/Multicontact conn.	164.0	12/13/2004	current
PV052ad	BP Solar	BP785S	85W 12V Saturn Single Crystal Module w/Multicontact conn.	75.5	9/3/2003	current
PV052ae	BP Solar	BP790DB	90W 12V Saturn Single Crystal Module, dark frame	80.0	9/3/2003	current

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PV052af	BP Solar	BP790S	90W 12V Saturn Single Crystal Module w/Multicontact conn.	80.0	9/3/2003	current
PV052ag	BP Solar	BP790U	90W 12V Saturn Single Crystal Module, universal frame	80.0	9/3/2003	current
PV052a	BP Solar	BP845I	45W Millenia 2J a-Si Module (medium voltage, integral frame)	42.4	9/19/2002	current
PV052b	BP Solar	BP850I	50W Millenia 2J a-Si Module (medium voltage, integral frame)	47.1	9/19/2002	current
PV052c	BP Solar	BP855I	55W Millenia 2J a-Si Module (medium voltage, integral frame)	51.9	9/19/2002	current
PV052d	BP Solar	BP970B	70W Thin-film CdTe Laminate w/Mounting Brackets	62.3	1/24/2002	current
PV052e	BP Solar	BP970I	70W Thin-film CdTe Module (Integra frame)	62.2	1/24/2002	current
PV052f	BP Solar	BP980B	80W Thin-film CdTe Laminate w/Mounting Brackets	71.3	1/24/2002	current
PV052g	BP Solar	BP980I	80W Thin-film CdTe Module (Integra frame)	71.2	1/24/2002	current
PV052h	BP Solar	BP990B	90W Thin-film CdTe Laminate w/Mounting Brackets	80.4	1/24/2002	current
PV052i	BP Solar	BP990I	90W Thin-film CdTe Module (Integra frame)	80.3	1/24/2002	current
PV053	BP Solar	MST-43I	43W Millennia 2J a-Si Module (med. voltage, Integra frame)	40.5	5/11/2001	current
PV053a	BP Solar	MST-43LV	43W Millennia 2J a-Si Module, (low voltage, universal frame)	40.5	1/15/2002	current
PV053b	BP Solar	MST-43MV	43W Millennia 2J a-Si Module (med.Voltage, universal frame)	40.5	1/15/2002	current
PV053c	BP Solar	MST-45LV	45W Millennia 2J a-Si Module, (low voltage, universal frame)	42.4	3/19/2002	current
PV053d	BP Solar	MST-45MV	45W Millennia 2J a-Si Module (med.Voltage, universal frame)	42.4	3/19/2002	current
PV054	BP Solar	MST-50I	50W Millennia 2J a-Si Module (med. voltage, Integra frame)	47.1	5/11/2001	current
PV054a	BP Solar	MST-50LV	50W Millennia 2J a-Si Module, (low voltage, universal frame)	47.1	1/15/2002	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV054b	BP Solar	MST-50MV	50W Millennia 2J a-Si Module (med.Voltage, universal frame)	47.1	1/15/2002	current
PV054c	BP Solar	MST-55MV	55W Millennia 2J a-Si Module (med.Voltage, universal frame)	51.9	9/19/2002	current
PV055	BP Solar	MSX-80U	80W Solarex Polycrystalline Module (universal frame)	69.7	5/11/2001	current
PV055aa	BP Solar	MSX-110	110W Solarex Polycrystalline Module	95.6	5/11/2001	current
PV055a	BP Solar	MSX-120	120W Solarex Polycrystalline Module	104.5	5/11/2001	current
PV055b	BP Solar	MSX-240	240W Solarex Polycrystalline Module	209.1	11/23/1999	current
PV055c	BP Solar	MSX-50	50W Solarex Polycrystalline Module	43.5	11/23/1999	current
PV055d	BP Solar	MSX-56	56W Solarex Polycrystalline Module	48.7	11/23/1999	current
PV055e	BP Solar	MSX-60	60W Solarex Polycrystalline Module	52.2	11/23/1999	current
PV055f	BP Solar	MSX-64	64W Solarex Polycrystalline Module	55.8	11/23/1999	current
PV055g	BP Solar	MSX-77	77W Solarex Polycrystalline Module	67.0	11/23/1999	current
PV055h	BP Solar	MSX-83	83W Solarex Polycrystalline Module	72.3	11/23/1999	current
PV056	BP Solar	SX-110S	110W Solarex poly-Si Module (Univ. frame, Multicontact conn.)	95.6	5/11/2001	current
PV056a	BP Solar	SX-110U	110W Solarex poly-Si Module (Univ. frame)	95.6	8/29/2000	current
PV057	BP Solar	SX-120S	120W Solarex poly-Si Module (Univ. frame, Multicontact conn.)	104.6	5/11/2001	current
PV057a	BP Solar	SX-120U	120W Solarex poly-Si Module (Univ. frame)	104.6	8/29/2000	current
PV057aa	BP Solar	SX140B	140W 24V Polycrystalline Module w/Multicontact, Bronze frame	123.8	1/31/2003	current
PV057ab	BP Solar	SX150B	150W 24V Polycrystalline Module w/Multicontact, Bronze frame	132.9	1/31/2003	current
PV057ac	BP Solar	SX160B	160W 24V Polycrystalline Module w/Multicontact, Bronze frame	142.0	1/31/2003	current
PV057b	BP Solar	SX-160S	160W 24V Polycrystalline Module w/Multicontact connection	141.96	11/19/2002	current
PV062_02	BP Solar	SX-40D	40W poly-Si Module (Direct-mount frame)	34.8	1/1/2002	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV063_02	BP Solar	SX-40M	40W poly-Si Module (Multi-mount frame)	34.8	1/1/2002	current
PV064_02	BP Solar	SX-40U	40W poly-Si Module (Univ. frame)	34.8	1/1/2002	current
PV065_02	BP Solar	SX-50D	50W poly-Si Module (Direct-mount frame)	43.5	1/1/2002	current
PV066_02	BP Solar	SX-50M	50W poly-Si Module (Multi-mount frame)	43.5	1/1/2002	current
PV067_02	BP Solar	SX-50U	50W poly-Si Module (Univ. frame)	43.5	1/1/2002	current
PV068_02	BP Solar	SX-55D	55W poly-Si Module (Direct-mount frame)	47.8	1/1/2002	current
PV069_02	BP Solar	SX-55U	55W poly-Si Module (Univ. frame)	47.8	1/1/2002	current
PV070_02	BP Solar	SX-60D	60W poly-Si Module (Direct-mount frame)	52.2	1/1/2002	current
PV071_02	BP Solar	SX-60U	60W poly-Si Module (Univ. frame)	52.2	1/1/2002	current
PV072_02	BP Solar	SX-65D	65W poly-Si Module (Direct-mount frame)	56.7	1/1/2002	current
PV073_02	BP Solar	SX-65U	65W poly-Si Module (Univ. frame)	56.7	1/1/2002	current
PV074_02	BP Solar	SX-75	75W poly-Si Module	65.2	1/1/2002	current
PV074a	BP Solar	SX-75TS	75W Solarex poly-Si Module (125 mm cells, Low-Profile/MC)	65.4	1/24/2002	current
PV074b	BP Solar	SX-75TU	75W Solarex poly-Si Module (125 mm cells, SPJB)	65.4	1/24/2002	current
PV075_02	BP Solar	SX-80	80W poly-Si Module	69.7	1/1/2002	current
PV076_02	BP Solar	SX-85	85W poly-Si Module	74.1	1/1/2002	current
PV076a	BP Solar	TF-80B	80W Thin-film CdTe Laminate w/ Mounting Brackets	71.3	5/17/2001	current
PV076b	BP Solar	TF-80I	80W Thin-film CdTe Module (Integra frame)	71.2	5/17/2001	current
PV076c	BP Solar	TF-90B	90W Thin-film CdTe Laminate w/Mounting Brackets (now BP990B)	80.4	5/9/2002	current
PV076d	BP Solar	TF-90I	90W Thin-film CdTe Module (Integra frame) (now BP990I)	80.3	5/9/2002	current
PV077_02	BP Solar	VLX-53	53W Value-Line poly-Si Module	46.2	1/1/2002	current
PV079_02	BP Solar	VLX-80	80W Value-Line poly-Si Module	69.7	1/1/2002	current
PV080	Dunasolar Inc.	DS-30	30W Unframed 2J a-Si Module	28.8	10/22/2001	current
PV081	Dunasolar Inc.	DS-40	40W Unframed 2J a-Si Module	38.4	10/22/2001	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV082	Energy Photovoltaics, Inc.	EPV-30	30W Unframed 2J a-Si Module	28.8	11/23/1999	current
PV083	Energy Photovoltaics, Inc.	EPV-40	40W Unframed 2J a-Si Module	38.4	11/23/1999	current
PV084	Evergreen Solar	E-25	25W String Ribbon poly-Si Module	22.2	11/23/1999	current
PV085	Evergreen Solar	E-28	28W String Ribbon poly-Si Module	24.9	11/23/1999	current
PV086	Evergreen Solar	E-30	30W String Ribbon poly-Si Module	26.7	11/23/1999	current
PV087	Evergreen Solar	E-50	50W String Ribbon poly-Si Module	44.4	11/23/1999	current
PV088	Evergreen Solar	E-56	56W String Ribbon poly-Si Module	49.8	11/23/1999	current
PV089	Evergreen Solar	E-60	60W String Ribbon poly-Si Module	53.4	11/23/1999	current
PV090	Evergreen Solar	EC-102	102W Cedar Line module	91.2	8/24/2001	current
PV091	Evergreen Solar	EC-110	110W Cedar Line module	98.4	8/24/2001	current
PV091a	Evergreen Solar	EC-115	115W String Ribbon Cedar Line Module	103.1	10/8/2003	current
PV092	Evergreen Solar	EC-47	47W Cedar Line module	41.9	8/24/2001	current
PV093	Evergreen Solar	EC-51	51W Cedar Line module	45.6	8/24/2001	current
PV094	Evergreen Solar	EC-55	55W Cedar Line module	49.2	8/24/2001	current
PV095	Evergreen Solar	EC-94	94W Cedar Line module	83.9	8/24/2001	current
PV096a	Evergreen Solar	ES-112	112W String Ribbon poly-Si AC Module (with Trace MS100)	99.7	1/15/2002	current
PV097	Evergreen Solar	ES-240	240W String Ribbon poly-Si AC Module (with AES MI-250)	213.8	1/15/2002	current
PV097a	First Solar	FS-40	40W Thin-Film CdTe Laminate	38.0	1/28/2003	current
PV097b	First Solar	FS-40D	40W Thin-Film CdTe Module w/ D-channel mounting rails	38.0	1/28/2003	current
PV097c	First Solar	FS-45	45W Thin Film CdTe laminate	42.8	1/14/2003	current
PV097d	First Solar	FS-45D	45W Thin Film CdTe module with mounting rails	42.8	1/14/2003	current
PV098a	First Solar, LLC	FS-50	laminate. change in voltage and amperage (no change to PTC rating)	47.6	1/14/2003	current
PV099	First Solar, LLC	FS-50C	50W/65V Thin Film CdTe laminate w/ C-channel mounting rails	47.6	8/6/2001	current
PV099a	First Solar	FS-50D	50W Thin Film CdTe Module with mounting rails	47.6	1/14/2003	current
PV099b	First Solar	FS-55	55W Thin-Film CdTe Laminate	52.4	1/28/2003	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV099c	First Solar	FS-55D	55W Thin-Film CdTe Module w/ D-channel mounting rails	52.4	1/28/2003	current
PV099d	First Solar	FS-60	60W Thin Film CdTe laminate	57.2	1/14/2003	current
PV099e	First Solar	FS-60D	60W Thin Film CdTe module with mounting rails	57.2	1/14/2003	current
PV100	First Solar, LLC	FS-50Z	laminate w/ Z-channel mounting rails	47.6	8/6/2001	current
PV100_1a	GE Energy	GEPV-030-MNA	30W Single Crystal Module w/o connectors	26.5	4/12/2004	current
PV100_1b	GE Energy	GEPV-030-MNB	30W Single Crystal Module w/o connectors B	26.5	4/12/2004	current
PV100_1c	GE Energy	GEPV-045-MNA	45W Single Crystal Module w/o connectors	39.7	4/12/2004	current
PV100_1d	GE Energy	GEPV-045-MNB	45W Single Crystal Module w/o connectors B	39.7	4/12/2004	current
PV100_1e	GE Energy	GEPV-050-MNA	50W Single Crystal Module w/o connectors	44.2	4/12/2004	current
PV100_1f	GE Energy	GEPV-050-MNB	50W Single Crystal Module w/o connectors B	44.2	4/12/2004	current
PV100_1g	GE Energy	GEPV-055-GCA	55W Single Crystal Module w/MC connectors	48.9	4/12/2004	current
PV100_1h	GE Energy	GEPV-055-GCB	55W Single Crystal Module w/MC connectors B	48.9	4/12/2004	current
PV100_1i	GE Energy	GEPV-065-MNA	65W Single Crystal Module w/o connectors	57.7	4/12/2004	current
PV100_1j	GE Energy	GEPV-065-MNB	65W Single Crystal Module w/o connectors B	57.7	4/12/2004	current
PV100_1k	GE Energy	GEPV-070-MNA	70W Single Crystal Module w/o connectors	62.2	4/12/2004	current
PV100_1l	GE Energy	GEPV-070-MNB	70W Single Crystal Module w/o connectors B	62.2	4/12/2004	current
PV100_1m	GE Energy	GEPV-100-MCA	100W Single Crystal Module w/MC connectors	88.7	4/12/2004	current
PV100_1n	GE Energy	GEPV-100-MCB	100W Single Crystal Module w/MC connectors B	88.7	4/12/2004	current
PV100_1o	GE Energy	GEPV-100-MNA	100W Single Crystal Module w/o connectors	88.7	4/12/2004	current
PV100_1p	GE Energy	GEPV-100-MNB	100W Single Crystal Module w/o connectors B	88.7	4/12/2004	current
PV100_1q	GE Energy	GEPV-110-MCA	110W Single Crystal Module w/MC connectors	97.8	4/12/2004	current
PV100_1r	GE Energy	GEPV-110-MCB	110W Single Crystal Module w/MC connectors B	97.8	4/12/2004	current
PV100_1s	GE Energy	GEPV-110-MNA	110W Single Crystal Module w/o connectors	97.8	4/12/2004	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV100_1t	GE Energy	GEPV-110-MNB	110W Single Crystal Module w/o connectors B	97.8	4/12/2004	current
PV100_1u	GE Energy	GEPV-165-MCA	165W Single Crystal Module w/MC connectors	146.7	4/12/2004	current
PV100_1v	GE Energy	GEPV-165-MCB	165W Single Crystal Module w/MC connectors B	146.7	4/12/2004	current
PV100_1w	GE Energy	GEPV-173-MCA	173W Single Crystal Module w/MC connectors	154	4/12/2004	current
PV100_1x	GE Energy	GEPV-173-MCB	173W Single Crystal Module w/MC connectors B	154	4/12/2004	current
PV100_1y	Isofoton	I-100/12	100W Monocrystalline Rail Mounted Module X2	89.5	3/29/2004	current
PV100_1z	Isofoton	I-100/24	100W Monocrystalline Rail Mounted Module	89.5	3/29/2004	current
PV100_1za	Isofoton	I-106/12	106W Monocrystalline Rail Mounted Module	95	3/29/2004	current
PV100_1zb	Isofoton	I-106/24	106W Monocrystalline Rail Mounted Module X2	95	3/29/2004	current
PV100_1zc	Isofoton	I-110-24	110W Monocrystalline Rail Mounted Module X2	98.7	3/29/2004	current
PV100_1zd	Isofoton	I-110/12	110W Monocrystalline Rail Mounted Module	98.7	3/29/2004	current
PV100_1ze	Isofoton	I-130/12	130W Monocrystalline Rail Mounted Module	116	3/29/2004	current
PV100_1zf	Isofoton	I-130/24	130W Monocrystalline Rail Mounted Module X2	116	3/29/2004	current
PV100_1zg	Isofoton	I-140 R /12	140W Monocrystalline Rail Mounted Module	125	3/29/2004	current
PV100_1zh	Isofoton	I-140 R /24	140W Monocrystalline Rail Mounted Module X3	125	3/29/2004	current
PV100_1zi	Isofoton	I-140 S /12	140W Monocrystalline Rail Mounted Module X4	125	3/29/2004	current
PV100_1zj	Isofoton	I-140 S /24	140W Monocrystalline Rail Mounted Module X5	125	3/29/2004	current
PV100_1zk	Isofoton	I-150	150W Monocrystalline Rail Mounted Module X2	134.3	3/29/2004	current
PV100_1zl	Isofoton	I-150 S /12	150 W Monocrystalline Rail Mounted Module	134.3	3/29/2004	current
PV100_1zm	Isofoton	I-150 S/24	150W Monocrystalline Rail Mounted Module	134.3	3/29/2004	current
PV100_1zn	Isofoton	I-159	159W Monocrystalline Rail Mounted Module	142.6	3/29/2004	current
PV100_1zo	Isofoton	I-165	165W Monocrystalline Rail Mounted Module	148.1	3/29/2004	current
PV100_1zp	Isofoton	I-36	36W Monocrystalline Rail Mounted Module	32.2	3/29/2004	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV100_1zq	Isofoton	I-50	50W Monocrystalline Rail Mounted Module	44.8	3/29/2004	current
PV100_1zr	Isofoton	I-53	53W Monocrystalline Rail Mounted Module	47.5	3/29/2004	current
PV100_1zs	Isofoton	I-55	55W Monocrystalline Rail Mounted Module	49.4	3/29/2004	current
PV100_1zt	Isofoton	I-65	65W Monocrystalline Rail Mounted Module	58	3/29/2004	current
PV100_1zu	Isofoton	I-70 R	70W Monocrystalline Rail Mounted Module	62.5	3/29/2004	current
PV100_1zv	Isofoton	I-70 S	70W Monocrystalline Rail Mounted Module X2	62.5	3/29/2004	current
PV100_1zw	Isofoton	I-75	75W Monocrystalline Rail Mounted Module	67.1	3/29/2004	current
PV100_1zx	Isofoton	I-94/12	94W Monocrystalline Rail Mounted Module X2	84.2	3/29/2004	current
PV100_1zy	Isofoton	I-94/24	94W Monocrystalline Rail Mounted Module	84.2	3/29/2004	current
PV100a	Kaneka	CSA201	58W a-Si module x	54.1	7/8/2003	current
PV100aa	Kaneka Corporation	CSA211 (CSA)	58W a-Si module (CSA)	54.1	4/15/2004	current
PV100ab	Kaneka Corporation	CSB211 (CSB)	58W a-Si module (CSB)	54.1	4/15/2004	current
PV100ac	Kaneka Corporation	GSA211	60W a-Si module	56	8/30/2004	current
PV100b	Kaneka	LSU205	58W a-Si module	54.1	7/8/2003	current
PV100ba	Kaneka Corporation	TSA211	116W a-Si Twin Type Module	108.2	3/29/2004	current
PV100bb	Kaneka Corporation	TSB211	116W a-Si Twin Type Module B	108.2	3/29/2004	current
PV100bba	Kaneka Corporation	TSC211	120W a-Si twin type module (TSC)	111.9	12/13/2004	current
PV100bbb	Kaneka Corporation	TSD211	120W a-Si twin type module (TSD)	111.9	12/13/2004	current
PV101	Kyocera America	KC120-1	120W High Efficiency Multicrystal PV Module	105.7	11/23/1999	current
PV101_1a	Kyocera America	KC125G	125W High efficiency Multicrystal PV Module	111.8	4/30/2003	current
PV101a	Kyocera America	KC158G	158W High Efficiency Multicrystal PV Module	139.7	6/24/2002	current
PV101b	Kyocera America	KC167G	167W High efficiency Multicrystal PV Module	149.6	4/30/2003	8/29/2004
PV101ba	Kyocera Solar, Inc.	KC187G	187W Multicrystal PV Module, Deep Blue	167.4	8/30/2004	current
PV102	Kyocera America	KC50	50W High Efficiency Multicrystal PV Module	43.9	12/26/2001	current
PV103	Kyocera America	KC60	60W High Efficiency Multicrystal PV Module	52.7	11/23/1999	current
PV103a	Kyocera America	KC70	70 W High Efficiency Multicrystal PV Module	61.6	1/15/2002	current
PV104	Kyocera America	KC80	80W High Efficiency Multicrystal PV Module	70.4	11/23/1999	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV104a	Kyocera Solar, Inc.	KC80-01	80W High Efficiency Multicrystal PV Module (01)	70.4	2/24/2004	current
PV105	Matrix Solar	PW1000-100	100W Large Scale Dual Voltage multi-Si Module	90.0	7/20/2000	current
PV106	Matrix Solar	PW1000-105	105W Large Scale Dual Voltage multi-Si Module	94.6	7/20/2000	current
PV107	Matrix Solar	PW1000-90	90W Large Scale Dual Voltage multi-Si Module	80.9	7/20/2000	current
PV108	Matrix Solar	PW1000-95	95W Large Scale Dual Voltage multi-Si Module	85.4	7/20/2000	current
PV108a	Matrix Solar	PW1250-115	115W Large Scale Dual Voltage Multi-Si Module	103.7	9/5/2002	current
PV108b	Matrix Solar	PW1250-125	125W Large Scale Dual Voltage Multi-Si Module	112.9	9/5/2002	current
PV108c	Matrix Solar	PW1250-135	135W Large Scale Dual Voltage Multi-Si Module	122.2	9/5/2002	current
PV108d	Matrix Solar	PW1650-155	155W Large Scale Dual Voltage Multi-Si Module	139.9	9/5/2002	current
PV108e	Matrix Solar	PW1650-165	165W Large Scale Dual Voltage Multi-Si Module	149.0	9/5/2002	current
PV108f	Matrix Solar	PW1650-175	175W Large Scale Dual Voltage Multi-Si Module	158.3	9/5/2002	current
PV109	Matrix Solar	PW750-70	70W Large Scale multi-Si Module	62.9	7/20/2000	current
PV110	Matrix Solar	PW750-75	75W Large Scale multi-Si Module	67.5	7/20/2000	current
PV111	Matrix Solar	PW750-80	80W Large Scale multi-Si Module	72.0	7/20/2000	current
PV111a	Matrix Solar	PW750-90	90W Large Scale multi-Si Module	81.2	3/5/2003	current
PV111b	MC Solar	BP970B	70W Thin-film CdTe Laminate w/ Mounting Brackets	62.3	3/29/2004	current
PV111c	MC Solar	BP980B	80W Thin-film CdTe Laminate w/ Mounting Brackets	71.3	3/29/2004	current
PV111d	MC Solar	BP990B	90W Thin-film CdTe Laminate w/ Mounting Brackets	80.4	3/29/2004	current
PV111e	MC Solar	TF-80B	80W Thin-film CdTe Laminate w/ Mounting Brackets (now BP980B)	71.3	3/29/2004	current
PV111f	MC Solar	TF-90B	90W Thin-film CdTe Laminate w/ Mounting Brackets (now BP990B)	80.4	3/29/2004	current
PV112	Midway Labs, Inc.	MLB3416-115	115W Concentrator (335x) Module	105.0	11/23/1999	current
PV112_1a	Mitsubishi Electric Corporation	PV-MF110EC3	110W Polycrystalline Lead-free solder w/o Cable	98.4	11/5/2004	current
PV112_1b	Mitsubishi Electric Corporation	PV-MF120EC3	120W Polycrystalline Lead-free solder w/o Cable	107.6	11/5/2004	current

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PV112a	Mitsubishi Electric Co	PV-MF125E	125 W Polycrystalline Module with Multicontact connectors	110.7	1/7/2003	current
PV112b	Mitsubishi Electric Co	PV-MF130E	130 W Polycrystalline Module with Multicontact connectors	115.2	1/7/2003	current
PV112c	Mitsubishi Electric Co	PV-MF125EA2LF	125W Polycrystalline Lead-free solder module with MC connector	110.7	5/19/2003	current
PV112d	Mitsubishi Electric Co	PV-MF130EA2LF	130W Polycrystalline Lead-free solder module with MC connector	115.2	5/19/2003	current
PV112e	Mitsubishi Electric	PV-MF160EB3	160W Polycrystalline Lead-free solder module with MC connector	142.4	10/1/2003	current
PV112f	Mitsubishi Electric	PV-MF165EB3	165W Polycrystalline Lead-free solder module with MC connector	146.9	10/1/2003	current
PV112g	Pacific Solar	PP-USA-213-B5	150W BP Solar 2150L SunEmpower modular mount	131.8	5/19/2003	current
PV112h	Pacific Solar	PP-USA-213-L6	160W BP Solar 5160L SunEmpower modular mount	140.9	5/19/2003	current
PV112i	Pacific Solar	PP-USA-213-L7	170W BP Solar 5170L SunEmpower modular mount	149.9	5/19/2003	current
PV112j	Pacific Solar	PP-USA-213-N5	150W BP Solar 4150L SunEmpower modular mount	131.8	5/19/2003	current
PV112k	Pacific Solar	PP-USA-213-N6	160W BP Solar 4160L SunEmpower modular mount	140.9	5/19/2003	current
PV112l	Pacific Solar	PP-USA-213-N7	170W BP Solar 4170L SunEmpower modular mount	149.9	5/19/2003	current
PV112m	Pacific Solar	PP-USA-213-P5	150W BP Solar 3150L SunEmpower modular mount	131.8	5/19/2003	current
PV112n	Pacific Solar	PP-USA-213-P6	160W BP Solar 3160L SunEmpower modular mount	140.9	5/19/2003	current
PV112p	Pacific Solar Pty Limited	PP-USA-213-S5	150W Shell Solar SP-150-PL, -PLC SunEmpower modular mount	135	5/19/2003	current
PV114	Powerlight Corp.	PL-AP-120L	120W PowerGuard Roof Tile (Astropower)	104.9	11/28/2001	current
PV115	Powerlight Corp.	PL-AP-130	130W PowerGuard Roof Tile (Astropower AP-130)	115.1	2/17/2000	current
PV115a	Powerlight Corp.	PL-AP-65	One Astropower AP-65 laminate mounted on one PowerGuard backerboard	56.6	9/3/2002	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV115b	Powerlight Corp.	PL-AP-65 Double module	Two Astropower AP-65 laminates mounted on one PowerGuard backerboard	113.2	9/3/2002	current
PV116	Powerlight Corp.	PL-AP-75 Double Module	150W PowerGuard Roof Tile (Two Astropower modules)	131.1	11/28/2001	current
PV116a	Powerlight Corp.	PL-Apx-110-SL	110W PowerGuard Roof Tile (AstroPower)	93.7	11/15/2002	current
PV117_02	Powerlight Corp.	PL-ASE-100	100W PowerGuard Roof Tile (ASE Americas)	88.6	1/1/2002	current
PV118	Powerlight Corp.	PL-BP-2150S	150W PowerGuard Roof Tile (BP Solar)	129.2	7/20/2001	current
PV118a	Powerlight	PL-BP-3160L	160W PowerGuard Roof Tile (BP Solar)	139.2	9/3/2003	current
PV118b	Powerlight Corp.	PL-BP-380L Double Module	160W PowerGuard Roof Tile (Two BP-380L modules)	139.1	6/28/2004	current
PV118c	Powerlight Corp.	PL-BP-485L Double Module	170W PowerGuard Roof Tile (Two BP-485L modules)	148	6/28/2004	current
PV119	Powerlight Corp.	PL-BP-TF-80L	80W PowerGuard Roof Tile (BP Solar)	70.7	7/20/2001	current
PV120	Powerlight Corp.	PL-FS-415-A	50W PowerGuard Roof Tile (First Solar)	47.4	10/9/2000	current
PV120a	Powerlight	PL-KYOC-FL120-1B	120W PowerGuard Roof Tile (Kyocera)	103.8	6/17/2003	current
PV120b	Powerlight	PL-KYOC-FL125	125W PowerGuard Roof Tile (Kyocera)	110.8	6/17/2003	current
PV120c	Powerlight	PL-KYOC-FL158	158W PowerGuard Roof Tile (Kyocera)	138.2	6/17/2003	current
PV120d	Powerlight	PL-KYOC-FL167	167W PowerGuard Roof Tile (Kyocera)	148.0	6/17/2003	current
PV121	Powerlight Corp.	PL-MST-43	43W PowerGuard Roof Tile (Solarex a-Si)	40.5	5/9/2000	current
PV122	Powerlight Corp.	PL-MSX-120	120W PowerGuard Roof Tile (Solarex poly-Si)	103.7	5/19/2000	current
PV123	Powerlight Corp.	PL-PW-750	75-80W PowerGuard Roof Tile (Matrix Solar/Photowatt)	69.9	10/3/2001	current
PV123a	Powerlight Corp.	PL-PW-750 Double Module	(two Matrix Solar Photowatt modules)	135.3	3/19/2002	current
PV123b	Powerlight Corp.	PL-SHAR-ND-N6E1D	146W PowerGuard Roof Tile (Sharp Corp.)	125.1	1/23/2004	current
PV124a	Powerlight Corp.	PL-SP-135	135W PowerGuard Roof Tile (Shell)	119.8	6/17/2003	current
PV125a	Powerlight Corp.	PL-SP-150-24L	150W PowerGuard Roof Tile (Rectangular Shell)	133.5	6/17/2003	current
PV126a	Powerlight Corp.	PL-SP-150-CPL	150W PowerGuard Roof Tile (Square Shell)	133.6	6/17/2003	current
PV126b	Powerlight	PL-SP-70 Double Module	140W PowerGuard Roof Tile (Two Shell modules)	124.8	6/17/2003	current
PV127a	Powerlight Corp.	PL-SP-75	75W PowerGuard Roof Tile (Shell)	66.8	6/17/2003	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV128_1a	Powerlight Corp.	PL-SP-75 Double Module	150W PowerGuard Roof Tile (Two Shell modules)	133.7	6/17/2003	current
PV128_1b	Powerlight Corp.	PL-SQ75-CPL	75W Power Guard Roof Tile (Shell)	65.1	9/28/2003	current
PV128_1c	Powerlight Corp.	PL-SQ75-CPL Double Module	150W Power Guard Roof Tile (Shell)	130.3	9/28/2003	current
PV128_1ca	Powerlight Corp.	PL-SQ77-CPL Double Module	154W Double Module PowerGuard Roof Tile (Shell Solar)	134.6	1/23/2004	current
PV128_1cb	Powerlight Corp.	PL-SQ85-P DOUBLE MODULE	170W PowerGuard Roof Tile (Two Shell modules)	152.3	10/13/2004	current
PV128_1d	Powerlight Corp.	PL-SY-HIP-190BA2	190W PowerGuard Roof Tile (Sanyo)	177.5	3/18/2003	current
PV128_1da	Powerlight Corp.	PL-SY-HIP-190CA2	190W PowerGuard Roof Tile (Sanyo)	177.5	1/23/2004	current
PV128a	Powerlight Corp.	PL-SY-HIP-H552BA2	175W PowerGuard Roof Tile (Sanyo)	162.2	5/9/2002	current
PV128a_1a	RWE SCHOTT Solar	ASE-250DGF/17	250W/17V EFG Module, Framed	223.7	10/13/2004	current
PV128a_1b	RWE SCHOTT Solar	ASE-250DGF/50	250W/50V EFG Module, Framed	223.7	10/13/2004	current
PV128a_1c	RWE SCHOTT Solar	ASE-270DGF/17	270W/17V EFG Module, Framed	242	10/13/2004	current
PV128a_1d	RWE SCHOTT Solar	ASE-270DGF/50	270W/50V EFG Module, Framed	242	10/13/2004	current
PV128a_1e	Sanyo Electric Co. Ltd.	HIP-167BA	167W HIT Hybrid a-Si/c-Si Solar Cell Module	156.7	2/24/2004	current
PV128a_1f	Sanyo Electric Co. Ltd.	HIP-175BA3	175W HIT Hybrid a-Si/c-Si Solar Cell Module	163.3	10/13/2004	current
PV128a_1g	Sanyo Electric Co. Ltd.	HIP-175BA5	175W HIT Hybrid a-Si/c-Si Solar Cell Module (5)	163.3	10/13/2004	current
PV128a_1h	Sanyo Electric Co. Ltd.	HIP-180BA	180W HIT Hybrid a-Si/c-Si Solar Cell Module	169.1	2/24/2004	current
PV128a_1i	Sanyo Electric Co. Ltd.	HIP-180BA3	180W HIT Hybrid a-Si/c-Si Solar Cell Module (3)	168	6/28/2004	current
PV128a_1j	Sanyo Electric Co. Ltd.	HIP-180BA5	180W HIT Hybrid a-Si/c-Si Solar Cell Module (5)	168	6/28/2004	current
PV128a_1k	Sanyo Electric Co. Ltd.	HIP-190BA	190W HIT Hybrid a-Si/c-Si Solar Cell Module	178.7	2/24/2004	current
PV128aa	Sanyo Electric	HIP-190BA1	190W HIT Hybrid a-Si/c-Si Solar Cell Module (std. j.b.)	178.7	1/15/2003	current
PV128ab	Sanyo Electric	HIP-190BA2	190W HIT Hybrid a-Si/c-Si Solar Cell Module (std. j.b. w/ addl. wiring)	178.7	1/15/2003	current
PV128ac	Sanyo Electric Co. Ltd.	HIP-190BA3	190W HIT Hybrid a-Si/c-Si Solar Cell Module (3)	178.7	6/28/2004	current
PV128ad	Sanyo Electric Co. Ltd.	HIP-190BA5	190W HIT Hybrid a-Si/c-Si Solar Cell Module (5)	178.7	6/28/2004	current
PV128b	Sanyo Electric Co. Ltd.	HIP-G751BA1	167W HIT Hybrid a-Si/c-Si Solar Cell Module (std.j.b.)	155.8	3/22/2002	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV128c	Sanyo Electric Co. Ltd.	HIP-G751BA2	167W HIT Hybrid a-Si/c-Si Solar Cell Module (std.j.b. w/addl wiring)	155.8	3/22/2002	current
PV128d	Sanyo Electric Co. Ltd.	HIP-H552BA1	175W HIT Hybrid a-Si/c-Si Solar Cell Module (std.j.b.)	163.3	4/4/2002	current
PV128e	Sanyo Electric Co. Ltd.	HIP-H552BA2	Solar Cell Module (std.j.b. w/addl wiring)	163.3	4/4/2002	current
PV128f	Sanyo Electric Co. Ltd.	HIP-J54BA1	180W HIT Hybrid a-Si/c-Si Solar Cell Module (std.j.b.)	168.1	3/22/2002	current
PV128g	Sanyo Electric Co. Ltd.	HIP-J54BA2	Solar Cell Module (std.j.b. w/addl wiring)	168.1	3/22/2002	current
PV128h	Schott Applied Power Corp.	SAPC-123	123W Multisilicon Module	107.8	5/21/2002	current
PV128i	Schott Applied Power Corp.	SAPC-165	165W Multicrystalline Silicon Module	144.8	1/28/2002	current
PV128j	Schott Applied Power Corp.	SAPC-80	80W Multisilicon Module	70.2	5/21/2002	current
PV128ja	Sharp Solar	ND-160U1Z	160 W, Multicrystalline Silicon Module	140.2	9/28/2003	12/13/2004
PV128jaa	Sharp Corporation	ND-160U1Z	160 W, Multicrystalline Silicon Module	140.6	12/13/2004	current
PV128jb	Sharp Solar	ND-167U1	167W Multisilicon module	146.5	6/19/2003	12/13/2004
PV128jb_1a	Sharp Corporation	ND-167U1	167W Multisilicon module	146.9	12/13/2004	current
PV128jba	Sharp Corporation	ND-167U3	167W Multisilicon module (3)	146.5	10/13/2004	12/13/2004
PV128jbb	Sharp Corporation	ND-167U3	167W Multisilicon module (3)	146.9	12/13/2004	current
PV128jc	Sharp Solar	ND-70ELU	70W Multi-crystalline Silicon Module (left)	61.0	8/4/2003	12/13/2004
PV128jca	Sharp Corporation	ND-70ELU	70W Multi-crystalline Silicon Module (left)	61.1	12/13/2004	current
PV128jd	Sharp Solar	ND-70ERU	70W Multi-crystalline Silicon Module (right)	61.0	8/4/2003	12/13/2004
PV128je	Sharp Corporation	ND-70ERU	70W Multi-crystalline Silicon Module (right)	61.1	12/13/2004	current
PV128k	Sharp Corporation	ND-L3E1U	123W Multisilicon Module	107.8	5/24/2002	12/13/2004
PV128k_01	Sharp Corporation	ND-L3E1U	123W Multisilicon Module	108.1	12/13/2004	current
PV128k_1a	Sharp Corporation	ND-L3EJE	123W Multisilicon module (w/junction box)	107.8	4/15/2004	12/13/2004
PV128k_1b	Sharp Corporation	ND-L3EJE	123W Multisilicon Module (w/junction box)	108.1	12/13/2004	current
PV128ka	Sharp Solar	ND-N6E1U	146W Multisilicon module	128.0	5/19/2003	12/13/2004
PV128kaa	Sharp Corporation	ND-N6E1U	146W Multisilicon module	128.3	12/13/2004	current
PV128kb	Sharp Solar	ND-NOECU	140W Multisilicon Residential Module	122.7	7/30/2003	12/13/2004
PV128kc	Sharp Corporation	ND-NOECU	140W Multisilicon Residential Module	123.0	12/13/2004	current
PV128l	Sharp Corporation	ND-Q0E2U	160W Multisilicon Module	140.2	5/24/2002	12/13/2004
PV128la	Sharp Corporation	ND-Q0E2U	160W Multisilicon Module	140.6	12/13/2004	current
PV128m	Sharp Corporation	NE-80E1U	80W Multisilicon Module	70.2	4/4/2002	12/13/2004
PV128m_01	Sharp Corporation	NE-80E1U	80W Multisilicon Module	70.4	12/13/2004	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV128m_1a	Sharp Corporation	NE-80EJE	80W Multisilicon module (w/junction box)	70.2	4/15/2004	12/13/2004
PV128m_1b	Sharp Corporation	NE-80EJE	80W Multisilicon Module (w/junction box)	70.4	12/13/2004	current
PV128ma	Sharp	NE-165U1	165W Multisilicon Module (flat screw type, same as NE-Q5E2U)	144.8	7/8/2003	12/13/2004
PV128mb	Sharp Corporation	NE-165U1	165W Multisilicon Module (flat screw type, same as NE-Q5E2U)	145.2	12/13/2004	current
PV128n	Sharp Corporation	NE-K125U1	125W Multisilicon Module (non-flat screw type, black color frame)	109.8	4/4/2002	12/13/2004
PV128na	Sharp Corporation	NE-K125U1	125W Multisilicon Module (non-flat screw type, black color frame)	110.0	12/13/2004	current
PV128o	Sharp Corporation	NE-K125U2	125W Multisilicon Module (flat screw type)	109.8	5/9/2002	12/13/2004
PV128oa	Sharp Corporation	NE-K125U2	125W Multisilicon Module (flat screw type)	110.1	12/13/2004	current
PV128p	Sharp Corporation	NE-Q5E1U	165W Multisilicon Module (non-flat screw type)	144.8	4/4/2002	12/13/2004
PV128pa	Sharp Corporation	NE-Q5E1U	165W Multisilicon Module (non-flat screw type)	145.2	12/13/2004	current
PV128q	Sharp Corporation	NE-Q5E2U	165W Multisilicon Module (flat screw type)	144.8	5/9/2002	12/13/2004
PV128q_1	Sharp Corporation	NE-Q5E2U	165W Multisilicon Module (flat screw type)	145.2	12/13/2004	current
PV128qa	Sharp Solar	NT-175U1	175W Monocrystalline Silicon Module	153.8	9/28/2003	12/13/2004
PV128qaa	Sharp Corporation	NT-175U1	175W Monocrystalline Silicon Module	154.2	12/13/2004	current
PV128qb	Sharp	NT-185U1	185W Single Crystal Silicon Module (same as NT-S5E1U)	163.3	7/8/2003	current
PV128qc	Sharp Corporation	NT-188U1	188W Single Crystal Silicon Module	165.6	10/13/2004	12/13/2004
PV128qd	Sharp Corporation	NT-188U1	188W Single Crystal Silicon Module	166.0	12/13/2004	current
PV128ra	Sharp Corporation	NT-R5E1U	175 W Multisilicon module	153.8	9/10/2002	12/13/2004
PV128ra_1	Sharp Corporation	NT-R5E1U	175 W Multisilicon module	154.2	12/13/2004	current
PV128rb	Sharp Solar	NT-S5E1U	185W Single Crystal Silicon Module	163.3	2/3/2003	current
PV129	Shell Solar Industries, formerly Siemens Solar	SM10	10W PowerMax Module	9.0	11/23/1999	current
PV130	Shell Solar Industries, formerly Siemens Solar	SM-110	110W PowerMax Module	99.2	11/23/1999	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV131	Shell Solar Industries, formerly Siemens Solar	SM20	20W Powermax Module	18.0	11/23/1999	current
PV132	Shell Solar Industries, formerly Siemens Solar	SM46	46W PowerMax Module	41.5	11/23/1999	current
PV133	Shell Solar Industries, formerly Siemens Solar	SM46J	46W PowerMax Module w/conduit-ready J-box	41.5	11/23/1999	current
PV134	Shell Solar Industries, formerly Siemens Solar	SM50	50W PowerMax Module	45.0	11/23/1999	current
PV135	Shell Solar Industries, formerly Siemens Solar	SM50-H	50W 33 cell Powermax module	45.1	11/23/1999	current
PV136	Shell Solar Industries, formerly Siemens Solar	SM50-HJ	50W 33 cell PowerMax Module w/ conduit-ready J-box	45.1	11/23/1999	current
PV137	Shell Solar Industries, formerly Siemens Solar	SM50-J	50W PowerMax Module w/ conduit-ready J-box	45.0	11/23/1999	current
PV138	Shell Solar Industries, formerly Siemens Solar	SM55	55W PowerMax module	49.6	11/23/1999	current
PV139	Shell Solar Industries, formerly Siemens Solar	SM55-J	55W PowerMax Module w/conduit-ready J-box	49.6	11/23/1999	current
PV140	Shell Solar Industries, formerly Siemens Solar	SM6	6 W PowerMax Module	5.4	11/23/1999	current
PV141	Shell Solar Industries, formerly Siemens Solar	SP130-24P	130W 24V PowerMax Module	116.7	5/11/2001	current
PV141a	Shell Solar Industries, formerly Siemens Solar	SP130-PC	130W PowerMax Mono-crystalline module with cable assembly	116.6	12/20/2002	current
PV142	Shell Solar Industries, formerly Siemens Solar	SP140-24P	140W 24V PowerMax Module	125.8	5/11/2001	current
PV142a	Shell Solar Industries, formerly Siemens Solar	SP140-PC	140W PowerMax mono-crystalline module with cable assembly	125.8	12/20/2002	current
PV143	Shell Solar Industries, formerly Siemens Solar	SP150-24P	150W 24V PowerMax Module	134.9	5/11/2001	current
PV143a	Shell Solar Industries, formerly Siemens Solar	SP150-PC	150W PowerMax mono-crystalline module with cable assembly	134.9	12/20/2002	current
PV144	Shell Solar Industries, formerly Siemens Solar	SP18	18W 6V/12V PowerMax Module	16.2	11/23/1999	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV145	Shell Solar Industries, formerly Siemens Solar	SP36	36W 6V/12V PowerMax Module	32.4	11/23/1999	current
PV146	Shell Solar Industries, formerly Siemens Solar	SP65	65W 6V/12V PowerMax Module	58.4	11/23/1999	current
PV147	Shell Solar Industries, formerly Siemens Solar	SP70	70W 6V/12V PowerMax Module	62.9	11/23/1999	current
PV148	Shell Solar Industries, formerly Siemens Solar	SP75	75W 6V/12V PowerMax Module	67.5	11/23/1999	current
PV148	Shell Solar	SQ140-P	140W PowerMax monocrystalline module	123.4	6/19/2003	current
PV148a	Shell Solar	SQ140-PC	140W PowerMax monocrystalline module with Multicontact cable assembly	123.4	6/19/2003	current
PV148b	Shell Solar	SQ150-P	150W PowerMax monocrystalline module	132.5	6/19/2003	current
PV148c	Shell Solar	SQ150-PC	150W PowerMax monocrystalline module with Multicontact cable assembly	132.5	6/19/2003	current
PV148d	Shell Solar	SQ160-P	160W PowerMax Monocrystalline Module	141.5	8/4/2003	current
PV148e	Shell Solar	SQ160-PC	160W PowerMax Monocrystalline Module w/Multicontact cable assembly	141.5	8/4/2003	current
PV148ea	Shell Solar Industries	SQ165-P	165W PowerMax monocrystalline module	149.1	6/28/2004	current
PV148eb	Shell Solar Industries	SQ165-PC	165W PowerMax monocrystalline module with Multicontact cable assembly	149.1	6/28/2004	current
PV148ec	Shell Solar Industries	SQ175-P	175W PowerMax monocrystalline module	158.3	6/28/2004	current
PV148ed	Shell Solar Industries	SQ175-PC	175W PowerMax monocrystalline module with Multicontact cable assembly	158.3	6/28/2004	current
PV148f	Shell Solar	SQ70	70W PowerMax monocrystalline module	61.8	6/19/2003	current
PV148g	Shell Solar	SQ75	75W PowerMax monocrystalline module	66.3	6/19/2003	current
PV148h	Shell Solar	SQ80	80W PowerMax Monocrystalline Module	70.8	8/4/2003	current
PV148ha	Shell Solar Industries	SQ80-P	80W PowerMax monocrystalline module	72.3	6/28/2004	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV148hb	Shell Solar Industries	SQ85-P	85W PowerMax monocrystalline module	76.9	6/28/2004	current
PV149	Shell Solar Industries, formerly Siemens Solar	SR100	100W 6V/12V PowerMax Module	89.9	11/23/1999	current
PV150	Shell Solar Industries, formerly Siemens Solar	SR50	50W 6V/12V PowerMax Module	44.9	11/23/1999	current
PV151	Shell Solar Industries, formerly Siemens Solar	SR90	90W 6V/12V PowerMax Module	80.8	11/23/1999	current
PV152a	Shell Solar Industries, formerly Siemens Solar	ST36	36W 12V PowerMax Module	31.7	1/24/2002	current
PV153a	Shell Solar Industries, formerly Siemens Solar	ST40	40W 12V PowerMax Module	35.3	1/24/2002	current
PV172a	Solar Integrated Technologies	SR2001A	816W Flat Plate Single-Ply Roofing Membrane	771.6	6/28/2004	current
PV172b	Solar Integrated Technologies	SR2004	1488W Flat Plate Single-Ply Roofing Membrane	1407	8/30/2004	current
PV172c	Solar Integrated Technologies	SR2004A	744W Flat Plate Single-Ply Roofing Membrane	703.5	8/30/2004	current
PV172d	Solar Integrated Technologies	SR372	372W Flat Plate Single-Ply Roofing Membrane	351.7	8/30/2004	current
PV173	Solec International, Inc.	S-055	55W Framed Crystalline Solar Electric Module	47.7	11/23/1999	current
PV174	Solec International, Inc.	S-100D	100W Dual Voltage Crystalline Solar Electric Module	86.5	11/23/1999	current
PV175	Solec International, Inc.	SQ-080	80W Framed Crystalline Solar Electric Module	68.9	11/23/1999	current
PV176	Solec International, Inc.	SQ-090	90W Framed Crystalline Solar Electric Module	77.8	11/23/1999	current
PV176_1a	Spire Solar Chicago	SS75	75W Rail Mounted Monocrystalline Module	66.7	1/23/2004	current
PV176_1b	Spire Solar Chicago	SSC 75	75W Rail Mounted Monocrystalline Module x	66.7	1/23/2004	current
PV176_1c	Sunpower Corporation	SPR-200	200W Monocrystalline Module	180	11/5/2004	current
PV176_1d	Sunpower Corporation	SPR-210	210W Monocrystalline Module	190.9	11/5/2004	current
PV176_1e	Sunpower Corporation	SPR-90	90W Monocrystalline Module	81.8	11/5/2004	current
PV176a	SunWize	SW 100	100W Monocrystalline PV Module	87.1	9/3/2003	current
PV176b	SunWize	SW 110	110W Monocrystalline PV Module	96.0	9/3/2003	current
PV176c	SunWize	SW 115	115W Monocrystalline PV Module	100.5	9/3/2003	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV176d	SunWize	SW 120	120W Monocrystalline PV Module	105.0	9/3/2003	current
PV176da	SunWize Technologies, LLC	SW 150L	150W Monocrystalline PV module	130.5	8/30/2004	current
PV176db	SunWize Technologies, LLC	SW 155L	155W Monocrystalline PV module	134.9	8/30/2004	current
PV176dc	SunWize Technologies, LLC	SW 160L	160W Monocrystalline PV module	139.4	8/30/2004	current
PV176dd	SunWize Technologies, LLC	SW 165L	165W Monocrystalline PV module	143.9	8/30/2004	current
PV176e	SunWize	SW 75	75W Monocrystalline PV Module	65.1	9/3/2003	current
PV176f	SunWize	SW 85	85W Monocrystalline PV Module	73.9	9/3/2003	current
PV176g	SunWize	SW 90	90W Monocrystalline PV Module	78.4	9/3/2003	current
PV176h	SunWize	SW 95	95W Monocrystalline PV Module	82.8	9/3/2003	current
PV177	United Solar Systems Corp.	ASR-120	120W Arch. Standing Seam 3J a-Si Module	110.9	11/23/1999	current
PV178	United Solar Systems Corp.	ASR-128	128W Arch. Standing Seam 3J a-Si Module	118.3	11/23/1999	current
PV178a	United Solar Systems Corp.	ASR-136	136W Arch. Standing Seam 3J a-Si Module	130	4/15/2004	current
PV179	United Solar Systems Corp.	ASR-60	60W Arch. Standing Seam 3J a-Si Module	55.4	11/23/1999	current
PV180	United Solar Systems Corp.	ASR-64	64W Arch. Standing Seam 3J a-Si Module	59.1	11/23/1999	current
PV180_1a	United Solar Systems Corp.	ASR-68	68W Arch. Standing Seam 3J a-Si Module	65	4/15/2004	current
PV180_1b	United Solar Systems Corp.	ES-116	116W a-Si Module with Black Anodized Frame	109.8	8/30/2004	current
PV180_1c	United Solar Systems Corp.	ES-124	124W a-Si Module with Black Anodized Frame	117.4	8/30/2004	current
PV180_1d	United Solar Systems Corp.	ES-58	58W a-Si Module with Black Anodized Frame	54.9	8/30/2004	current
PV180_1e	United Solar Systems Corp.	ES-62T	62W a-Si Module with Black Anodized Frame	58.7	8/30/2004	current
PV180a	United Solar Systems Corp.	PVL-116(DM)	116W Field Applied 3J a-Si Laminate, Deck-Mounted	107.4	3/22/2002	current
PV180b	United Solar Systems Corp.	PVL-116(PM)	116W Field Applied 3J a-Si Laminate, Purlin-Mounted	109.9	3/22/2002	current
PV180ba	United Solar Systems Corp.	PVL-124	124W Field Applied 3J a-Si Laminate	118.5	4/15/2004	current
PV181	United Solar Systems Corp.	PVL-128(DM)	128W Field Applied 3J a-Si Laminate, Deck-Mounted	118.4	10/18/2000	current
PV182	United Solar Systems Corp.	PVL-128(PM)	128W Field Applied 3J a-Si Laminate, Purlin-Mounted	121.2	10/18/2000	current
PV182_1a	United Solar Systems Corp.	PVL-136	136W Field Applied 3J a-Si Laminate	130	4/15/2004	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV182a	United Solar Systems Corp.	PVL-29(DM)	29W Field Applied 3J a-Si Laminate, Deck Mounted	26.9	3/22/2002	current
PV182b	United Solar Systems Corp.	PVL-29(PM)	29W Field Applied 3J a-Si Laminate, Purlin-Mounted	27.5	3/22/2002	current
PV182ba	United Solar Systems Corp.	PVL-31	31W Field Applied 3J a-Si Laminate	29.6	4/15/2004	current
PV182c	United Solar Systems Corp.	PVL-58(DM)	58W Field Applied 3J a-Si Laminate, Deck Mounted	53.7	3/22/2002	current
PV182d	United Solar Systems Corp.	PVL-58(PM)	58W Field Applied 3J a-Si Laminate, Purlin-Mounted	55.0	3/22/2002	current
PV182e	United Solar Systems Corp.	PVL-62	62W Field Applied 3J a-Si Laminate	59.3	4/15/2004	current
PV183	United Solar Systems Corp.	PVL-64(DM)	64W Field Applied 3J a-Si Laminate, Deck-Mounted	59.2	10/18/2000	current
PV184	United Solar Systems Corp.	PVL-64(PM)	64W Field Applied 3J a-Si Laminate, Purlin-Mounted	60.6	10/18/2000	current
PV184_1a	United Solar Systems Corp.	PVL-68	68W Field Applied 3J a-Si Laminate	65	4/15/2004	current
PV184a	United Solar Systems Corp.	PVL-87(DM)	87W Field Applied 3J a-Si Laminate, Deck-Mounted	80.6	3/22/2002	current
PV184b	United Solar Systems Corp.	PVL-87(PM)	87W Field Applied 3J a-Si Laminate, Purlin-Mounted	82.5	3/22/2002	current
PV184c	United Solar Systems Corp.	PVL-93	93W Field Applied 3J a-Si Laminate	88.9	4/15/2004	current
PV184d	United Solar Systems Corp.	PVR10T	62W a-Si Roof Module	59.3	4/15/2004	current
PV184e	United Solar Systems Corp.	PVR15T	93W a-Si Roof Module	88.9	4/15/2004	current
PV184f	United Solar Systems Corp.	PVR20T	124W a-Si Roof Module	118.5	4/15/2004	current
PV184g	United Solar Systems Corp.	PVR5T	31W a-Si Roof Module	29.6	4/15/2004	current
PV184h	United Solar Systems Corp.	SFS-11L-10	10-68W Structural Standing Seam 3J a-Si Module	650	4/15/2004	current
PV184i	United Solar Systems Corp.	SFS-11L-11	11-68W Structural Standing Seam 3J a-Si Module	715	4/15/2004	current
PV184j	United Solar Systems Corp.	SFS-11L-12	12-68W Structural Standing Seam 3J a-Si Module	780	4/15/2004	current
PV184k	United Solar Systems Corp.	SFS-22L-10	10-136W Structural Standing Seam 3J a-Si Module	1300	4/15/2004	current
PV184l	United Solar Systems Corp.	SFS-22L-11	11-136W Structural Standing Seam 3J a-Si Module	1430	4/15/2004	current
PV184m	United Solar Systems Corp.	SFS-22L-12	12-136W Structural Standing Seam 3J a-Si Module	1560	4/15/2004	current
PV185	United Solar Systems Corp.	SHR-15	15W Shingle 3J a-Si Module	13.9	11/23/1999	current
PV186	United Solar Systems Corp.	SHR-17	17W Shingle 3J a-Si Module	15.7	11/23/1999	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV187	United Solar Systems Corp.	SSR-120	120W Structural Standing Seam 3J a-Si Module	113.5	11/23/1999	current
PV188	United Solar Systems Corp.	SSR-120(DM)	120W Structural Standing Seam 3J a-Si Module, Deck-Mounted	110.9	10/18/2000	current
PV189	United Solar Systems Corp.	SSR-120J	120W Structural Standing Seam 3J a-Si Module w/J-box	113.5	11/23/1999	current
PV190	United Solar Systems Corp.	SSR-120J(DM)	120W Structural Standing Seam 3J a-Si Module w/J-box, Deck-Mounted	110.9	10/18/2000	current
PV191	United Solar Systems Corp.	SSR-128	128W Structural Standing Seam 3J a-Si Module	121.1	11/23/1999	current
PV192	United Solar Systems Corp.	SSR-128(DM)	128W Structural Standing Seam 3J a-Si Module, Deck-Mounted	118.3	10/18/2000	current
PV193	United Solar Systems Corp.	SSR-128J	128W Structural Standing Seam 3J a-Si Module w/J-box	121.1	11/23/1999	current
PV194	United Solar Systems Corp.	SSR-128J(DM)	128W Structural Standing Seam 3J a-Si Module w/J-box, Deck-Mounted	118.3	10/18/2000	current
PV194a	United Solar Systems Corp.	SSR-136	136W Structural Standing Seam 3J a-Si Module	130	4/15/2004	current
PV195	United Solar Systems Corp.	SSR-60	60W Structural Standing Seam 3J a-Si Module	56.8	11/23/1999	current
PV196	United Solar Systems Corp.	SSR-60(DM)	60W Structural Standing Seam 3J a-Si Module, Deck-Mounted	55.4	10/18/2000	current
PV197	United Solar Systems Corp.	SSR-60J	60W Structural Standing Seam 3J a-Si Module w/J-box	56.8	11/23/1999	current
PV198	United Solar Systems Corp.	SSR-60J(DM)	60W Structural Standing Seam 3J a-Si Module w/J-box, Deck-Mounted	55.4	10/18/2000	current
PV199	United Solar Systems Corp.	SSR-64	64W Structural Standing Seam 3J a-Si Module	60.6	11/23/1999	current
PV200	United Solar Systems Corp.	SSR-64(DM)	64W Structural Standing Seam 3J a-Si Module, Deck-Mounted	59.1	10/18/2000	current
PV201	United Solar Systems Corp.	SSR-64J	64W Structural Standing Seam 3J a-Si Module w/J-box	60.6	11/23/1999	current
PV202	United Solar Systems Corp.	SSR-64J(DM)	64W Structural Standing Seam 3J a-Si Module w/J-box, Deck-Mounted	59.1	10/18/2000	current
PV202_1a	United Solar Systems Corp.	SSR-68	68W Structural Standing Seam 3J a-Si Module	65	4/15/2004	current
PV202a	United Solar Systems Corp.	US-116	116W Framed Triple-Junction a-Si Module	109.9	3/22/2002	current

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CEC Certification #	Make	Module Model Number	Description	PTC Rating (watts)	Begin Certified	End Certified
PV203	United Solar Systems Corp.	US-32	32W Framed Triple-Junction a-Si Module	30.3	11/23/1999	current
PV204	United Solar Systems Corp.	US-39	39W Framed Triple-Junction a-Si Module	36.9	11/23/1999	current
PV205	United Solar Systems Corp.	US-42	42W Framed Triple-Junction a-Si Module	39.8	11/23/1999	current
PV206	United Solar Systems Corp.	US-60	60W Framed Triple-Junction a-Si Module	56.8	11/23/1999	current
PV207	United Solar Systems Corp.	US-64	64W Framed Triple-Junction a-Si Module	60.6	11/23/1999	current
PV208	Webel-SL Energy Systems	W1000-100	100W Monocrystalline PV Module	87.1	9/3/2003	current
PV209	Webel-SL Energy Systems	W1000-110	110W Monocrystalline PV Module	96.0	9/3/2003	current
PV210	Webel-SL Energy Systems	W1000-115	115W Monocrystalline PV Module	100.5	9/3/2003	current
PV211	Webel-SL Energy Systems	W1000-120	120W Monocrystalline PV Module	105.0	9/3/2003	current
PV211a	Webel-SL Energy Systems	W1600-150	150W Monocrystalline PV module	130.5	8/30/2004	current
PV211b	Webel-SL Energy Systems	W1600-155	155W Monocrystalline PV module	134.9	8/30/2004	current
PV211c	Webel-SL Energy Systems	W1600-160	160W Monocrystalline PV module	139.4	8/30/2004	current
PV211d	Webel-SL Energy Systems	W1600-165	165W Monocrystalline PV module	143.9	8/30/2004	current
PV212	Webel-SL Energy Systems	W900-75	75W Monocrystalline PV Module	65.1	9/3/2003	current
PV213	Webel-SL Energy Systems	W900-80	80W Monocrystalline PV Module	69.5	9/3/2003	current
PV214	Webel-SL Energy Systems	W900-85	85W Monocrystalline PV Module	73.9	9/3/2003	current
PV215	Webel-SL Energy Systems	W900-90	90W Monocrystalline PV Module	78.4	9/3/2003	current