

Required q'ty of optimizers for repowering (single-phase PV inverters, 54 models)

No	Manufacturer	Product / Type	Model	Power	No. of modules	No. of MPPT	Ref. Module (per 1 MPPT)	Minimum qty of optimizer			Average (per kWh)	Annual (30%) kWh	Annual (30%) kWh
								2500w module	3000w module	3750w module			
1	Diamond Zebra (former: Tabuchi Elec.)	Single phase 5.5kW Hybrid inverter	EHF-S55MP3B	5.5KW	3	3	2,200	9	8	6	2,530	759	228
2	Diamond Zebra (former: Tabuchi Elec.)	Single phase 8.0kW Hybrid inverter	EHF-S80MP4B	8.0KW	4	4	2,400	10	8	7	2,760	828	248
3	Diamond Zebra (former: Tabuchi Elec.)	Single phase 9.9kW Hybrid inverter	EHF-S99MP5B	9.9KW	5	5	2,400	10	8	7	2,760	828	248
4	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 4.0kW inverter	EPC-S40MP2-L	4.0KW	2	2	2,400	10	8	7	2,760	828	248
5	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 4.9kW inverter	EPC-S49MP3-L	4.9KW	3	3	2,000	8	7	6	2,300	690	207
6	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 5.5kW inverter	EPC-A-S55P	5.5KW	3	3	2,200	9	8	6	2,530	759	228
7	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 5.5kW inverter	EPC-S55MP3-L	5.5KW	3	3	2,200	9	8	6	2,530	759	228
8	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 5.5kW inverter (4MPPT)	EPC-S55MP4-L	5.5KW	4	4	1,650	7	6	5	1,898	569	171
9	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 9.9kW inverter	EPC-S99MP5-L	9.9KW	5	5	2,400	10	8	7	2,760	828	248
10	Diamond Zebra (former: Tabuchi Elec.)	(End of sale) Single phase 9.9kW inverter (horizontal)	EPC-S99MP5-CL	9.9KW	5	5	2,400	10	8	7	2,760	828	248
11	Omron	Single phase 5.5kW inverter (no off-grid function)	KPV-A55-J4/SJ4	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
12	Omron	Single phase 4.8kW inverter	KPW-A48-J4	4.8KW	4	1	5,760	24	20	16	6,624	1,987	596
13	Omron	Single phase 5.5kW inverter	KPW-A55-J4/SJ4	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
14	Omron	Single phase 4.8kW inverter (4MPPT)	KPR-A48-J4	4.8KW	4	4	1,440	6	5	4	1,656	497	149
15	Omron	Single phase 5.6kW inverter (4MPPT)	KPR-A56-J4	5.6KW	4	4	1,680	7	6	5	1,932	580	174
16	Omron	Single phase 4kW inverter (indoor)	KPK-A40	4KW	1	1	4,800	20	16	13	5,520	1,656	497
17	Omron	Single phase 5.5kW inverter (indoor)	KPK-A55	5.5KW	1	1	6,600	27	22	18	7,590	2,277	683
18	Omron	Single phase 5.5kW inverter (master) for self-consumption	KPW-A55-2PJ4/2SPJ4	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
19	Omron	Single phase 5.5kW inverter (slave) for self-consumption	KPW-A55-2J4/2SJ4	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
20	Omron	(End of sale) Single phase 4.4kW inverter	KP44M2	4.4KW	1	1	5,280	22	18	15	6,072	1,822	546
21	Omron	(End of sale) Single phase 5.5kW inverter	KP55M2	5.5KW	1	1	6,600	27	22	18	7,590	2,277	683
22	Omron	(End of sale) Single phase 4.4kW inverter	KP44M2-J4/SJ4	4.4KW	4	1	5,280	22	18	15	6,072	1,822	546
23	Omron	(End of sale) Single phase 5.5kW inverter	KP55M2-J4/SJ4	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
24	Omron	(End of sale) Single phase 4.4kW inverter	KP44M2-PJ4	4.4KW	4	1	5,280	22	18	15	6,072	1,822	546
25	Omron	(End of sale) Single phase 5.5kW inverter	KP55M2-PJ4	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
26	Omron	(End of sale) Single phase 4.8kW inverter (3MPPT)	KP48R-J3-A	4.8KW	3	3	1,920	8	7	6	2,208	662	199
27	Omron	(End of sale) Single phase 5.9kW inverter (4MPPT)	KP59R-J4-A	5.9KW	4	4	1,770	8	6	5	2,036	611	183
28	Panasonic	Single phase 3.0kW inverter (indoor)	VBPC230NC2	3.0KW	1	1	3,600	15	12	10	4,140	1,242	373
29	Panasonic	Single phase 4.4kW inverter (4MPPT)	VBPC244GM2	4.4KW	4	4	1,320	6	5	4	1,518	455	137
30	Panasonic	Single phase 5.5kW inverter (4MPPT)	VBPC255GM2	5.5KW	4	4	1,650	7	6	5	1,898	569	171
31	Panasonic	Single phase 5.5kW inverter	VBPC255GS2	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
32	Panasonic	(End of sale) Single phase 5.5kW inverter	VBPC255GC1	5.5KW	4	1	6,600	27	22	18	7,590	2,277	683
33	Sanyo Denki	Single phase 5.5kW inverter	P61B552S-JCA201	5.5KW	4	2	3,300	14	11	9	3,795	1,139	342
34	Sanyo Denki	(End of sale) Single phase 5.0kW inverter	P61B502S-JCA001	5.0KW	4	2	3,000	12	10	8	3,450	1,035	311
35	SMA	(End of sale) Single phase 3.5kW inverter	SB3500TL-JP-22	3.5KW	4	2	2,100	9	7	6	2,415	725	217
36	SMA	(End of sale) Single phase 4.5kW inverter	SB4500TL-JP-22	4.5KW	4	2	2,700	11	9	8	3,105	932	279
37	SMA	(End of sale) Single phase 5.4kW inverter	SB5400TL-JP-22	5.4KW	4	2	3,240	13	11	9	3,726	1,118	335
38	SMA	(End of sale) Single phase 5.5kW inverter	SB5.5LV-JP-41	5.5KW	4	2	3,300	14	11	9	3,795	1,139	342
39	Huawei	Single phase 4.95kW inverter (no off-grid function)	SUN2000-4.95KTL-NHL2	4.95KW	4	2	3,000	12	10	8	3,450	1,035	311
40	Huawei	Single phase 4.95kW inverter	SUN2000-4.95KTL-JPL1	4.95KW	4	2	3,000	12	10	8	3,450	1,035	311
41	Huawei	(End of sale) Single phase 4.125kW inverter	SUN2000L-4.125KTL-JP	4.125KW	2	2	2,500	10	9	7	2,875	863	259
42	Huawei	(End of sale) Single phase 4.95kW inverter	SUN2000L-4.95KTL-JP	4.95KW	2	2	3,000	12	10	8	3,450	1,035	311
43	Huawei	(End of sale) Single phase 4.95kW inverter	SUN2000-4.95KTL-JPL0	4.95KW	4	2	3,000	12	10	8	3,450	1,035	311
44	Delta Elec.	Single phase 4.0kW inverter	H4J_220	4.0KW	2	2	2,400	10	8	7	2,760	828	248
45	Delta Elec.	Single phase 4.5kW inverter	H4.5J_230	4.5KW	3	3	1,800	8	6	5	2,070	621	186
46	Delta Elec.	Single phase 5.5kW inverter	H5.5J_221	5.5KW	4	2	3,300	14	11	9	3,795	1,139	342
47	Delta Elec.	Single phase 5.5kW inverter	H5.5J_230	5.5KW	3	3	2,400	10	8	7	2,760	828	248
48	Delta Elec.	Single phase 5.9kW inverter	H6J_240	5.9KW	4	4	1,800	8	6	5	2,070	621	186
49	Delta Elec.	Single phase 9.9kW inverter	RPI H10J	9.9KW	6	6	2,000	8	7	6	2,300	690	207
50	Delta Elec.	(End of sale) Single phase 4kW inverter	RPLJH4J(P)	4KW	2	2	2,400	10	8	7	2,760	828	248
51	Delta Elec.	(End of sale) Single phase 4.5kW inverter	RPLJH5.5J(P)	4.5KW	3	3	1,800	8	6	5	2,070	621	186
52	Delta Elec.	(End of sale) Single phase 5.5kW inverter	RPLJH5.5J(P)	5.5KW	3	3	2,200	9	8	6	2,530	759	228
53	Delta Elec.	(End of sale) Single phase 5.5kW inverter (no off-grid function)	H5.5J_223	5.5KW	4	2	3,300	14	11	9	3,795	1,139	342
54	Delta Elec.	(End of sale) Single phase 5.9kW inverter	RPIH6J(P)	5.9KW	4	4	1,770	8	6	5	2,036	611	183