



Courtesy Fronius USA

Single- and 3-Phase String Inverter Specifications

Compiled by Joe Schwartz

Updated for 2017, *SolarPro's* string-inverter dataset includes 158 single- and 3-phase string inverter models from 16 manufacturers. A Nationally Recognized Testing Laboratory (NRTL) has listed all the products in the table to the UL 1741 standard. All of the manufacturers represented maintain one or more established US sales and technical support offices.

The technical evolution of string inverters has been fascinating to watch in recent years. The gains in efficiency, design flexibility and installability have been nothing short of impressive. A few years back, not many integrators would have imagined a 7.6 kWac single-phase inverter with a CEC efficiency of 99% that weighs 25 pounds, or a 125 kWac 3-phase string inverter certified for 1,500 Vdc applications that, at 143 pounds, is light enough for two installers to lift and mount. Today, the range of applications for string inverters stretches from small residential systems to multimewatt PV plants. ⊕

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Manufacturers

- ABB / 877.261.1374 / abb.com/solarinverters
- Chint Power Systems / 855.584.7168 / chintpower.com/na
- Delta / 510.668.5100 / delta-americas.com
- Fronius USA / 877.376.6487 / fronius-usa.com
- Ginlong Solis / 866.438.8408 / ginlong-usa.com
- Growatt / 818.800.9177 / growatt-america.com
- HiQ Solar / 408.970.9580 / hiqsolar.com
- Huawei / 214.919.6000 / huawei.com/solar
- Ingeteam / 408.524.2929 / ingetteam.com
- KACO new energy / 415.931.2046 / kaco-newenergy.com
- Pika Energy / 207.887.9105 / pikaenergy.com
- Schneider Electric / 888.778.2733 / schneider-electric.com
- SMA America / 916.625.0870 / sma-america.com
- SolarEdge Technologies / 877.360.5292 / solaredge.us
- Sungrow USA / 510.656.1259 / en.sungrowpower.com
- Yaskawa-Solectria Solar / 978.683.9700 / solectria.com

2017 Single- and 3-Phase String Inverter Specifications

Manufacturer	Model	Topology	Input Data (dc)					
			Max. recommended PV power at STC (W)	Maximum open-circuit voltage	PV start voltage	Operating voltage range	No. MPP trackers	MPPT voltage range
ABB	UNO-2.0-I-OUTD-S-US-A	isolated	2,100	520	200 ²	90-520	1	170-470
ABB	UNO-2.5-I-OUTD-S-US-A	isolated	2,600	520	200 ²	90-520	1	200-470
ABB	UNO-7.6-TL-OUTD-S-US-A	non-isolated	DNR	600	200 ²	90-580	2	165-480
ABB	UNO-8.6-TL-OUTD-S-US-A	non-isolated	DNR	600	200 ²	90-580	2	185-480
ABB	PVI-3.0-TL-OUTD-S-US-A	non-isolated	3,500	600	200 ²	90-580	2	160-530
ABB	PVI-3.6-TL-OUTD-S-US-A	non-isolated	4,150	600	200 ²	90-580	2	120-530
ABB	PVI-3.8-TL-OUTD-S-US-A	non-isolated	DNR	600	200 ²	90-580	2	140-530
ABB	PVI-4.2-TL-OUTD-S-US-A	non-isolated	4,820	600	200 ²	90-580	2	140-530
ABB	PVI-5000-TL-OUTD-US-A	non-isolated	5,300	600	200 ²	90-580	2	145-530
ABB	PVI-6000-TL-OUTD-US-A	non-isolated	6,400	600	200 ²	90-580	2	175-530
ABB	TRIO-20.0-TL-OUTD-S1-US-480-A	non-isolated	22,000	1,000	360 ²	200-950	2	450-800
ABB	TRIO-27.6-TL-OUTD-S1-US-480-A	non-isolated	30,000	1,000	360 ²	200-950	2	520-800
ABB	TRIO-50.0-TL-OUTD	non-isolated	DNR	1,000	360 ²	250-950	1	520-800
Chint Power Systems	CPS SC14KTL-DO/US-208	non-isolated	19,000	600	300	180-580	2	300-540
Chint Power Systems	CPS SC20KTL-DO/US-480	non-isolated	27,000	600	300	260-580	2	300-550
Chint Power Systems	CPS SCA23KTL-DO/US-480	non-isolated	31,000	1,000	330	300-900	2	480-800
Chint Power Systems	CPS SCA28KTL-DO/US-480	non-isolated	38,000	1,000	330	300-900	2	500-800
Chint Power Systems	CPS SCA36KTL-DO/US-480	non-isolated	54,000	1,000	330	240-950	2	540-800
Chint Power Systems	CPS SCA50KTL-DO/US-480	non-isolated	75,000	1,000	330	200-950	3	480-850
Chint Power Systems	CPS SCA60KTL-DO/US-480	non-isolated	90,000	1,000	330	200-950	3	540-850
Delta	SOLIVA 3.0 TL	non-isolated	3,600	600	120	120-550	1	200-500
Delta	SOLIVA 3.8 TL	non-isolated	4,560	600	120	120-550	1	200-500
Delta	SOLIVA 5.2 TL	non-isolated	6,240	600	120	120-550	2	200-500
Delta	SOLIVA 6.6 TL	non-isolated	7,920	600	120	120-550	2	200-500
Delta	SOLIVA 7.6 TL	non-isolated	9,120	600	120	120-550	2	200-500
Delta	RPI H7U	non-isolated	8,400	500	35	30-500	4	160-470/185-470
Delta	15kW TL	non-isolated	18,000	1,000	DNR	130-1,000	2	450-900
Delta	20kW TL	non-isolated	24,000	1,000	DNR	130-1,000	2	500-900
Delta	24kW TL	non-isolated	28,800	1,000	DNR	130-1,000	2	550-900
Delta	28kW TL	non-isolated	33,600	1,000	DNR	130-1,000	2	550-900
Delta	M80U	non-isolated	106,000	1,000	250	200-1,000	2	600-800
Fronius USA	Galvo 1.5-1	isolated	2,400	420	140	120-420	1	120-335
Fronius USA	Galvo 2.0-1	isolated	3,200	420	140	120-420	1	120-335
Fronius USA	Galvo 2.5-1	isolated	3,800	550	185	165-550	1	165-440
Fronius USA	Galvo 3.1-1	isolated	4,500	550	185	165-550	1	165-440
Fronius USA	Primo 3.8-1	non-isolated	6,000	600	80	80-600	2	200-480
Fronius USA	Primo 5.0-1	non-isolated	7,800	600	80	80-600	2	240-480
Fronius USA	Primo 6.0-1	non-isolated	9,300	600	80	80-600	2	240-480
Fronius USA	Primo 7.6-1	non-isolated	11,700	600	80	80-600	2	250-480
Fronius USA	Primo 8.2-1	non-isolated	12,700	600	80	80-600	2	270-480

Footnote Key

¹ Per MPP tracker

² Default, adjustable

³ Wiring boxes available in multiple product variants

⁴ Fused string input, terminal block and MC4 connector wiring box options

⁵ MPPT 1/MPPT 2

⁶ Connector approved as load-break disconnect

⁷ Supplies PV power at < 550 Vdc

⁸ With optional PSD disconnect

⁹ PV Link S2501 subarray optimizer specification

¹⁰ Nominal dc-input voltage

¹¹ String-level MPP tracking

¹² DC disconnect dimensions: 11.7 x 7.3 x 7.5 in.

¹³ DC disconnect weight: 8 lbs.

¹⁴ With SMA Connection Unit 1000-US

¹⁵ 570–800 @ 400 Vac

¹⁶ 98% CEC efficiency @ 400 Vac

¹⁷ Module-level MPP tracking

¹⁸ -40–140°F version available

DNR = Did not report

			Output Data (ac)				Operation	
Max. number dc source circuits	Max. usable input current ¹	Max. short-circuit current	Rated power (W)	Nominal output voltage	Number of phases	Max. output current	CEC-weighted efficiency (%)	Ambient temp. range (°F)
2	12.5	15	2,000	208/240/277	1	10	95.5	-13–140
2	12.8	15	2,500	208/240/277	1	12	95.5/96/96	-13–140
4	2 x 24	2 x 30	7,600	208/240/277	1	36.5/32/27.5	96.5	-13–140
4	2 x 24	2 x 30	8,600	240/277	1	36/31	96.5	-13–140
4	2 x 10	2 x 12.5	3,000	208/240/277	1	14.5/14.5/12	96	-13–140
4	2 x 16	2 x 20	3,600	208/240/277	1	17.2/16/16	96	-13–140
4	2 x 16	2 x 20	3,800	208/240/277	1	16	96	-13–140
4	2 x 16	2 x 20	4,200	208/240/277	1	20	96	-13–140
4	2 x 18	2 x 22	5,000	208/240/277	1	27/23/20	96/96.5/96.5	-13–140
4	2 x 18	2 x 22	6,000	208/240/277	1	30/28/24	96/96.5/96.5	-13–140
8	2 x 25	2 x 30	20,000	480	3	27	97.5	-22–140
8	2 x 30.9	2 x 36	27,600	480	3	36	97.5	-22–140
2, 12, 16	1 x 100	144	50,000	480	3	61	98	-13–140
8	2 x 25	2 x 45	14,000	208	3	39	96	-13–140
8	2 x 35	2 x 45.5	20,000	480	3	24	97	-13–140
8	2 x 25	2 x 41	23,000	480	3	27.7	98	-22–140
8	2 x 29	2 x 48	28,000	480	3	33.7	98	-22–140
8, 10	2 x 35	125	36,000	480	3	43.5	98	-22–140
15	3 x 36	3 x 50	50,000	480	3	60	98.5	-22–140
15	3 x 38	3 x 60	60,000	480	3	72	98.5	-22–140
2	18	24	3,000	208/240	1	15.6	97.5	-13–158
2	20	24	3,800	208/240	1	19.7	97.5	-13–158
4	2 x 15	2 x 24	5,200	208/240	1	27	97.5	-13–158
4	2 x 18	2 x 24	6,600	208/240	1	34.3	97.5	-13–158
4	2 x 20	2 x 24	7,600	208/240	1	39.6	97.5	-13–158
4	4 x 10	4 x 13.9	6,000/7,000	208/240	1	28.8/29.1	97	-13–140
6	2 x 18.5	2 x 23	15,000	277/480	3	20	98	-13–158
6	2 x 22	2 x 27	20,000	277/480	3	26	98	-13–158
6	2 x 24.2	2 x 29	24,000	277/480	3	30	98	-13–158
6	2 x 28.3	2 x 34	28,000	277/480	3	34	98	-13–158
16 ⁴	2 x 70	DNR	80,000	480	3	100	98.5	-13–140
3	13.4	16.7	1,500	208/240	1	7.2/6.3	94/94.5	-40–122
3	17/17.9	22.4	2,000	208/240	1	9.1/8.3	94.5	-40–122
3	16.1	20.1	2,500	208/240	1	12/10.4	95	-40–122
3	18.7/20	25	3,100	208/240	1	14.1/12.9	95.5	-40–122
4	2 x 18	2 x 22.5	3,800	208/240	1	18.3/15.8	95	-40–131
4	2 x 18	2 x 22.5	5,000	208/240	1	24/20.8	95.5	-40–131
4	2 x 18	2 x 22.5	6,000	208/240	1	28.8/25	96	-40–131
4	2 x 18	2 x 22.5	7,600	208/240	1	36.5/31.7	96	-40–131
4	2 x 18	2 x 22.5	7,900/8,200	208/240	1	38/34.2	96.5	-40–131

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Manufacturer	Model	Integrated Disconnects and Combiners				Mechanical				Listing and Warranty	
		DC disconnect standard	AC disconnect standard	Fused combiner standard	Arc-fault protection	Cooling method	Enclosure NEMA rating	Dimensions H x W x D (in.)	Weight (lbs.)	Listing agency	Warranty std./ext. (yrs.)
ABB	UNO-2.0-I-OUTD-S-US-A	yes ³	no	no ³	yes ³	passive	4X	30.3 x 14.4 x 6.3	43	CSA	10/15, 20
ABB	UNO-2.5-I-OUTD-S-US-A	yes ³	no	no ³	yes ³	passive	4X	30.3 x 14.4 x 6.3	43	CSA	10/15, 20
ABB	UNO-7.6-TL-OUTD-S-US-A	yes ³	no	no ³	yes ³	passive	4X	29.3 x 22.9 x 8.8	82	CSA	10/15, 20
ABB	UNO-8.6-TL-OUTD-S-US-A	yes ³	no	no ³	yes ³	passive	4X	29.3 x 22.9 x 8.8	82	CSA	10/15, 20
ABB	PVI-3.0-TL-OUTD-S-US-A	yes ³	no	yes ³	yes ³	passive	4X	33.8 x 12.8 x 8.7	47	CSA	10/15, 20
ABB	PVI-3.6-TL-OUTD-S-US-A	yes ³	no	yes ³	yes ³	passive	4X	33.8 x 12.8 x 8.7	47	CSA	10/15, 20
ABB	PVI-3.8-TL-OUTD-S-US-A	yes ³	no	yes ³	yes ³	passive	4X	33.8 x 12.8 x 8.7	47	CSA	10/15, 20
ABB	PVI-4.2-TL-OUTD-S-US-A	yes ³	no	yes ³	yes ³	passive	4X	33.8 x 12.8 x 8.7	47	CSA	10/15, 20
ABB	PVI-5000-TL-OUTD-US-A	yes ³	no	yes ³	yes ³	passive	4X	41.4 x 12.8 x 8.6	60	CSA	10/15, 20
ABB	PVI-6000-TL-OUTD-US-A	yes ³	no	yes ³	yes ³	passive	4X	41.4 x 12.8 x 8.6	60	CSA	10/15, 20
ABB	TRIO-20.0-TL-OUTD-S1-US-480-A	yes ³	no	yes ³	yes ³	passive	4X	41.7 x 27.6 x 11.5	157	CSA	10/15, 20
ABB	TRIO-27.6-TL-OUTD-S1-US-480-A	yes ³	no	yes ³	yes ³	passive	4X	41.7 x 27.6 x 11.5	168	CSA	10/15, 20
ABB	TRIO-50.0-TL-OUTD	yes ³	yes ³	yes ³	yes ³	active	4X	28.5 x 58.7 x 12.4	209	TUV	10/15, 20
Chint Power Systems	CPS SC14KTL-DO/US-208	yes	yes	yes	yes	active	4X	41.6 x 21.4 x 8.5	141	ETL	10/15, 20
Chint Power Systems	CPS SC20KTL-DO/US-480	yes	yes	yes	yes	active	4X	41.6 x 21.4 x 8.5	141	ETL	10/15, 20
Chint Power Systems	CPS SCA23KTL-DO/US-480	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 9.1	122	CSA	10/15, 20
Chint Power Systems	CPS SCA28KTL-DO/US-480	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 9.1	122	CSA	10/15, 20
Chint Power Systems	CPS SCA36KTL-DO/US-480	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 9.1	145	CSA	10/15, 20
Chint Power Systems	CPS SCA50KTL-DO/US-480	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 10.2	157	CSA	10/15, 20
Chint Power Systems	CPS SCA60KTL-DO/US-480	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 10.2	157	CSA	10/15, 20
Delta	SOLIVIA 3.0 TL	yes	no	yes	yes	passive	4	17.5 x 15.8 x 8.5	43	UL	10/15, 20
Delta	SOLIVIA 3.8 TL	yes	no	yes	yes	passive	4	17.5 x 15.8 x 8.5	43	UL	10/15, 20
Delta	SOLIVIA 5.2 TL	yes	no	yes	yes	passive	4	26.8 x 15.8 x 8.5	65	UL	10/15, 20
Delta	SOLIVIA 6.6 TL	yes	no	yes	yes	passive	4	26.8 x 15.8 x 8.5	65	UL	10/15, 20
Delta	SOLIVIA 7.6 TL	yes	no	yes	yes	passive	4	26.8 x 15.8 x 8.5	65	UL	10/15, 20
Delta	RPI H7U	yes	no	no	yes	passive	4X	23.3 x 20.1 x 6.9	60	ETL	10
Delta	15kW TL	yes	no	yes	yes	passive	4X	29.5 x 21.7 x 9.5	110	UL	10/15, 20
Delta	20kW TL	yes	no	yes	yes	passive	4X	29.5 x 21.7 x 9.5	110	UL	10/15, 20
Delta	24kW TL	yes	no	yes	yes	active	4X	29.5 x 21.7 x 9.5	110	UL	10/15, 20
Delta	28kW TL	yes	no	yes	yes	active	4X	29.5 x 21.7 x 9.5	110	UL	10/15, 20
Delta	M80U	option ⁴	no	option ⁴	yes	active	4X	35.4 x 24.2 x 10.8	181 ⁴	ETL	10/15, 20
Fronius USA	Galvo 1.5-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	36	CSA	10/15, 20
Fronius USA	Galvo 2.0-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	36	CSA	10/15, 20
Fronius USA	Galvo 2.5-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	37	CSA	10/15, 20
Fronius USA	Galvo 3.1-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	37	CSA	10/15, 20
Fronius USA	Primo 3.8-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	47	CSA	10/15, 20
Fronius USA	Primo 5.0-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	47	CSA	10/15, 20
Fronius USA	Primo 6.0-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	47	CSA	10/15, 20
Fronius USA	Primo 7.6-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	47	CSA	10/15, 20
Fronius USA	Primo 8.2-1	yes	no	no	yes	active	4X	24.7 x 16.9 x 8.1	47	CSA	10/15, 20

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2017 Single- and 3-Phase String Inverter Specifications

Manufacturer	Model	Topology	Input Data (dc)					
			Max. recommended PV power at STC (W)	Maximum open-circuit voltage	PV start voltage	Operating voltage range	No. MPP trackers	MPPT voltage range
Fronius USA	Primo 10.0-1	non-isolated	12,000	600	80	80–600	2	220–480
Fronius USA	Primo 11.4-1	non-isolated	13,700	600	80	80–600	2	240–480
Fronius USA	Primo 12.5-1	non-isolated	15,000	600	80	80–600	2	260–480
Fronius USA	Primo 15.0-1	non-isolated	18,000	600	80	80–600	2	320–480
Fronius USA	Symo 10.0-3 208/240	non-isolated	13,000	600	200	200–600	2	300–500
Fronius USA	Symo 12.0-3 208/240	non-isolated	15,500	600	200	200–600	2	300–500
Fronius USA	Symo 10.0-3 480	non-isolated	13,000	1,000	200	200–1,000	2	300–800
Fronius USA	Symo 12.5-3 480	non-isolated	16,000	1,000	200	200–1,000	2	350–800
Fronius USA	Symo 15.0-3 280	non-isolated	19,500	1,000	325	325–1,000	1	325–850
Fronius USA	Symo 15.0-3 480	non-isolated	19,500	1,000	200	200–1,000	2	350–800
Fronius USA	Symo 17.5-3 480	non-isolated	23,000	1,000	200	200–1,000	2	400–800
Fronius USA	Symo 20.0-3 480	non-isolated	26,000	1,000	200	200–1,000	2	450–800
Fronius USA	Symo 22.7-3 480	non-isolated	29,500	1,000	200	200–1,000	2	500–800
Fronius USA	Symo 24.0-3 480	non-isolated	31,000	1,000	200	200–1,000	2	500–800
Ginlong Solis	Solis-2.5K-2G-US	non-isolated	2,900	600	120	100–500	2	125–500
Ginlong Solis	Solis-3K-2G-US	non-isolated	3,500	600	120	100–500	2	150–500
Ginlong Solis	Solis-3.6K-2G-US	non-isolated	4,200	600	120	100–500	2	180–500
Ginlong Solis	Solis-4K-2G-US	non-isolated	4,600	600	120	100–500	2	145–500
Ginlong Solis	Solis-4.6K-2G-US	non-isolated	5,300	600	120	100–500	2	165–500
Ginlong Solis	Solis-5K-2G-US	non-isolated	5,800	600	120	100–500	2	180–500
Ginlong Solis	Solis-1P6K-3G-US	non-isolated	6,900	600	120	100–500	3	200–500
Ginlong Solis	Solis-1P7K-3G-US	non-isolated	8,000	600	120	100–500	3	233–500
Ginlong Solis	Solis-1P7.6K-3G-US	non-isolated	8,700	600	120	100–500	3	190–500
Ginlong Solis	Solis-1P8K-3G-US	non-isolated	9,200	600	120	100–500	4	200–500
Ginlong Solis	Solis-1P9K-3G-US	non-isolated	10,400	600	120	100–500	4	200–500
Ginlong Solis	Solis-1P10K-3G-US	non-isolated	11,500	600	120	100–500	4	250–500
Ginlong Solis	Solis-6K-US ⁶	non-isolated	7,200	1,000	330	200–980	2	200–800
Ginlong Solis	Solis-10K-US ⁶	non-isolated	12,000	1,000	330	200–980	2	200–800
Ginlong Solis	Solis-15K-US	non-isolated	18,000	1,000	330	200–980	2	200–800
Ginlong Solis	Solis-20K-US	non-isolated	24,000	1,000	330	200–980	2	200–800
Ginlong Solis	Solis-25K-US	non-isolated	30,000	1,000	330	200–980	4	200–800
Ginlong Solis	Solis-30K-US	non-isolated	36,000	1,000	330	200–980	4	200–800
Ginlong Solis	Solis-36K-US	non-isolated	43,200	1,000	330	200–980	4	200–800
Ginlong Solis	Solis-40K-US	non-isolated	48,000	1,000	330	200–980	4	200–800
Growatt	4000 MTLP-US	non-isolated	DNR	600	150	100–600	2	120–500
Growatt	5000 MTLP-US	non-isolated	DNR	600	150	100–600	2	120–500
Growatt	6000 MTLP-US	non-isolated	DNR	600	150	100–600	2	120–500
Growatt	7000 MTLP-US	non-isolated	DNR	600	150	100–600	2	120–500
Growatt	7600 MTLP-US	non-isolated	DNR	600	150	100–600	2	120–500
Growatt	8000 MTLP-US	non-isolated	DNR	600	140	100–600	3	110–480

Footnote Key

¹ Per MPP tracker

² Default, adjustable

³ Wiring boxes available in multiple product variants

⁴ Fused string input, terminal block and MC4 connector wiring box options

⁵ MPPT 1/MPPT 2

⁶ Connector approved as load-break disconnect

⁷ Supplies PV power at < 550 Vdc

⁸ With optional PSD disconnect

⁹ PV Link S2501 subarray optimizer specification

¹⁰ Nominal dc-input voltage

¹¹ String-level MPP tracking

¹² DC disconnect dimensions: 11.7 x 7.3 x 7.5 in.

¹³ DC disconnect weight: 8 lbs.

¹⁴ With SMA Connection Unit 1000-US

¹⁵ 570–800 @ 400 Vac

¹⁶ 98% CEC efficiency @ 400 Vac

¹⁷ Module-level MPP tracking

¹⁸ -40–140°F version available

DNR = Did not report

			Output Data (ac)				Operation	
Max. number dc source circuits	Max. usable input current ¹	Max. short-circuit current	Rated power (W)	Nominal output voltage	Number of phases	Max. output current	CEC-weighted efficiency (%)	Ambient temp. range (°F)
6	33/18 ⁵	41.3/22.5 ⁵	9,995	208/240	1	48.1/41.6	96	-40–140
6	33/18 ⁵	41.3/22.5 ⁵	11,400	208/240	1	54.8/47.5	96	-40–140
6	33/18 ⁵	41.3/22.5 ⁵	12,500	208/240	1	60.1/52.1	96	-40–140
6	33/18 ⁵	41.3/22.5 ⁵	13,750/15,000	208/240	1	66.1/62.5	96.5	-40–140
6	25/16.5 ⁵	37.5/24.8 ⁵	9,995	208/240	3	27.7/24	96.5	-40–140
6	25/16.5 ⁵	37.5/24.8 ⁵	11,995	208/240	3	33.3/28.9	96.5	-40–140
6	25/16.5 ⁵	37.5/24.8 ⁵	9,995	480	3	12	96.5	-40–140
6	25/16.5 ⁵	37.5/24.8 ⁵	12,495	480	3	15	97	-40–140
6	50	75	15,000	208	3	41.6	96.5	-40–140
6	33/25 ⁵	49.5/37.5 ⁵	14,995	480	3	18	97	-40–140
6	33/25 ⁵	49.5/37.5 ⁵	17,495	480	3	21	97.5	-40–140
6	33/25 ⁵	49.5/37.5 ⁵	19,995	480	3	24	97.5	-40–140
6	33/25 ⁵	49.5/37.5 ⁵	22,727	480	3	27.3	97.5	-40–140
6	33/25 ⁵	49.5/37.5 ⁵	23,995	480	3	28.9	97.5	-40–140
2	10/10 ⁵	2 x 15.6	2,500	208/240	1	13.3	96.5	-13–140
2	10/10 ⁵	2 x 15.6	3,000	208/240	1	15.7	96.5	-13–140
2	10/10 ⁵	2 x 15.6	3,600	208/240	1	16	96.5	-13–140
2	10/18 ⁵	15.6/23.4 ⁵	4,000	208/240	1	21	97	-13–140
3	10/18 ⁵	15.6/23.4 ⁵	4,600	208/240	1	23.8	97	-13–140
3	10/18 ⁵	15.6/23.4 ⁵	5,000	208/240	1	23.8	97	-13–140
3	3 x 10	3 x 15.6	6,000	208/240	1	31.7	97	-13–140
3	3 x 10	3 x 15.6	7,000	208/240	1	37	97	-13–140
3	3 x 10	3 x 15.6	7,600	208/240	1	40.1	97	-13–140
4	4 x 10	4 x 15.6	8,000	208/240	1	42.3	97	-13–140
4	4 x 10	4 x 15.6	9,000	208/240	1	47.6	97	-13–140
4	4 x 10	4 x 15.6	10,000	208/240	1	45.9	97	-13–140
4	2 x 15	2 x 23.4	6,000	480	3	10	96.5	-13–140
4	2 x 18	2 x 23.4	10,000	480	3	16.7	96.5	-13–140
4	2 x 18	2 x 28	15,000	480	3	25.1	97.3	-13–140
4	2 x 18	2 x 28	20,000	480	3	30.4	97.3	-13–140
8	4 x 18	DNR	25,000	480	3	33.3	97.5	-13–140
8	4 x 18	DNR	30,000	480	3	39.7	97.5	-13–140
8	4 x 18	DNR	36,000	480	3	47.8	97.5	-13–140
8	4 x 18	DNR	40,000	480	3	53	97.5	-13–140
4	2 x 18	42	4,000	208/240/277	1	16.7	96	-13–113
4	2 x 18	47	5,000	208/240/277	1	21	96.5	-13–113
4	2 x 18	56	6,000	208/240/277	1	25	96.5	-13–113
4	2 x 20	47	7,000	208/240/277	1	29	97	-13–113
4	2 x 20	47	7,600	208/240/277	1	31.7	97	-13–113
4	9.5/9.5/19 ⁵	DNR	8,000	208/240	1	33.5	97	-13–140

2017 Single- and 3-Phase String Inverter Specifications

Manufacturer	Model	Integrated Disconnects and Combiners				Mechanical				Listing and Warranty	
		DC disconnect standard	AC disconnect standard	Fused combiner standard	Arc-fault protection	Cooling method	Enclosure NEMA rating	Dimensions H x W x D (in.)	Weight (lbs.)	Listing agency	Warranty std./ext. (yrs.)
Fronius USA	Primo 10.0-1	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	83	CSA	10/15, 20
Fronius USA	Primo 11.4-1	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	83	CSA	10/15, 20
Fronius USA	Primo 12.5-1	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	83	CSA	10/15, 20
Fronius USA	Primo 15.0-1	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	83	CSA	10/15, 20
Fronius USA	Symo 10.0-3 208/240	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	92	CSA	10/15, 20
Fronius USA	Symo 12.0-3 208/240	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	92	CSA	10/15, 20
Fronius USA	Symo 10.0-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	77	CSA	10/15, 20
Fronius USA	Symo 12.5-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	77	CSA	10/15, 20
Fronius USA	Symo 15.0-3 280	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	78	CSA	10/15, 20
Fronius USA	Symo 15.0-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	96	CSA	10/15, 20
Fronius USA	Symo 17.5-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	96	CSA	10/15, 20
Fronius USA	Symo 20.0-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	96	CSA	10/15, 20
Fronius USA	Symo 22.7-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	96	CSA	10/15, 20
Fronius USA	Symo 24.0-3 480	yes	no	yes	yes	active	4X	28.5 x 20.1 x 8.9	96	CSA	10/15, 20
Ginlong Solis	Solis-2.5K-2G-US	yes	no	no	yes	passive	4X	25.9 x 13.3 x 6.5	33	ETL	10/15, 20
Ginlong Solis	Solis-3K-2G-US	yes	no	no	yes	passive	4X	25.9 x 13.3 x 6.5	33	ETL	10/15, 20
Ginlong Solis	Solis-3.6K-2G-US	yes	no	no	yes	passive	4X	25.9 x 13.3 x 6.5	33	ETL	10/15, 20
Ginlong Solis	Solis-4K-2G-US	yes	no	no	yes	passive	4X	25.9 x 13.3 x 6.5	39	ETL	10/15, 20
Ginlong Solis	Solis-4.6K-2G-US	yes	no	no	yes	passive	4X	25.9 x 13.3 x 6.5	39	ETL	10/15, 20
Ginlong Solis	Solis-5K-2G-US	yes	no	no	yes	passive	4X	25.9 x 13.3 x 6.5	39	ETL	10/15, 20
Ginlong Solis	Solis-1P6K-3G-US	yes	no	no	yes	passive	4X	22.4 x 13.3 x 9.3	34	ETL	10/15, 20
Ginlong Solis	Solis-1P7K-3G-US	yes	no	no	yes	passive	4X	22.4 x 13.3 x 9.3	34	ETL	10/15, 20
Ginlong Solis	Solis-1P7.6K-3G-US	yes	no	no	yes	passive	4X	22.4 x 13.3 x 9.3	34	ETL	10/15, 20
Ginlong Solis	Solis-1P8K-3G-US	yes	no	no	yes	passive	4X	22.4 x 13.3 x 9.3	40	ETL	10/15, 20
Ginlong Solis	Solis-1P9K-3G-US	yes	no	no	yes	passive	4X	22.4 x 13.3 x 9.3	40	ETL	10/15, 20
Ginlong Solis	Solis-1P10K-3G-US	yes	no	no	yes	passive	4X	22.4 x 13.3 x 9.3	40	ETL	10/15, 20
Ginlong Solis	Solis-6K-US ⁶	yes	no	no	option	passive	4X	26.1 x 16.9 x 9.3	64	ETL	10/15, 20
Ginlong Solis	Solis-10K-US ⁶	yes	no	no	option	passive	4X	26.1 x 16.9 x 9.3	64	ETL	10/15, 20
Ginlong Solis	Solis-15K-US	yes	no	no	option	passive	4X	26.1 x 16.9 x 9.3	71	ETL	10/15, 20
Ginlong Solis	Solis-20K-US	yes	no	no	option	passive	4X	26.1 x 16.9 x 9.3	71	ETL	10/15, 20
Ginlong Solis	Solis-25K-US	yes	no	no	option	passive	4X	27.9 x 20.9 x 14	130	ETL	10/15, 20
Ginlong Solis	Solis-30K-US	yes	no	no	option	passive	4X	27.9 x 20.9 x 14	130	ETL	10/15, 20
Ginlong Solis	Solis-36K-US	yes	no	no	option	passive	4X	27.9 x 20.9 x 14	130	ETL	10/15, 20
Ginlong Solis	Solis-40K-US	yes	no	no	option	passive	4X	27.9 x 20.9 x 14	130	ETL	10/15, 20
Growatt	4000 MTLP-US	yes	no	no	yes	passive	4X	28.7 x 15.8 x 8.5	69	ETL	5/10, 15
Growatt	5000 MTLP-US	yes	no	no	yes	passive	4X	28.7 x 15.8 x 8.5	69	ETL	5/10, 15
Growatt	6000 MTLP-US	yes	no	no	yes	passive	4X	28.7 x 15.8 x 8.5	71	ETL	5/10, 15
Growatt	7000 MTLP-US	yes	no	no	yes	passive	4X	28.7 x 15.8 x 8.5	71	ETL	5/10, 15
Growatt	7600 MTLP-US	yes	no	no	yes	passive	4X	28.7 x 15.8 x 8.5	71	ETL	5/10, 15
Growatt	8000 MTLP-US	yes	no	no	yes	passive	4X	27.3 x 14 x 8.3	66	ETL	5/10, 15

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2017 Single- and 3-Phase String Inverter Specifications

Manufacturer	Model	Topology	Input Data (dc)					
			Max. recommended PV power at STC (W)	Maximum open-circuit voltage	PV start voltage	Operating voltage range	No. MPP trackers	MPPT voltage range
Growatt	9000 MTLP-US	non-isolated	DNR	600	140	100-600	3	110-480
Growatt	10000 MTLP-US	non-isolated	DNR	600	140	100-600	3	110-480
Growatt	33000 TL3-US	non-isolated	41,250	1,000	250	200-1,000	2	480-800
Growatt	36000 TL3-US	non-isolated	45,000	1,000	250	200-1,000	2	520-800
Growatt	40000 TL3-US	non-isolated	50,000	1,000	250	200-1,000	2	570-800
HiQ Solar	TrueString TS208-5k75	non-isolated	12,000	1,000	200	200-850	2	325-525
HiQ Solar	TrueString TS480-8k	non-isolated	16,000	1,000	200	DNR	2	425-850
Huawei	SUN2000-25KTL-US	non-isolated	DNR	1,000	200	200-950	3	560-850
Huawei	SUN2000-30KTL-US	non-isolated	DNR	1,000	200	200-950	3	560-850
Huawei	SUN2000-33KTL-US	non-isolated	DNR	1,000	250	200-1,000	4	460-850
Huawei	SUN2000-36KTL-US	non-isolated	DNR	1,000	250	200-1,000	4	490-850
Huawei	SUN2000-40KTL-US	non-isolated	DNR	1,000	250	200-1,000	4	530-850
Huawei	SUN2000-45KTL-US-HV-DO	non-isolated	DNR	1,500	650	600-1,450	4	880-1,275
Ingeteam	INGECON SUN 3Play 24TL U M480	non-isolated	32,200	1,000	200	200-820	2	200-820
Ingeteam	INGECON SUN 3Play 40TL U M480	non-isolated	53,600	1,000	200	200-820	2	200-820
KACO new energy	2.0 TL1	non-isolated	DNR	600 ⁷	150	125-550	1	190-510
KACO new energy	3.0 TL1	non-isolated	DNR	600 ⁷	150	125-550	2	140-510
KACO new energy	4.0 TL1	non-isolated	DNR	600 ⁷	150	125-550	2	185-510
KACO new energy	5.0 TL1	non-isolated	DNR	600 ⁷	150	125-550	2	215-510
Pika Energy	X3001-NA	non-isolated	4,000	420 ⁹	60	380 ¹⁰	varies ¹¹	60-360 ⁹
Pika Energy	X7600	non-isolated	10,000	420 ⁹	60	380 ¹⁰	varies ¹¹	60-360 ⁹
Pika Energy	X11400	non-isolated	15,000	420 ⁹	60	380 ¹⁰	varies ¹¹	60-360 ⁹
Schneider Electric	CL18000 NA	non-isolated	22,800	1,000	DNR	250-1,000	2	300-800
Schneider Electric	CL25000 NA	non-isolated	31,800	1,000	DNR	250-1,000	2	500-800
SMA America	SB 3.0-US	non-isolated	DNR	600	125	100-550	2	155-480
SMA America	SB 3.8-US	non-isolated	DNR	600	125	100-550	2	195-480
SMA America	SB 5.0-US	non-isolated	DNR	600	125	100-550	3	220-480
SMA America	SB 6.0-US	non-isolated	DNR	600	125	100-550	3	220-480
SMA America	SB 7.0-US	non-isolated	DNR	600	125	100-550	3	245-480
SMA America	SB 7.7-US	non-isolated	DNR	600	125	100-550	3	270-480
SMA America	SB 3000TL-US	non-isolated	3,200	600	150	125-500	2	175-480
SMA America	SB 3800TL-US	non-isolated	4,200	600	150	125-500	2	175-480
SMA America	SB 4000TL-US	non-isolated	4,200	600	150	125-500	2	175-480
SMA America	SB 5000TL-US	non-isolated	5,300	600	150	125-500	2	175-480
SMA America	SB 6000TL-US	non-isolated	6,300	600	150	125-500	2	210-480
SMA America	SB 7000TL-US	non-isolated	7,300	600	150	125-500	2	245-480
SMA America	SB 7700TL-US	non-isolated	8,000	600	150	125-500	2	270-480
SMA America	SB 9000TL-US	non-isolated	11,250	600	360	DNR	1	300-480/345-480
SMA America	SB 10000TL-US	non-isolated	12,500	600	360	DNR	1	300-480/345-480
SMA America	SB 11000TL-US	non-isolated	3,750	600	360	DNR	1	345-480

Footnote Key

¹ Per MPP tracker

² Default, adjustable

³ Wiring boxes available in multiple product variants

⁴ Fused string input, terminal block and MC4 connector wiring box options

⁵ MPPT 1/MPPT 2

⁶ Connector approved as load-break disconnect

⁷ Supplies PV power at < 550 Vdc

⁸ With optional PSD disconnect

⁹ PV Link S2501 subarray optimizer specification

¹⁰ Nominal dc-input voltage

¹¹ String-level MPP tracking

¹² DC disconnect dimensions: 11.7 x 7.3 x 7.5 in.

¹³ DC disconnect weight: 8 lbs.

¹⁴ With SMA Connection Unit 1000-US

¹⁵ 570–800 @ 400 Vac

¹⁶ 98% CEC efficiency @ 400 Vac

¹⁷ Module-level MPP tracking

¹⁸ -40–140°F version available

DNR = Did not report

Max. number dc source circuits	Max. usable input current ¹	Max. short-circuit current	Output Data (ac)				Operation	
			Rated power (W)	Nominal output voltage	Number of phases	Max. output current	CEC-weighted efficiency (%)	Ambient temp. range (°F)
4	9.5/9.5/19 ⁵	DNR	9,000	208/240	1	37.5	97	-13–140
4	9.5/9.5/19 ⁵	DNR	10,000	208/240	1	42	97	-13–140
8	2 x 36	2 x 45	33,000	480	3	44	98.2	-13–140
8	2 x 36	2 x 45	36,000	480	3	48	98.2	-13–140
8	2 x 36	2 x 45	40,000	480	3	48	98.2	-13–140
2	2 x 10	30	5,750	208	3	16	97	-40–150
2	2 x 10	30	8,000	480	3	16	98	-40–150
6	3 x 25	DNR	25,000	277/480	3	33.1	98	-13–140
6	3 x 25	DNR	30,000	277/480	3	39.7	98	-13–140
8	3 x 22	3 x 30	33,300	277/480	3	40.1	98.5	-13–140
8	3 x 22	3 x 30	36,000	277/480	3	48.2	98.5	-13–140
8	3 x 22	3 x 30	40,000	277/480	3	53	98.5	-13–140
8	3 x 22	3 x 30	45,000	600	3	48.1	98.5	-13–140
4	2 x 27	DNR	24,000	480	3	29	98	-13–149
4	2 x 40	DNR	40,000	480	3	48	98	-13–149
1	11	13	2,000	208/240	1	9.7/8.3	96.5	-13–140
2	2 x 11	2 x 13.2	3,000	208/240	1	14.5/12.5	96.5	-13–140
2	2 x 11	2 x 13.2	4,000	208/240	1	19.2/16.7	96.5	-13–140
2	2 x 11	2 x 13.2	4,600/5,000	208/240	1	22/20	96.5	-13–140
varies ¹¹	13	DNR	3,000	240	1	13	96	-4–140
varies ¹¹	30	DNR	7,600	240	1	32	97	-4–122
varies ¹¹	30	DNR	11,400	208	3	32	97	-4–122
8	32	2 x 36	18,000	480	3	25	97.5	-13–140
8	26.5	2 x 36	25,000	480	3	33	98	-13–140
2	10	18	3,000	208/240	1	14.5/12.5	96.5/96.5	-13–140
2	10	18	3,330/3,800	208/240	1	16	96.6	-13–140
3	10	18	5,000	208/240	1	24	96.5/97	-13–140
3	10	18	5,200/6,000	208/240	1	25	96.5/97	-13–140
3	10	18	6,660/7,000	208/240	1	32/29.2	96.5/97	-13–140
3	10	18	6,660/7,680	208/240	1	32	96.5/97	-13–140
4	2 x 15	36	3,000	208/240	1	15	96.5	-40–140
4	2 x 15	36	3,330/3,840	208/240	1	16	96.5/97	-40–140
4	2 x 15	36	4,000	208/240	1	20	96.5/97	-40–140
4	2 x 15	36	4,550/5,000	208/240	1	22	96.5/97	-40–140
4	2 x 15	45	5,200/6,000	208/240	1	25	96.5/97	-40–140
4	2 x 18	45	6,000/7,000	208/240	1	29.2	96.5/97	-40–140
4	2 x 18	45	6,650/7,680	208/240	1	32	96.5/97	-40–140
6	31/27.1	45	9,000	208/240	1	43.3/37.5	98	-40–140
6	35/30.2	45	10,000	208/240	1	48.1/41.7	98	-40–140
6	33.3	45	11,000	240	1	45.8	98	-40–140

2017 Single- and 3-Phase String Inverter Specifications

Manufacturer	Model	Integrated Disconnects and Combiners				Mechanical				Listing and Warranty	
		DC disconnect standard	AC disconnect standard	Fused combiner standard	Arc-fault protection	Cooling method	Enclosure NEMA rating	Dimensions H x W x D (in.)	Weight (lbs.)	Listing agency	Warranty std./ext. (yrs.)
Growatt	9000 MTLP-US	yes	no	no	yes	passive	4X	27.3 x 14 x 8.3	66	ETL	5/10, 15
Growatt	10000 MTLP-US	yes	no	no	yes	passive	4X	27.3 x 14 x 8.3	66	ETL	5/10, 15
Growatt	33000 TL3-US	yes	yes	yes	option	active	4	31.1 x 17.1 x 10.4	110	ETL	10/15
Growatt	36000 TL3-US	yes	yes	yes	option	active	4	31.1 x 17.1 x 10.4	110	ETL	10/15
Growatt	40000 TL3-US	yes	yes	yes	option	active	4	31.1 x 17.1 x 10.4	110	ETL	10/15
HiQ Solar	TrueString TS208-5k75	yes ⁶	yes ⁶	no	yes	passive	6	18.7 x 13.2 x 3	24	MET	10/25
HiQ Solar	TrueString TS480-8k	yes ⁶	yes ⁶	no	yes	passive	6	18.7 x 13.2 x 3	24	MET	10/25
Huawei	SUN2000-25KTL-US	yes	no	no	yes	passive	4X	30.3 x 21.7 x 10.6	121	CSA	10/15, 20, 25
Huawei	SUN2000-30KTL-US	yes	no	no	yes	passive	4X	30.3 x 21.7 x 10.6	121	CSA	10/15, 20, 25
Huawei	SUN2000-33KTL-US	yes	no	no	yes	passive	4X	21.7 x 36.6 x 10.2	121	CSA	10/15, 20, 25
Huawei	SUN2000-36KTL-US	yes	no	no	yes	passive	4X	21.7 x 36.6 x 10.2	121	CSA	10/15, 20, 25
Huawei	SUN2000-40KTL-US	yes	no	no	yes	passive	4X	21.7 x 36.6 x 10.2	121	CSA	10/15, 20, 25
Huawei	SUN2000-45KTL-US-HV-DO	yes	no	no	yes	passive	4X	23.6 x 36.6 x 10.6	143	CSA	10/15, 20, 25
Ingeteam	INGECON SUN 3Play 24TL U M480	option	no	option	yes	active	4	28 x 29 x 10.5	129	ETL	10/15, 20
Ingeteam	INGECON SUN 3Play 40TL U M480	option	no	option	yes	active	4	28 x 29 x 10.5	138	ETL	10/15, 20
KACO new energy	2.0 TL1	option	no	option	yes	passive	3R	31.9 x 14.5 x 8.6 ⁸	45 ⁸	ETL	10/15, 20
KACO new energy	3.0 TL1	option	no	option	yes	passive	3R	31.9 x 14.5 x 8.6 ⁸	48 ⁸	ETL	10/15, 20
KACO new energy	4.0 TL1	option	no	option	yes	passive	3R	31.9 x 14.5 x 8.6 ⁸	48 ⁸	ETL	10/15, 20
KACO new energy	5.0 TL1	option	no	option	yes	passive	3R	31.9 x 14.5 x 8.6 ⁸	48 ⁸	ETL	10/15, 20
Pika Energy	X3001-NA	no	no	no	yes	passive	3R	15 x 15 x 6	26	ETL	5
Pika Energy	X7600	yes	no	yes	yes	active	3R	24.5 x 19.25 x 8	63	ETL	10/20
Pika Energy	X11400	yes	no	yes	yes	active	3R	24.5 x 19.25 x 8	63	ETL	10/20
Schneider Electric	CL18000 NA	option ³	no	option ³	option ³	active	3R	42.3 x 26.5 x 10.5	152	CSA	10
Schneider Electric	CL25000 NA	option ³	no	option ³	option ³	active	3R	42.3 x 26.5 x 10.5	152	CSA	10
SMA America	SB 3.0-US	yes	no	no	yes	passive	3R	28.5 x 21.1 x 7.8	57	UL	10/15, 20
SMA America	SB 3.8-US	yes	no	no	yes	passive	3R	28.5 x 21.1 x 7.8	57	UL	10/15, 20
SMA America	SB 5.0-US	yes	no	no	yes	passive	3R	28.5 x 21.1 x 7.8	57	UL	10/15, 20
SMA America	SB 6.0-US	yes	no	no	yes	passive	3R	28.5 x 21.1 x 7.8	57	UL	10/15, 20
SMA America	SB 7.0-US	yes	no	no	yes	active	3R	28.5 x 21.1 x 7.8	57	UL	10/15, 20
SMA America	SB 7.7-US	yes	no	no	yes	active	3R	28.5 x 21.1 x 7.8	57	UL	10/15, 20
SMA America	SB 3000TL-US	yes	no	no	yes	passive	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 3800TL-US	yes	no	no	yes	passive	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 4000TL-US	yes	no	no	yes	passive	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 5000TL-US	yes	no	no	yes	passive	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 6000TL-US	yes	no	no	yes	active	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 7000TL-US	yes	no	no	yes	active	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 7700TL-US	yes	no	no	yes	active	3R	20.5 x 19.3 x 7.3 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 9000TL-US	yes	no	no	yes	active	3R	24.1 x 18.4 x 9.5 ¹²	53 ¹³	UL	10/15, 20
SMA America	SB 10000TL-US	yes	no	no	yes	active	3R	24.1 x 18.4 x 9.5 ¹²	78 ¹³	UL	10/15, 20
SMA America	SB 11000TL-US	yes	no	no	yes	active	3R	24.1 x 18.4 x 9.5 ¹²	78 ¹³	UL	10/15, 20

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2017 Single- and 3-Phase String Inverter Specifications

Manufacturer	Model	Topology	Input Data (dc)					
			Max. recommended PV power at STC (W)	Maximum open-circuit voltage	PV start voltage	Operating voltage range	No. MPP trackers	MPPT voltage range
SMA America	STP 12000TL-US	non-isolated	15,000	1,000	188	150–1,000	2	300–800
SMA America	STP 15000TL-US	non-isolated	18,750	1,000	188	150–1,000	2	300–800
SMA America	STP 20000TL-US	non-isolated	25,000	1,000	188	150–1,000	2	300–800
SMA America	STP 24000TL-US	non-isolated	30,000	1,000	188	150–1,000	2	450–800
SMA America	STP 30000TL-US	non-isolated	DNR	1,000	188	150–1,000	2	500–800
SMA America	STP 60-10-US	non-isolated	DNR	1,000	DNR	DNR	1	685–800 ¹⁵
SolarEdge	SE3000H-US	non-isolated	4,650	480	varies ¹⁷	380 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE3800H-US	non-isolated	5,900	480	varies ¹⁷	380 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE5000H-US	non-isolated	7,750	480	varies ¹⁷	380 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE6000H-US	non-isolated	9,300	480	varies ¹⁷	380 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE7600H-US	non-isolated	11,800	480	varies ¹⁷	400 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE3000A-US	non-isolated	4,050	500	varies ¹⁷	350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE3800A-US	non-isolated	5,100	500	varies ¹⁷	350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE5000A-US	non-isolated	6,750	500	varies ¹⁷	325/350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE6000A-US	non-isolated	8,100	500	varies ¹⁷	350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE7600A-US	non-isolated	10,250	500	varies ¹⁷	350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE10000A-US	non-isolated	13,500	500	varies ¹⁷	325/350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE11400A-US	non-isolated	15,350	500	varies ¹⁷	350 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE9KUS	non-isolated	12,150	500	varies ¹⁷	400 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE10KUS	non-isolated	13,500	980	varies ¹⁷	840 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE14.4KUS	non-isolated	19,400	600	varies ¹⁷	400 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE20KUS	non-isolated	27,000	980	varies ¹⁷	840 ¹⁰	varies ¹⁷	varies ¹⁷
SolarEdge	SE33.3KUS	non-isolated	45,000	980	varies ¹⁷	840 ¹⁰	varies ¹⁷	varies ¹⁷
Sungrow USA	SG30KU	non-isolated	34,100	1,000	300	280–950	2	480–850
Sungrow USA	SG36KU	non-isolated	41,000	1,000	300	280–950	2	560–850
Sungrow USA	SG60KU-M	non-isolated	DNR	1,000	300	300–950	4	550–850
Sungrow USA	SG125HV	non-isolated	DNR	1,500	860	860–1,450	1	860–1,250
Yaskawa–Solectria	PVI 3800TL	non-isolated	4,580	600	150	120–550	1	200–500
Yaskawa–Solectria	PVI 5200TL	non-isolated	6,200	600	150	120–550	2	200–500
Yaskawa–Solectria	PVI 6600TL	non-isolated	8,000	600	150	120–550	2	200–500
Yaskawa–Solectria	PVI 7600TL	non-isolated	9,100	600	150	120–550	2	200–500
Yaskawa–Solectria	PVI 14TL	non-isolated	9,000	600	300	180–580	2	300–540
Yaskawa–Solectria	PVI 20TL	non-isolated	27,000	600	300	260–580	2	300–550
Yaskawa–Solectria	PVI 23TL	non-isolated	31,000	1,000	330	300–900	2	480–800
Yaskawa–Solectria	PVI 28TL	non-isolated	38,000	1,000	330	300–900	2	500–800
Yaskawa–Solectria	PVI 36TL	non-isolated	54,000	1,000	330	200–950	2	540–800
Yaskawa–Solectria	PVI 50TL	non-isolated	75,000	1,000	330	200–950	3	480–850
Yaskawa–Solectria	PVI 60TL	non-isolated	90,000	1,000	330	200–950	3	540–850

Footnote Key

¹ Per MPP tracker

² Default, adjustable

³ Wiring boxes available in multiple product variants

⁴ Fused string input, terminal block and MC4 connector wiring box options

⁵ MPPT 1/MPPT 2

⁶ Connector approved as load-break disconnect

⁷ Supplies PV power at < 550 Vdc

⁸ With optional PSD disconnect

⁹ PV Link S2501 subarray optimizer specification

¹⁰ Nominal dc-input voltage

¹¹ String-level MPP tracking

¹² DC disconnect dimensions: 11.7 x 7.3 x 7.5 in.

¹³ DC disconnect weight: 8 lbs.

¹⁴ With SMA Connection Unit 1000-US

¹⁵ 570–800 @ 400 Vac

¹⁶ 98% CEC efficiency @ 400 Vac

¹⁷ Module-level MPP tracking

¹⁸ -40–140°F version available

DNR = Did not report

Max. number dc source circuits	Max. usable input current ¹	Max. short-circuit current	Output Data (ac)				Operation	
			Rated power (W)	Nominal output voltage	Number of phases	Max. output current	CEC-weighted efficiency (%)	Ambient temp. range (°F)
8 ¹⁴	2 x 33	2 x 43	12,000	480	3	14.4	97.5	-13–140
8 ¹⁴	2 x 33	2 x 43	15,000	480	3	18	97.5	-13–140
8 ¹⁴	2 x 33	2 x 43	20,000	480	3	24	97.5	-13–140
8 ¹⁴	2 x 33	2 x 43	24,000	480	3	29	98	-13–140
8 ¹⁴	2 x 33	2 x 43	30,000	480	3	36.2	98	-13–140
1	110	150	60,000	480 ¹⁵	3	87	98.5 ¹⁶	-13–140
2	8.5	45	3,000	240	1	12.5	99	-13–140 ¹⁸
2	10.5	45	3,800	240	1	16	99	-13–140 ¹⁸
2	15.5/13.5	45	5,000	208/240	1	24/21	99	-13–140 ¹⁸
2	16.5	45	6,000	240	1	25	99	-13–140 ¹⁸
2	20	45	7,600	240	1	32	99	-13–140 ¹⁸
2	9.5	45	3,000	240	1	12.5	97.5	-13–140 ¹⁸
2	13	45	3,800	240	1	16	98	-13–140 ¹⁸
2	16.5/15.5	45	5,000	208/240	1	24/21	97.5/98	-13–140 ¹⁸
2	18	45	6,000	240	1	25	97.5	-13–140 ¹⁸
2	23	45	7,600	240	1	32	97.5	-13–140 ¹⁸
2	33/30.5	45	9,980/10,000	208/240	1	48/42	97/97.5	-13–140 ¹⁸
2	34.5	45	11,400	240	1	47.5	97.5	-13–140 ¹⁸
2	26.5	45	9,000	208	3	25	96.5	-40–140
2	13.5	45	10,000	480	3	12	98	-40–140
3	38	45	14,400	208	3	40	97	-40–140
2	26.5	45	20,000	480	3	24	98	-40–140
3	40	45	33,300	480	3	40	98.5	-40–140
10	2 x 33	2 x 40	30,000	480	3	40	98	-13–140
10	2 x 33	2 x 40	36,000	480	3	48	98	-13–140
16	DNR	200	60,000	480	3	80	98.5	-13–140
DNR	150	DNR	125,000	600	3	120	98.5	-13–140
2	20	DNR	3,300/3,800	208/240	1	15.8	97.5	-13–122
4	2 x 15	DNR	5,200	208/240	1	25/21.6	97.5	-13–122
4	2 x 18	DNR	6,600	208/240	1	31.7/27.5	97.5	-13–122
4	2 x 20	DNR	6,600/7,600	208/240	1	31.7	97.5	-13–122
8	2 x 25	2 x 45	14,000	208	3	39	96	-13–122
8	2 x 35	2 x 45.5	20,000	480	3	25.5	97	-13–122
8	2 x 25	2 x 41	23,000	480	3	27.7	98	-13–122
8	2 x 29	2 x 48	28,000	480	3	33.7	98	-13–122
8	2 x 35	2 x 50	36,000	480	3	43.5	98	-13–122
15	3 x 36	3 x 50	50,000	480	3	61	98.5	-22–140
15	3 x 38	3 x 60	60,000	480	3	73	98.5	-22–140

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Manufacturer	Model	Integrated Disconnects and Combiners				Mechanical				Listing and Warranty	
		DC disconnect standard	AC disconnect standard	Fused combiner standard	Arc-fault protection	Cooling method	Enclosure NEMA rating	Dimensions H x W x D (in.)	Weight (lbs.)	Listing agency	Warranty std./ext. (yrs.)
SMA America	STP 12000TL-US	option ¹⁴	no	option ¹⁴	yes	active	3R	25.6 x 26.2 x 10.4	121	UL	10/15, 20
SMA America	STP 15000TL-US	option ¹⁴	no	option ¹⁴	yes	active	3R	25.6 x 26.2 x 10.4	121	UL	10/15, 20
SMA America	STP 20000TL-US	option ¹⁴	no	option ¹⁴	yes	active	3R	25.6 x 26.2 x 10.4	121	UL	10/15, 20
SMA America	STP 24000TL-US	option ¹⁴	no	option ¹⁴	yes	active	3R	25.6 x 26.2 x 10.4	121	UL	10/15, 20
SMA America	STP 30000TL-US	option ¹⁴	no	option ¹⁴	yes	active	3R	25.6 x 26.2 x 10.4	121	UL	10/15, 20
SMA America	STP 60-10-US	option	no	option	no	active	3R	29.1 x 22.2 x 11.8	165	ETL	5/10, 15, 20
SolarEdge	SE3000H-US	yes	yes	no	yes	passive	3R	17.7 x 14.6 x 6.8	25	ETL	12/20, 25
SolarEdge	SE3800H-US	yes	yes	no	yes	passive	3R	17.7 x 14.6 x 6.8	25	ETL	12/20, 25
SolarEdge	SE5000H-US	yes	yes	no	yes	passive	3R	17.7 x 14.6 x 6.8	25	ETL	12/20, 25
SolarEdge	SE6000H-US	yes	yes	no	yes	passive	3R	17.7 x 14.6 x 6.8	25	ETL	12/20, 25
SolarEdge	SE7600H-US	yes	yes	no	yes	passive	3R	17.7 x 14.6 x 6.8	25	ETL	12/20, 25
SolarEdge	SE3000A-US	yes	yes	no	yes	passive	3R	30.5 x 12.5 x 7.2	51	ETL	12/20, 25
SolarEdge	SE3800A-US	yes	yes	no	yes	passive	3R	30.5 x 12.5 x 7.2	51	ETL	12/20, 25
SolarEdge	SE5000A-US	yes	yes	no	yes	passive	3R	30.5 x 12.5 x 7.2	55	ETL	12/20, 25
SolarEdge	SE6000A-US	yes	yes	no	yes	passive	3R	30.5 x 12.5 x 7.2	55	ETL	12/20, 25
SolarEdge	SE7600A-US	yes	yes	no	yes	active	3R	30.5 x 12.5 x 10.5	55	ETL	12/20, 25
SolarEdge	SE10000A-US	yes	yes	no	yes	active	3R	30.5 x 12.5 x 10.5	88	ETL	12/20, 25
SolarEdge	SE11400A-US	yes	yes	no	yes	active	3R	30.5 x 12.5 x 10.5	88	ETL	12/20, 25
SolarEdge	SE9KUS	yes	yes	no	yes	active	3R	30.5 x 12.5 x 10.5	80	ETL	12/20, 25
SolarEdge	SE10KUS	yes	yes	no	yes	active	3R	30.5 x 12.5 x 10.5	80	ETL	12/20, 25
SolarEdge	SE14.4KUS	yes	yes	yes	yes	active	3R	30.5 x 12.5 x 10.5	106	ETL	12/20, 25
SolarEdge	SE20KUS	yes	yes	no	yes	active	3R	30.5 x 12.5 x 10.5	80	ETL	12/20, 25
SolarEdge	SE33.3KUS	yes	yes	yes	yes	active	3R	30.5 x 12.5 x 10.5	106	ETL	12/20, 25
Sungrow USA	SG30KU	yes	option	yes	yes	active	4X	34.6 x 25 x 9.8	143	CSA	10/15, 20
Sungrow USA	SG36KU	yes	option	yes	yes	active	4X	34.6 x 25 x 9.8	143	CSA	10/15, 20
Sungrow USA	SG60KU-M	yes	yes	yes	yes	active	4X	36 x 26.2 x 10.9	154	CSA	10/15, 20
Sungrow USA	SG125HV	yes	yes	yes	yes	active	4X	30.3 x 27.2 x 12.6	143	CSA	10/15, 20
Yaskawa–Solectria	PVI 3800TL	yes	no	yes	yes	passive	4	17.5 x 15.8 x 8.5	43	ETL	10
Yaskawa–Solectria	PVI 5200TL	yes	no	yes	yes	passive	4	26.8 x 15.8 x 8.5	65	CSA	10
Yaskawa–Solectria	PVI 6600TL	yes	no	yes	yes	passive	4	26.8 x 15.8 x 8.5	65	CSA	10
Yaskawa–Solectria	PVI 7600TL	yes	no	yes	yes	passive	4	26.8 x 15.8 x 8.5	65	CSA	10
Yaskawa–Solectria	PVI 14TL	yes	yes	yes	yes	active	4	41.6 x 21.4 x 8.5	141	ETL	10/15, 20
Yaskawa–Solectria	PVI 20TL	yes	yes	yes	yes	active	4	41.6 x 21.4 x 8.5	132	ETL	10/15, 20
Yaskawa–Solectria	PVI 23TL	yes	yes	yes	yes	active	4	39.4 x 23.6 x 9.1	104	CSA	10/15, 20
Yaskawa–Solectria	PVI 28TL	yes	yes	yes	yes	active	4	39.4 x 23.6 x 9.1	104	CSA	10/15, 20
Yaskawa–Solectria	PVI 36TL	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 9.1	121	CSA	10/15, 20
Yaskawa–Solectria	PVI 50TL	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 10.2	157	CSA	10/15, 20
Yaskawa–Solectria	PVI 60TL	yes	yes	yes	yes	active	4X	39.4 x 23.6 x 10.2	157	CSA	10/15, 20