

What a Solar Inverter *aspires* to be



Thea Energy specializes in renewable energy solutions, particularly solar technology.

We have a 30-year history in manufacturing reliable solar inverters and launching global brands like Kaco New Energy in India.

We are known for our Grid-Tied Solar Inverters tailored to Indian conditions and plan to expand into energy storage solutions, including hybrid inverters, Li-ion batteries, and EV chargers. We also contribute to India's Renewable Energy roadmap and operate a carbon-neutral production facility powered by solar energy.

SE-TH02 30kW (Three Phase) SE-TH01 40kW, 50kW, 60kW (Three Phase) For Large Scale Applications



SUPERIOR PERFORMANCE

- Maximum Efficiency of 98.6%
- String current of 16A/20A, compatible with 210 mm PV modules
- 150% PV configuration and 110% output overload



HIGH RELIABILITY

- IP66 protection level for outdoor installation
- Integrated Type II DC/AC SPD
- High Quality components used



INTELLIGENT MAINTENANCE

- Quick commissioning via mobile app
- Remote configuration and upgrade
- String level current detection
- Power Export Control supported.

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Branches: Mumbai | Bangalore | Bhopal | Chennai



SE-TH02 30kW (Three Phase)

SE-TH01 40kW, 50kW, 60kW (Three Phase)

Model	30.0TL3		40.0TL3		50.0TL3		60.0TL3	
Efficiency								
Max Efficiency	98.5%						98.6%	
European Efficiency	98.0%				97.9%		98.0%	
Input (PV)								
Max. Input Voltage	1,100V							
Max. PV Configuration (STC)	150%							
Rated Input Voltage	620V							
Max. Input Current	40A + 2*32A				40A + 3*32A			
Max. Short Circuit Current	50A + 2*45A				50A + 3*45A			
Start Input Voltage	200V							
MPPT Operating Voltage Range	180V-1000V							
Max. Number of PV Strings	2/2/2				2/2/2/2			
No. of MPPTs	3				4			
Output (Grid)								
Rated AC Active Power	30,000W		40,000W		50,000W		60,000W	
Max. AC Apparent Power	33,400VA		44,500VA		55,600VA		66,700VA	
Max. AC Output Current	3*51A		3*67.5A		3*84.3A		3*92A	
Rated AC Voltage	380V / 400V / 415V, 3P+N+PE							
AC Voltage Range①	320V-520V (Adjustable)							
Rated Grid Frequency	50Hz / 60Hz							
Grid Frequency Range②	45Hz-55Hz / 55Hz-65Hz (Adjustable)							
THDI	<3%@Rated Power							
DC Current Injection	<0.5%@Rated Current							
Power Factor	>0.99 Rated power (Adjustable 0.8 LD - 0.8 LG)							
Protection								
DC Switch	Support							
Anti-Islanding Protection	Support							
AC Overcurrent Protection	Support							
AC Short Circuit Protection	Support							
DC Reverse Connection	Support							
Surge Arrester	AC Type II / DC Type II							
Insulation Resistance Detection	Support							
Leakage Current Protection	Support							
General								
Topology	Transformerless							
IP Rating	IP66							
Night Self Consumption	<5W							
Cooling	Natural Cooling		Fan Cooling					
Operating Temperature Range	-25°C to 60°C							
Relative Humidity Range	0-100%							
Max. Operating Altitude	4000m							
Dimensions (W*H*D)	635mm*530mm*224mm						635mm*530mm*233mm	
Weight	36Kg		40Kg		42Kg		43.5Kg	
HMI & COM								
Display	Wireless & App + LED, LCD(Optional)							
Communication	RS485, Optional: WiFi / GPRS							
Certification								
Safety	IEC 62109, IEC 61727, IEC 62116							
Grid Code	IEC 61683, IEC 60068, IEC 61000							
BIS (R-51002593)	IS 16221 (Part 2):2015/IEC 62109-2:2011, IS 16169:2019/IEC 62116:2014 & IS 17980:2022/IEC 62891:2020							

Remarks :

① ② The range of output voltage and frequency may vary depending on different grid codes.
Specifications are subject to change without advance notice.

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