

Grid-tie solar inverters

On-grid solar inverters

Solar, maximised. Energiaa X residential inverters from 2 to 5.5 kW and Thunder commercial and industrial inverters from 6 to 100 kW, designed and built in India.

2–100 kW

Single and three phase

Designed and built in India



2–5.5 kW

Energiaa X residential, single phase

6–100 kW

Thunder commercial and industrial, three phase

98.7 %

max. efficiency, Thunder 40–100 kW

IP65

protection degree across the range

About us

An Indian solar inverter manufacturer

Statcon Energiaa (P) Ltd. is an ISO 9001, 14001 and 45001 certified power electronics manufacturer, building advanced solar, defence, hydrogen, power and railway solutions since 1987.

With complete in-house design, R&D and software development, we build reliable, efficient and service-friendly solar inverters for Indian conditions, backed by after-sales support across India. Our manufacturing works are at Pilkhuwa (Hapur, Uttar Pradesh).

Quality

Rigorous in-house quality control

Our quality control lab houses precision testing jigs, power analysers, digital meters and environmental chambers for component and product evaluation. Every unit undergoes pre-QC and a final inspection, and trained teams and our vendor quality programme keep standards and material integrity consistent.

Our strengths

- ✓ Total in-house inverter design
- ✓ Total coding and software
- ✓ End-to-end manufacturing
- ✓ In-house testing
- ✓ Long-term after-sales support
- ✓ Quick spares support

BIS certified

Our products are BIS certified: select range, and the rest underway.

Across the range

Robust safety protection

Class-1 supplier (Make in India)

Secure data storage

ISO 9001

ISO 14001

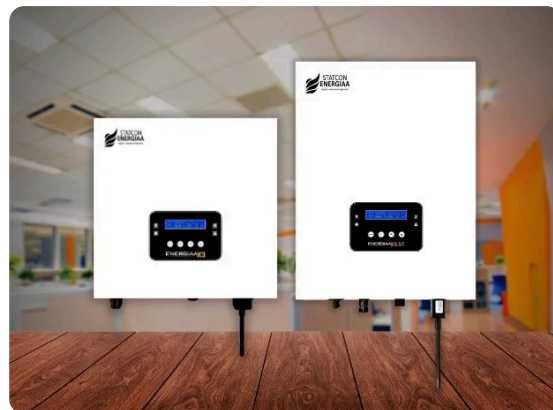
ISO 45001

— Residential, single phase

Energiaa X on-grid inverters, 2–5.5 kW

Energiaa X is a single-phase, transformerless on-grid inverter range for homes. A single MPPT channel accepts up to 6 kW of PV, and the inverter delivers power at unity power factor with THDi below 3%.

- ✓ MPPT efficiency above 99.5%
- ✓ Zero export feature available
- ✓ 16 × 2 LCD, RS-485 / Wi-Fi interface
- ✓ Maximum efficiency above 97.5%
- ✓ IP65, natural convection cooling
- ✓ Night-time consumption below 1 W



Energiaa X on-grid solar inverters in two enclosure sizes.

— Technical specifications

Energiaa X, 2–5.5 kW

	2 kW	3 kW	5.5 kW
Model no.	Energiaa X2T	Energiaa X3T	Energiaa X5.5T
Input data (DC)			
Max. recommended PV power	2.4 kW*	3.6 kW*	6 kW*
Max. DC voltage	450 V	450 V	550 V
Start voltage	100 V	100 V	100 V
Nominal voltage	380 V	380 V	380 V
MPPT voltage range	100–450 V	100–450 V	100–550 V
No. of MPPT channels	1	1	1
No. of PV strings per MPPT channel	1	1	1
Max. input current per MPPT channel	16 A	16 A	21 A
Max. short-circuit current per MPPT channel	24 A	24 A	30 A
Output data (AC)			
AC nominal power	2 kW	3 kW	5.5 kW
Max. AC apparent power	2 kVA	3 kVA	5.5 kVA
Nominal AC voltage (range)	230 V (180–265 V)	230 V (180–265 V)	230 V (180–265 V)
AC grid frequency (range)	50 Hz (47.5–52.5 Hz)	50 Hz (47.5–52.5 Hz)	50 Hz (47.5–52.5 Hz)
Max. output current	8.7 A	13 A	24 A
Power factor	Unity	Unity	Unity
THDi	< 3%**	< 3%**	< 3%**
AC grid connection type	Single phase	Single phase	Single phase
Efficiency			
MPPT efficiency	> 99.5%	> 99.5%	> 99.5%
Max. efficiency	> 97.5%	> 97.5%	> 97.5%

— Technical specifications, continued

Energiaa X, 2–5.5 kW

	2 kW	3 kW	5.5 kW
Model no.	Energiaa X2T	Energiaa X3T	Energiaa X5.5T
Protection			
Grid monitoring	Yes	Yes	Yes
Anti-islanding	Yes	Yes	Yes
Differential current monitoring	Yes	Yes	Yes
AC short-circuit protection	Yes	Yes	Yes
DC surge protection	Yes	Yes	Yes
Insulation resistance monitoring	Yes	Yes	Yes
Anti-islanding timer	Yes	Yes	Yes
Export control	Yes	Yes	Yes
AC surge protection	Yes	Yes	Yes
Safety parameters on display board			
Parameters	Over voltage, under voltage, over frequency, under frequency, idle start of and anti islanding (60 seconds)		
General data			
Zero export features	Available	Available	Available
Dimension (W/H/D)	282/317/190 mm ±2 mm	282/317/190 mm ±2 mm	375/350/190 mm ±2 mm
Weight	7.45 kg	7.45 kg	11.8 kg
Operating temperature range	-25 to +60 °C	-25 to +60 °C	-25 to +60 °C
Night-time power consumption	< 1 W	< 1 W	< 1 W
Topology	Transformerless	Transformerless	Transformerless
Cooling	Natural convection	Natural convection	Natural convection
Protection degree	IP65	IP65	IP65
Relative humidity	0-100%	0-100%	0-100%
DC connection	MC4	MC4	MC4
AC connection	Connector	Connector	Connector
Display	16 × 2 LCD	16 × 2 LCD	16 × 2 LCD
Interface	RS-485 / Wi-Fi	RS-485 / Wi-Fi	RS-485 / Wi-Fi
Warranty	132 months*** / 11 years***	132 months*** / 11 years***	132 months*** / 11 years***

*Can overload up to 20%.

**This product is compliant with BIS, EMI-EMC and IEC standards (IEC 62116 & 61727, IEC 60068-2 (1, 2, 14, 30), IEC 61683).

***Warranty period and T&Cs as per the warranty card supplied along with the product.

Commercial and industrial, three phase

Thunder on-grid inverters, 6–50 kW

Thunder is a three-phase, transformerless on-grid inverter range for commercial and industrial rooftops. Models from 6 to 50 kW take up to 1100 V DC across two to four MPP trackers and feed a 3L/N/PE, 230/400 V grid.

- ✓ Max. efficiency up to 98.7%
- ✓ MPPT efficiency above 99%
- ✓ Output power factor 0.8 leading to 0.8 lagging
- ✓ IP65, integrated DC switch
- ✓ Remote software upload
- ✓ RS485 / RS232 / Wi-Fi / LAN interface



Thunder commercial and industrial inverters, 6–50 kW.

Technical specifications

Thunder, 6–50 kW

	6 kW	10 kW	15 kW	20 kW	25 kW	30 kW	40 kW	50 kW
Model no.	Thunder6K	Thunder10K	Thunder15K	Thunder20K	Thunder25K	Thunder30K	Thunder40K	Thunder50K
Input data (DC)								
Max. DC input power (kW)	7.8	13	19.5	26	32.5	39	52	65
Max. DC input voltage (V)	1100							
Start-up DC input voltage (V)	250							
MPPT operating range (V)	250–1000							
Max. DC input current (A)	20+20		20+26	26+26		40+40	40+40+40	40+40+40+40
Max. short-circuit current (A)	30+30		30+39	39+39		60+60	60+60+60	60+60+60+60
No. of MPP trackers				2			3	4
No. of strings per MPP tracker	1+1		1+2	2+2		3+3	3+3+3	3+3+3+3
Output data (AC)								
Rated output power (kW)	6	10	15	20	25	30	40	50
Max. active power (kW)	6.6	11	16.5	22	27.5	33	44	55
Rated output voltage / range (V)	3L/N/PE, 230/400 V							
Rated grid frequency (Hz)	50							
Operating phase	Three phase							
Rated AC grid output current (A)	9.1/8.7	15.2/14.5	22.7/21.7	30.3/29	37.9/36.2	45.5/43.5	60.6/58	75.8/72.5
Max. AC output current (A)	10/9.6	16.7/15.9	25/23.9	33.3/31.9	41.7/39.8	50/47.9	66.7/63.8	83.3/79.7
Output power factor	0.8 leading to 0.8 lagging							
Grid current THD	< 3%							
DC injection current (mA)	< 0.5%							
Grid frequency range	47.5–52.5							

— Technical specifications, continued

Thunder, 6–50 kW

	6 kW	10 kW	15 kW	20 kW	25 kW	30 kW	40 kW	50 kW
Model no.	Thunder6K	Thunder10K	Thunder15K	Thunder20K	Thunder25K	Thunder30K	Thunder40K	Thunder50K
Efficiency								
Max. efficiency	98.3%		98.5%		98.6%			98.7%
Euro efficiency		97.5%		97.83%		97.8%		98%
MPPT efficiency				> 99%				
Protection								
DC reverse-polarity protection				Yes				
AC short-circuit protection				Yes				
AC output overcurrent protection				Yes				
Output overvoltage protection				Yes				
Insulation resistance protection				Yes				
Ground fault monitoring				Yes				
Anti-islanding protection				Yes				
Temperature protection				Yes				
Integrated DC switch				Yes				
Remote software upload				Yes				
Remote charger of operating parameters				Yes				
Surge protection	DC type II / AC type II							
General data								
Dimension (W/H/D)	330/457/203		283/463/178		362/527/220		362/577/215	434/570/243
Weight	12 kg		16 kg		22 kg		25 kg	39.1 kg
Topology	Transformerless							
Internal consumption	< 1 W (night)							
Running temperature	-25 to +60 °C, >45 °C derating							
Ingress protection	IP65							
Noise emission (typical)	≤ 30 dB			≤ 40 dB			≤ 50 dB	
Cooling concept	Natural cooling				Smart cooling			
Max. operating altitude without derating			4000 m			2000 m	4000 m	
Warranty					8 years			
Operating surroundings humidity					0–100%			
Features								
Display					LCD 1602		LCD 240 × 160	
Interface	RS485 / RS232 / Wi-Fi / LAN							

Commercial and industrial, three phase

Thunder on-grid inverters, 60–100 kW

The larger Thunder models cover 60 to 100 kW for commercial and industrial plants, with four or six MPP trackers, 1100 V maximum DC input voltage and smart cooling.

- ✓ Max. efficiency 98.7%
- ✓ MPPT efficiency above 99%
- ✓ LCD 240 × 160 display
- ✓ Euro efficiency 98.3%
- ✓ IP65, integrated DC switch
- ✓ RS485 / RS232 / Wi-Fi / LAN interface



Thunder commercial and industrial inverters, 60–100 kW.

Technical specifications

Thunder, 60–100 kW

	60 kW	70 kW	80 kW	100 kW
Model no.	Thunder60K	Thunder70K	Thunder80K	Thunder100K
Input data (DC)				
Max. DC input power (kW)	78	91	104	130
Max. DC input voltage (V)	1100			
Start-up DC input voltage (V)	250			
MPPT operating range (V)	250–1000			
Max. DC input current (A)	40+40+40+40			40+40+40+40+40+40
Max. short-circuit current (A)	60+60+60+60			60+60+60+60+60+60
No. of MPP trackers	4			6
No. of strings per MPP tracker	3+3+3+3	4+4+4+4		4+4+4+4+4+4
Output data (AC)				
Rated output power (kW)	60	70	80	100
Max. AC power (kW)	66	77	88	110
Rated output voltage / range (V)	3L/N/PE, 230/400 V			
Rated grid frequency (Hz)	50			
Operating phase	Three phase			
Rated AC grid output current (A)	90.9/87	106.1/101.5	121.2/115.9	151.5/144.9
Max. AC output current (A)	100/95.7	116.7/111.6	133.3/127.5	166.7/159.4
Output power factor	0.8 leading to 0.8 lagging			
Grid current THD	< 3%			
DC injection current (mA)	< 0.5%			
Grid frequency range	47.5–52.5			

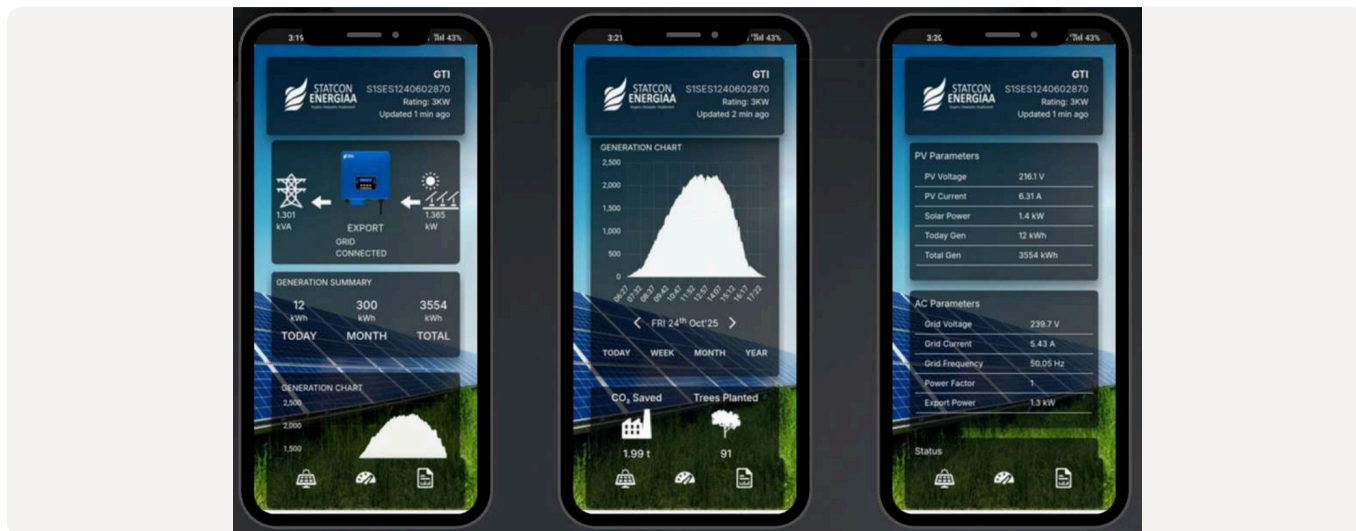
— Technical specifications, continued

Thunder, 60–100 kW

	60 kW	70 kW	80 kW	100 kW
Model no.	Thunder60K	Thunder70K	Thunder80K	Thunder100K
Efficiency				
Max. efficiency		98.7%		
Euro efficiency		98.3%		
MPPT efficiency		> 99%		
Protection				
DC reverse-polarity protection		Yes		
AC short-circuit protection		Yes		
AC output overcurrent protection		Yes		
Output overvoltage protection		Yes		
Insulation resistance protection		Yes		
Ground fault monitoring		Yes		
Anti-islanding protection		Yes		
Temperature protection		Yes		
Integrated DC switch		Yes		
Remote software upload		Yes		
Remote charger of operating parameters		Yes		
Surge protection	DC type II / AC type II			
General data				
Dimension (W/H/D)		700/575/297		826/516/312
Weight		63 kg		81 kg
Topology		Transformerless		
Internal consumption		< 1 W (night)		
Running temperature		-25 to +65 °C, >45 °C derating		
Ingress protection		IP65		
Noise emission (typical)	≤ 50 dB		≤ 55 dB	
Cooling concept		Smart cooling		
Max. operating altitude without derating		2000 m		4000 m
Warranty		8 years		
Operating surroundings humidity		0–100%		
Features				
Display		LCD 240 × 160		
Interface		RS485 / RS232 / Wi-Fi / LAN		

Monitoring

Smart power, smarter monitoring



Monitoring app screens showing live generation, generation charts, and PV and AC parameters.

- ✓ Access live solar data, anytime, anywhere
- ✓ Monitor voltage, current, grid import/export and battery status
- ✓ View daily, monthly and lifetime energy analytics
- ✓ Receive performance alerts and efficiency reports
- ✓ Works on both mobile and desktop
- ✓ 24x7 visibility, 365 days a year

Cloud sync

Real-time data

Alerts

Analytics

Service

On-grid service promise

We back performance with our solar service network. A free-of-cost standby inverter is provided through our channel partners, for quick replacement and minimum downtime of your solar system.

Three-step service flow

- **Call support.** Customer care toll-free 1800-891-3319 · servicing@energiasa.in
- **Remote diagnosis.** 80% of issues are solved through a remote check: fast and transparent.
- **Quick replacement.** If the issue persists, the dealer provides a free-of-cost standby inverter to keep power uninterrupted.

Statcon Energiaa works across five divisions: Solar, Power, Defence, Railways and Hydrogen. Its solar range covers solar inverters and energy storage systems from 1 to 250 kVA. Corporate office: B-81, Sector 63, Noida, Uttar Pradesh. Specifications are subject to change without notice.

Why it works

- ✓ Minimum downtime
- ✓ Nationwide service network
- ✓ Free-of-cost standby support
- ✓ Factory-backed reliability
- ✓ Made in India