

Boxer 1-phase and HBD series 3-phase

Hybrid solar inverters

Hybrid MPPT inverters in single and three phase, from 3 to 250 kVA, with single-phase off-grid MPPT inverters from 1 to 20 kVA.

Hybrid 3–250 kVA

Off-grid 1–20 kVA

Lithium-ion compatible

Designed and built in India



3–250 kVA

hybrid, single and three phase

1–20 kVA

off-grid, single phase

<5 ms

changeover time

100 %

load imbalance withstood (3-phase ratings)

Overview

Store, export or blend solar power

Statcon Energiaa hybrid inverters combine grid-tie and storage functions for uninterrupted power on unreliable grids and against rising energy costs. They store energy in batteries, export surplus to the grid, or blend solar and grid power through behind-the-meter control. Off-grid MPPT inverters complete the range. Other customised ratings are available on request.

The range



Boxer hybrid solar inverter, single phase

Grid-tie and storage in one unit, with floor- or wall-mount options and customisable lithium-ion compatibility.

1–50 kVA · 24 V to 360 V



HBD series hybrid solar inverter, three phase

Hybrid inverters for commercial and industrial (C&I) sites, designed for unreliable grids and power cuts.

5–250 kVA · 48 V to 576 V



SEOG and Bullet series off-grid inverters

Single-phase MPPT-based PCUs built for harsh Indian weather, managing solar power, grid supply and battery.

1–20 kVA · 24 V to 240 V

— Hybrid features

One machine, many possibilities

The hybrid range brings scheduling, peak shaving, grid export control and lithium battery management together in a single machine.

— One machine

- ✓ **High kVA in single phase.** Ratings up to 50 kVA in 1-phase, for sites such as hospitals and petrol pumps that run high-capacity single-phase machines
- ✓ **High surge capability.** Up to 300% short surge and 150% longer surge, for motors and other jerk loads
- ✓ **Time-of-day scheduling.** Uses energy arbitrage to lower energy costs; settable by region, for residential and commercial use
- ✓ **Peak shaving.** For industries that face penalties for exceeding sanctioned load, supported by the inbuilt grid import settings

— Lithium compatibility

- ✓ **RS-485 communication.** Talks to the battery BMS, an extra layer of security
- ✓ **Soft-charge protection.** An in-built pre-charge circuit protects the lithium-ion battery from high inrush current
- ✓ **Wake-up circuit.** No need to charge the battery manually after deep discharge: it charges automatically through PV or grid and the inverter switches on automatically

— Many possibilities

- ✓ **Grid power sharing.** Grid sync through Active Front End technology; exports to the grid as soon as loads decrease
- ✓ **100% load imbalance.** Across 3-phase ratings, the inverter withstands up to 100% load imbalance across all phases, a benefit in industrial installations
- ✓ **Seamless changeover.** Changeover time of less than 5 ms, for sensitive equipment that cannot stop
- ✓ **DG set replacement.** Economical backup in place of polluting DG sets; a mobile solution that uses solar to reduce the cost per kWh
- ✓ **Battery compatibility.** Battery chemistry is settable through the display, and the inverter communicates with a smart BMS to take charging decisions

— Grid management

- ✓ **Grid sync.** Synchronises with the grid through Active Front End technology and shares power with the AC grid, for 100% utilisation of solar power
- ✓ **Grid export control.** Enable or disable grid export to suit net-meter availability, with a simple command on the inbuilt display and keypad
- ✓ **Grid import control.** Limits the power drawn from the AC grid, useful for peak shaving

Smart monitoring

Live solar data, any time and anywhere: voltage, current, grid import and export, and battery status. Daily, monthly and lifetime energy analytics, performance alerts and efficiency reports, on mobile and desktop, with 24×7, 365-day visibility.

Service

Customer care on toll-free 1800-891-3319 and servicing@energias.in. Remote diagnosis solves 80% of issues instantly via remote check. A minimum turnaround-time guarantee through our channel partners, with service pairs and free-of-cost standby units, keeps downtime to a minimum.

About Statcon Energiaa

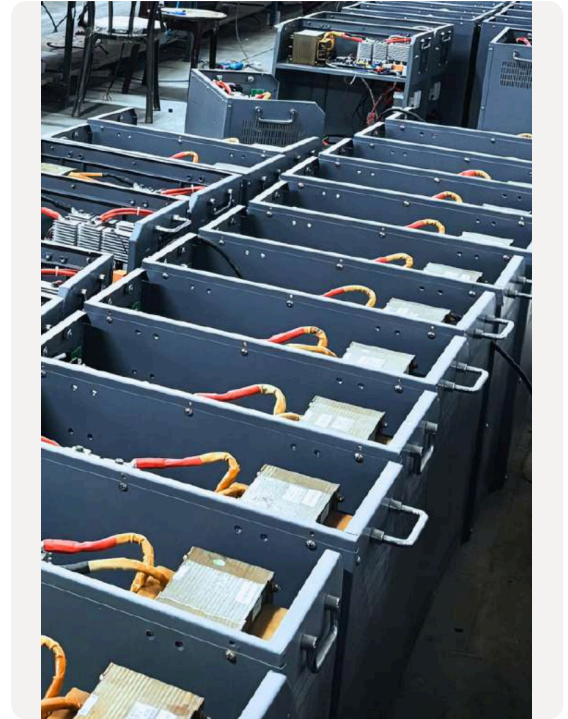
Indian solar inverter manufacturer

Statcon Energiaa Pvt. Ltd. is an ISO 9001, 14001 and 45001 certified power electronics manufacturer, working since 1987 across solar, defence, hydrogen, power and railway solutions.

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

Our strengths

- ✓ In-house inverter design
- ✓ End-to-end manufacturing
- ✓ Long-term after-sales support
- ✓ Own transformer manufacturing
- ✓ In-house coding and software
- ✓ In-house testing
- ✓ Quick spares support
- ✓ PCUs handle heavy loads, above 100% of labelled wattage



Transformer-based inverter assemblies in production.



Power conditioning units ready for dispatch.

Quality

Rigorous in-house quality control

Our quality control lab has precision testing jigs, power analysers, digital meters and environmental chambers for component and product evaluation. Every unit goes through pre-QC and final inspection, and trained teams and our vendor quality programme maintain material standards.

Certifications

ISO 9001

ISO 14001

ISO 45001

BIS certified: select range, the rest underway

Class-1 supplier (Make in India)

Robust safety protection

Secure data storage

Boxer series · single phase

Boxer hybrid solar inverter

The Boxer series (1–50 kVA) integrates grid-tie and storage functions for uninterrupted power. Engineered for unreliable grids and rising energy costs, it stores, exports or blends solar power through behind-the-meter control, with floor- or wall-mount options and customisable lithium-ion compatibility.

Approvals and standards

BIS approved, R-93031208

Anti-islanding: IEC 62116

Grid interface: IEC 61727

Lithium-ion battery compatible



Boxer wall-mounted hybrid solar inverters.

Ratings

Single-phase hybrid MPPT inverters

24 V	1–3.5 kVA	48 V	3–10 kVA
96 V	5–7.5 kVA	120 V	8–15 kVA
240 V	15–50 kVA	360 V	40–50 kVA



Typical installation. Boxer connects solar panels, battery, grid and home loads.

Other customised ratings are available on request.

— Low voltage, 24 V

Boxer 1–3.5 kVA, single phase

	800 W 24 V	1100 W 24 V	1200 W 24 V	1600 W 24 V	2000 W 24 V	2400 W 24 V	2500 W 24 V	3000 W 24 V (3750 VA)
Model number	BXR-HBD-024-1K000P-1P-1.0M1	BXR-HBD-024-1K375-1P-1.3M1	BXR-HBD-024-1K500-1P-1.4M1	BXR-HBD-024-2K000-1P-1.9M1	BXR-HBD-024-2K500-1P-2.4M1	BXR-HBD-024-3K000-1P-2.9M1	BXR-HBD-024-3K125-1P-3.0M1	BXR-HBD-024-3K750-1P-3.6M1
A. MPPT charger								
Type (buck)	MPPT							
Max. PV access power (W)	1600 W	2200 W	2400 W	3200 W	4000 W	4800 W	5000 W	6000 W
Max. PV input power (W)	960 W	1320 W	1440 W	1920 W	2400 W	2880 W	3000 W	3600 W
Max. PV strings in parallel	1	2	2	2	3	3	3	4
Number of MPPT	1							
Max. open-circuit volts (Voc)	160 V							
PV short-circuit current (Isc)	24 A	48 A	48 A	48 A	72 A	72 A	72 A	96 A
Nominal voltage (V)	70 V							
MPPT voltage range (full load)	55–125 V	38–125 V	42–125 V	54–125 V	50–125 V	53–125 V	55–125 V	50–125 V
MPPT voltage range (Vmp)	35–125 V							
PV DC input current (A)	16 A	32 A	32 A	32 A	48 A	48 A	48 A	64 A
Max. MPPT charging efficiency	92%							
B. Solar inverter								
Nominal capacity (W)	800 W	1100 W	1200 W	1600 W	2000 W	2400 W	2500 W	3000 W
Output current (A)	3.5 A	4.8 A	5.3 A	7 A	8.7 A	10.5 A	10.9 A	13.2 A
Output voltage / freq. / phase	230 V (±2%) / 50 Hz / 1P+N							
Power factor	0.8 to unity							
Max. conversion efficiency	88%							
Overloads: 60 s / 30 s / 5 s	101–110% / 111–120% / 121–150%, immediate trip							
Auto bypass	Provided							
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)							
C. Battery input								
Battery type	VRLA / lead-acid / lithium-ion / NiCd							
Battery voltage / range	24 V / 24–30 V							
Max. discharging current (A)	40 A	54 A	59 A	78.5 A	98 A	100 A	122.5 A	147 A
D. Grid input								
Grid nominal voltage / range	230 V / 184–253 V AC							
Grid rated frequency / range	50 Hz / 47.5–50.5 Hz							
Grid rated input current (A)	7 A	9.6 A	10.6 A	14 A	17.4 A	21 A	21.8 A	25 A
Max. grid import power (W)	1600 W	2200 W	2400 W	3200 W	4000 W	4800 W	5000 W	5750 W

Protections, display parameters and general specifications for Boxer 24 V and 48 V models are on page 12.

— Low voltage, 48 V

Boxer 1–10 kVA, single phase

	1 kVA 48 V	2 kVA 48 V	2.5 kVA 48 V	3 kVA 48 V	3.5 kVA 48 V	6 kVA 48 V	8 kVA 48 V	10 kVA 48 V
Model number	BXR-HBD-048-01K 1P-1.2M1-11-C01	BXR-HBD-048-02K 1P-2.4M1-11-C01	BXR-HBD-048-2.5K 1P-03M1-11-C01	BXR-HBD-048-03K 1P-3.6M1-11-C01	BXR-HBD-048-3.5K 1P-4.2M1-11-C01	BOX-048-06K-1P	BOX-048-08K-1P	BOX-048-10K-1P
A. MPPT charger								
Type (buck)	MPPT							
Max. PV access power (kW)	1.5 kW	3 kW	3.75 kW	4.5 kW	5.25 kW	–	–	–
Max. input power (kW)	1.2	2.4	3.0	3.6	4.2	7.2	9.6	12
Max. PV strings in parallel	1	2	2	3	4	6	8	10
Number of MPPT	1							
Max. open-circuit volts (Voc)	190 V							
PV short-circuit current (Isc)	10 A	20 A	20 A	30 A	40 A	–	–	–
MPPT voltage range (Vmp)	75–160 V							
PV DC input current (A)	9 A	18 A	18 A	27 A	36 A	141	188	235
Max. MPPT charging efficiency	92%		94%					
B. Solar inverter								
Nominal capacity (kVA)	1 kVA	2 kVA	2.5 kVA	3 kVA	3.5 kVA	6 kVA	8 kVA	10 kVA
Output current (A)	4.3 A	8.7 A	10.9 A	13.0 A	15.2 A	21	28	35
Output voltage / freq. / phase	230 V (±2%) / 50 Hz / 1P+N							
Power factor	0.8 to unity							
Max. conversion efficiency	85%							
Overloads: 60 s / 30 s / 5 s	101–110% / 111–120% / 121–150% / >150% (immediate trip)							
Auto bypass	Provided							
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)							
C. Battery input								
Battery type	VRLA / lead-acid / lithium-ion / NiCd							
Battery voltage / range	48 V / 48–60 V							
Max. discharging current	1.5 kVA	3 kVA	3.75 kVA	4.5 kVA	5.25 kVA	9 kVA	12 kVA	15 kVA
D. Grid input								
Grid nominal voltage / range	230 V / 184–253 V							
Grid rated frequency / range	50 Hz / 47.5–50.5 Hz							
Grid rated input current (A)	8.2 A	16.3 A	20.4 A	24.5 A	28.5 A	–	–	–
Max. grid import power	1.5 kVA	3 kVA	3.75 kVA	4.5 kVA	5.25 kVA	–	–	–

– Not stated for this rating. Protections, display parameters and general specifications for Boxer 24 V and 48 V models are on page 12.

— High voltage, 96 V, 120 V and 240 V

Boxer 5-15 kVA, single phase

	5 kVA 96 V	6 kVA 96 V	7.5 kVA 96 V	8 kVA 120 V	10 kVA 120 V	15 kVA 120 V	15 kVA 240 V
Model number	BOX-096-05K-1P	BOX-096-06K-1P	BOX-096-07K5-1P	BOX-120-08K-1P	BOX-120-10K-1P	BOX-120-15K-1P	BOX-240-15K-1P
A. MPPT charger							
Type (buck)	MPPT						
Max. PV input power (kWp)	6	7.2	9	9.6	12	18	18
Max. PV strings in parallel	3	4	5	5	6	9	5
No. of MPPT channels / inputs	1/1						
Max. open-circuit volts (Voc)	320 V			320 V			650 V
MPPT voltage range (Vmp)	165–280 V			165–280 V			330–570 V
Max. output current (A)	59	70	87	74	94	141	70
Peak charging efficiency	94%						
B. Solar inverter							
Nominal capacity	5 kVA	6 kVA	7.5 kVA	8 kVA	10 kVA	15 kVA	15 kVA
Output current (A)	17	21	28	28	35	52	52
Battery voltage (V)	96		120			240	
Output voltage / freq. / phase	230 V (±2%) / 50 Hz / 1P+N						
Load power factor	0.8 to unity						
Peak efficiency	>88%			>90%			
Overloads: 60 s / 30 s / 5 s	101–110% / 111–125% / 126–150%						
Auto bypass	Provided						
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)						
C. Grid charger							
Grid voltage range	230 V (+10% / –20%)						
Grid frequency range	50 Hz (+5% / –5%)						
Max. grid import power	7.5 kVA	9 kVA	11.25 kVA	12 kVA	15 kVA	22.5 kVA	22.5 kVA

Protections, display parameters and general specifications for Boxer 5-50 kVA models are on page 12.

— High voltage, 240 V and 360 V

Boxer 20–50 kVA, single phase

	20 kVA 240 V	25 kVA 240 V	30 kVA 240 V	40 kVA 240 V	50 kVA 240 V	40 kVA 360 V	50 kVA 360 V
Model number	BOX-240-20K-1P	BOX-240-25K-1P	BOX-240-30K-1P	BOX-240-40K-1P	BOX-240-50K-1P	BOX-360-40K-1P	BOX-360-50K-1P
A. MPPT charger							
Type (buck)	MPPT						
Max. PV input power (kWp)	24	30	36	48	60	48	60
Max. PV strings in parallel	6	8	9	12	15	8	10
No. of MPPT channels / inputs	1/1						
Max. open-circuit volts (Voc)	650 V			820 V			
MPPT voltage range (Vmp)	330–570 V			495–681 V			
Max. output current (A)	95	119	142	190	237	127	157
Peak charging efficiency	95%						
B. Solar inverter							
Nominal capacity	20 kVA	25 kVA	30 kVA	40 kVA	50 kVA	40 kVA	50 kVA
Output current (A)	70	87	104	139	174	139	174
Battery voltage (V)	240			360			
Output voltage / freq. / phase	230 V (±2%) / 50 Hz / 1P+N						
Load power factor	0.8 to unity						
Peak efficiency	>91%						
Overloads: 60 s / 30 s / 5 s	101–110% / 111–125% / 126–150%						
Auto bypass	Provided						
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)						
C. Grid charger							
Grid voltage range	230 V (+10% / ~20%)						
Grid frequency range	50 Hz (+5% / ~5%)						
Max. grid import power	30 kVA	37.5 kVA	45 kVA	60 kVA	75 kVA	60 kVA	75 kVA

Protections, display parameters and general specifications for Boxer 5–50 kVA models are on page 12.

— HBD series · three phase

HBD series hybrid solar inverter

The HBD series (5–250 kVA) brings hybrid solar inverters to businesses and industries (C&I). Designed for unreliable grids and power cuts, it combines grid-tie and storage functions: storing energy in batteries, exporting surplus to the grid, or operating independently through its behind-the-meter system. Lithium-ion battery compatible; other customised ratings are available on request.

Three-phase ratings

48 V	5–15 kVA
120 V	10–15 kVA
240 V	15–100 kVA
360 V	30–200 kVA
480 V	125–250 kVA
576 V	250 kVA

— Low voltage, 48 V

HBD 5–15 kVA, three phase

	5 kVA / 48 V	8 kVA / 48 V	10 kVA / 48 V	15 kVA / 48 V
Model number	HBD-048-05K-3P	HBD-048-008K-3P	HBD-048-010K-3P	HBD-048-015-3P
A. MPPT charger				
PV nominal capacity (kWp)	5	8	10	15
Max. no. of strings	5	8	10	15
Charge controller type (buck)	MPPT			
No. of MPPT channels / inputs	1/1			
Max. open-circuit volts (Voc)	190 V			
MPPT voltage range (Vmp)	75–160 V			
Max. SCC output amps	100	160	200	300
Peak charging efficiency	94%			
B. Solar inverter				
Nominal capacity (total)	5 kVA	8 kVA	10 kVA	15 kVA
Output amps per phase	6	9	12	17
Nominal battery voltage	48 V			
Output voltage / freq. / phase	400 V (±2%) / 50 Hz / 3P+N			
Load power factor	0.8 to unity			
Peak efficiency	>86%		>88%	
Overloads: 60 s / 30 s / 5 s	101–110% / 111–125% / 126–150%			
Auto bypass	Provided			
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)			
C. Grid charger				
Grid voltage operating range	400 V (+10% / –20%)			
Grid freq. operating range	50 Hz (+5% / –5%)			
Max. grid import power	7.5 kVA	12 kVA	15 kVA	22.5 kVA
Dimensions (H x W x D, mm)	750 x 530 x 897.45			

— High voltage, 120 V, 240 V and 360 V

ECO-HBD 10–50 kVA, three phase

	10 kVA 120 V	15 kVA 120 V	15 kVA 240 V	20 kVA 240 V	25 kVA 240 V	30 kVA 240/360 V	40 kVA 240/360 V	50 kVA 240/360 V
Model number	ECO-HBD-120-010K-3P	ECO-HBD-120-015K-3P	ECO-HBD-240-15K-3P	ECO-HBD-240-25K-3P	ECO-HBD-240-25K-3P	ECO-HBD-240-30K-3P ECO-HBD-360-30K-3P	ECO-HBD-240-40K-3P ECO-HBD-360-40K-3P	ECO-HBD-240-50K-3P ECO-HBD-360-50K-3P
A. MPPT charger								
PV nominal capacity (kWp)	10	15	15	20	25	30	40	50
Max. no. of strings	6	9	5	6	8	9/6	12/8	15/10
Charge controller type (buck)	MPPT							
No. of MPPT channels / inputs	1/1							
Max. open-circuit volts (Voc)	320 V		650 V			650/820 V		
MPPT voltage range (Vmp)	165–280 V		330–570 V			330–570 / 495–681 V		
Max. SCC output amps	80	120	60	80	100	120/80	160/108	200/135
Peak charging efficiency	94%							
B. Solar inverter								
Nominal capacity	10 kVA	15 kVA	15 kVA	20 kVA	25 kVA	30 kVA	40 kVA	50 kVA
Output amps per phase	12	17	17	23	29	35	46	58
Nominal battery voltage	120 V		240/360 V					
Output voltage / freq. / phase	400 V (±2%) / 50 Hz / 3P+N							
Load power factor	0.8 to unity							
Peak efficiency	>89%		>90%			>92%		
Overloads: 60 s / 30 s / 5 s	101–110% / 111–125% / 126–150%							
Auto bypass	Provided							
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)							
C. Grid charger								
Grid voltage operating range	400 V (+10% / –20%)							
Grid freq. operating range	50 Hz (+5% / –5%)							
Max. import power	15 kVA	22.5 kVA	22.5 kVA	30 kVA	37.5 kVA	45 kVA	60 kVA	75 kVA
Dimensions (H x W x D, mm)	700 x 550 x 845		800 x 550 x 845				900 x 650 x 965	

Protections, display parameters and general specifications for all HBD models are on page 12.

— High voltage, 240 V to 480 V

ECO-HBD 60-250 kVA, three phase

	60 kVA 240/360 V	80 kVA 240/360 V	100 kVA 240/360 V	125 kVA 360/480 V	150 kVA 360/480 V	200 kVA 360/480 V	250 kVA 480 V
Model number	ECO-HBD-240-60K-3P ECO-HBD-360-60K-3P	ECO-HBD-240-80K-3P ECO-HBD-360-80K-3P	ECO-HBD-240-100K-3P ECO-HBD-360-100K-3P	ECO-HBD-360-125K-3P ECO-HBD-480-125K-3P	ECO-HBD-360-150K-3P ECO-HBD-480-150K-3P	ECO-HBD-360-200K-3P ECO-HBD-480-200K-3P	ECO-HBD-480-250K-3P
A. MPPT charger							
PV nominal capacity (kWp)	60	80	100	125	150	200	250
Max. strings (per channel)	6/4	8/5	10/6	8/7	10/10	14/13	12/9
Charge controller type (buck)	MPPT						
No. of MPPT channels / inputs	3/3						4/4
Max. open-circuit volts (Voc)	650/820 V			820/900 V			900 V
MPPT voltage range (Vmp)	330–570 / 495–681 V			495–681 / 660–800 V			660–800 V
Max. SCC output amps	235/157	314/209	392/261	326/245	392/294	522/392	490
Peak charging efficiency	94%						
B. Solar inverter							
Nominal capacity	60 kVA	80 kVA	100 kVA	125 kVA	150 kVA	200 kVA	250 kVA
Output amps per phase	69	92	115	144	173	231	289
Nominal battery voltage	240/360 V			360/480 V			480 V
Output voltage / freq. / phase	400 V (±2%) / 50 Hz / 3P+N						
Load power factor	0.8 to unity						
Peak efficiency	>92%		>94%				
Overloads: 60 s / 30 s / 5 s	101–110% / 111–125% / 126–150%					101–110% / 111–120% / 121–130%	
Auto bypass	Provided						
Anti-islanding / grid export	Provided (as per IEC 62116 and IEC 61727)						
C. Grid charger							
Grid voltage operating range	400 V (+10% / –20%)						
Grid freq. operating range	50 Hz (+5% / –5%)						
Max. import power	90 kVA	120 kVA	150 kVA	188 kVA	225 kVA	250 kVA	300 kVA
Dimensions (H x W x D, mm)	1650 x 800 x 850		1900 x 800 x 1050		2125 x 1200 x 1200		

Protections, display parameters and general specifications for all HBD models are on page 12.

— Protections and display parameters

Protections and general specifications

Protections		Display parameters	
Boxer 24 V and 48 V models (1-10 kVA)			
PV side	Reverse polarity, PV power limit, surge protection (MOV), over/under voltage	Voltage, current, power, cumulative energy, today's energy	
Battery side	Reverse polarity, over/under voltage, current limit	Voltage, current, battery state	
Grid side	Over/under voltage, over/under frequency, surge protection (MOV)	Voltage, frequency, power, power factor, export kWh, import kWh	
Load side	Overloads, short circuit	Voltage, current, frequency, power, load percentage	
System	Over-temperature	Mode of operation, active faults	
Miscellaneous			
Switchgear protection	MCB/MCCB/fuse	LED indications	Power on, inverter on, solar present/charging, load on grid/charging, battery low, system trip
Data port (RS-485 / RS-232)	Optional (available on request)	Remote monitoring	Optional, through GPRS-based modem (24 V models: GPRS-based modem / Wi-Fi)
Ingress protection	IP20 (indoor type)	Over-voltage category	VOC II (DC), VOC III (AC)
Inverter topology	Isolation	Cooling method	Forced cooling (temperature controlled)
Operating temperature	0-50 °C (without derating)	Humidity	Max. 95%, non-condensing
Altitude	1000 m above sea level		

— Protections and display parameters

Protections		Display parameters	
Boxer 5–50 kVA (96 V to 360 V) and all HBD series models			
PV side	Reverse polarity, PV power limit, surge protection (MOV)	Voltage, charger output amps, power, cumulative energy	
Battery side	Reverse polarity, over/under voltage, current limit	Voltage, current, battery state	
Grid side	Over/under voltage, over/under frequency, surge protection (MOV)	Phase voltage, frequency, power, power factor	
Load side	Overloads, short circuit, surge protection (MOV)	Voltage and current, frequency, power, export kWh	
System	Over-temperature	Mode of operation, active faults, status mimic	
Miscellaneous			
Switchgear protection	MCB/MCCB provided on PV, battery, load and grid path	LED indications	Mains on, alarm, buzzer mute
Data port (RS-485 / RS-232)	Optional (available on request)	Remote monitoring	Optional, through GPRS-based modem
Ingress protection	IP20 (indoor type)	Cooling method	Forced cooled (temperature controlled)
Operating temperature	0–50 °C (without derating)	Humidity	Max. 95%, non-condensing
Altitude	1000 m above sea level	Colour shade	RAL 7035 / DA grey HE 15005

Other customised ratings are available on request. Statcon Energiaa Pvt. Ltd. reserves the right to modify or withdraw any of the ratings or technical specifications.

— SEOG and Bullet series · off-grid

Single-phase MPPT solar inverters

Built for harsh Indian weather, our MPPT-based PCUs manage solar power, grid supply and battery to deliver power seamlessly for all electrical applications, reducing diesel consumption and electricity bills: an economical power solution that uses renewable energy 365 days a year. Other customised ratings are available on request.

Single-phase ratings

24 V	1 kVA
48 V	1–6 kVA
96 V	5–7.5 kVA
120 V	5–15 kVA
240 V	15–20 kVA

— Off-grid, 24 V to 240 V

Bullet and SEOG series 1–20 kVA, single phase

	2 kVA 24 V	2 kVA 48 V	3 kVA 48 V	5 kVA 48 V	6 kVA 48 V	5 kVA 96 V	7.5 kVA 96 V	10 kVA 120 V	12.5 kV 120 V	15 kVA 120 V	15 kVA 240 V	20 kVA 240 V
Model number	Bullet 3024	SEOG- 048- 2K0-1P	SEOG- 048- 3K0-1P	SEOG- 048- 5K0-1P	SEOG- 048- 6K0-1P	SEOG- 096- 5K0-1P	SEOG- 096- 7K5-1P	SEOG- 120- 10K0- 1P	SEOG- 120- 12K5- 1P	SEOG- 120- 15K0- 1P	SEOG- 240- 15K0- 1P	SEOG- 240- 20K0- 1P
A. MPPT charger												
Type (buck)							MPPT					
PV nominal capacity (kWp)	2	2	3	5	6	5	7.5	10	10	15	15	20
Max. PV strings in parallel	2	2	3	5	6	3	5	6	6	9	5	6
MPPT channels / inputs	1/1											
Max. open-circuit V, Voc (V)	110	190				320			320		650	
MPPT tracking range, Vmp (V)	35–88	75–160				165–280			165–280		330–570	
Max. output current (A)	40	40	60	100	120	50	75	80	80	120	60	80
Peak charging efficiency	≥94%						≥94%					
B. Solar inverter												
Nominal capacity (kVA)	2	2	3	5	6	5	7.5	10	12.5	15	15	20
Output current (A)	8.0	7.0	10.4	17.4	20.8	17.5	26	35	43.5	52	52	70
Battery voltage (V)	24	48				96		120	120		240	
Output V / freq. / phase	220 V					230 V (±2%) / 50 Hz / 1P+N						
Peak efficiency	≥88%											
Overloads: 60/30/5 s	101–110% / 111–150% / 151–200%											
Auto bypass	Provided											
C. Grid charger												
Grid voltage range	120–280 V											
Grid frequency range	50 Hz (+5% / –5%)											
Max. grid import power (kVA)	3	3	4.5	7.5	9	7.5	11.25	15	18.7	22.5	22.5	30
Colour shade	Green / white						Black					

Protections, display parameters and general specifications for off-grid models are on page 14.

— Protections and display parameters

Off-grid protections and general specifications

Protections		Display parameters	
Bullet and SEOG series			
PV side	Reverse polarity, PV overload, surge protection (MOV)	Voltage, current, power, energy	
Battery side	Reverse polarity, over/under voltage, current limit	Voltage, current, battery charging/discharging	
Grid side	Over/under voltage, over/under frequency, surge protection (MOV)	Voltage, frequency	
Load side	Over/under voltage, overloads, short circuit, surge protection (MOV)	Voltage, current, frequency, load %	
Miscellaneous	Over-temperature	Mode of operation, faults	
Miscellaneous			
Switchgear protection	MCB/MCCB provided in PV, battery, load and grid path	LED indications	Power on, inverter on, solar present/charging, load on grid, charging, battery low, system trip
Remote monitoring	GPRS-based modem (at extra cost)	Data port (RS-485 / RS-232)	Optional (available on request)
Ingress protection	IP20 (indoor type)	Operating temperature	0–50 °C (without derating)
Type of cooling	Forced cooled (temperature controlled)	Humidity	Max. 95%, non-condensing
Altitude	1000 m above sea level		

Other customised ratings are available on request. Statcon Energiaa Pvt. Ltd. reserves the right to modify or withdraw any of the ratings or technical specifications.

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