







HYBRID SOLAR INVERTER

1-5 KVA | 48V

BOXER HBD

THE OFFGRID INVERTER KILLER

-  Seamless changeover time
-  Battery-less operation on demand
-  Export power to grid at lean loads
-  20% Overloading on PV Side
-  Li+ compatible with brand selection
-  Runs heavy loads including 1.5T AC

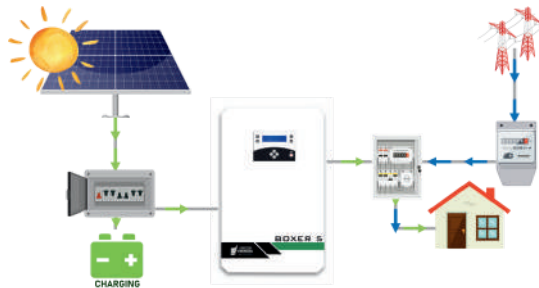
HYBRID SOLAR INVERTER 1PH (GRID EXPORT WITH STORAGE)

The smart consumer says, “Why pay for off grid, when hybrid is now at the same cost?”

The Boxer is a unique addition to the Indian solar industry, plagued with cheap and frequently failing foreign wall mounted products. Boxer has a galvanic isolation to protect from the grid variations and gives the consumer all benefits of a hybrid inverter, while being a sleek, efficient machine. With Lithium compatibility, it is set to bring about a revolution in Indian homes, craving for high power and better backups.

*Other customised ratings available on request

BOXER HBD THE OFFGRID INVERTER KILLER



Block Diagram of Installation

DID YOU KNOW... 5 OUT OF 10 CUSTOMERS ACTUALLY ASK FOR HYBRID SYSTEMS RATHER THAN GRID TIED SYSTEMS?

Now avail subsidy on Hybrid Solar inverter systems, with Lithium ion batteries or Lead acid, or any other battery under the PM SURYAGHAR MUFT BIJLI YOJANA

| RATINGS | 1KVA/48V | 2KVA/48V | 3KVA/48V | 4KVA/48V | 5KVA/48V |
|--|--|---------------|----------------|--|----------------|
| MODEL NO. | BOX-048-01K-1P | BOX-048-2K-1P | BOX-048-03K-1P | BOX-048-04K-1P | BOX-048-05K-1P |
| A.MPPT CHARGER | | | | | |
| Type (Buck) | MPPT | | | | |
| PV Normal Capacity (KWp) | 1.2 | 2.4 | 3.6 | 4.8 | 6 |
| Max PV Strings in parallel | 1 | 2 | 3 | 4 | 5 |
| No of MPPT Channel/No. of Input | 1/1 | | | | |
| Max. Open Circuit Voltage (Voc) | 190 | | | | |
| MPPT Tracking Range (Vmp) | 75-160 | | | | |
| Max Output Current (A) | 23 | 46 | 71 | 94 | 118 |
| Peak Charging Efficiency | ≥92% | | ≥94% | | |
| B. SOLAR INVERTER | | | | | |
| Nominal Capacity | 1KVA | 2KVA | 3KVA | 4KVA | 5KVA |
| Output Current(A) | 3.5 | 7 | 10 | 14 | 17 |
| Battery Voltage(V) | 48 | | | | |
| Output Voltage/Freq/Phase | 230V(± 2%) / 50Hz/1P+N | | | | |
| Load Power Factor | 0.8- unity | | | | |
| Peak Efficiency | >88 % | | | | |
| Over Loads: 120 sec/ 5 sec/ 2.5 sec | 101-110%/111-150% /151-200%/>200% Immediate trip | | | | |
| Auto Bypass Feature | Provided | | | | |
| Anti Islanding/ Power Export to Grid | Provided (As per IEC 62116 & IEC 61727) | | | | |
| C. GRID CHARGER | | | | | |
| Grid Voltage Range | 230V (+10% & -20%) | | | | |
| Grid freq Range | 50Hz (+5% & -5%) | | | | |
| Max Grid Import Power | 1.5KVA | 3KVA | 4.5KVA | 6KVA | 7.5KVA |
| D. PROTECTIONS & DISPLAY PARMETERS | | | | | |
| | PROTECTIONS | | | DISPLAY PARAMETERS | |
| PV Side Battery Side Grid Side Load Side System Protection | <ul style="list-style-type: none"> Reverse Polarity, PV Power Limit, Surge Protection (MOV),O/P voltage Reverse Polarity, O/U Voltage, Current Limit O/U Voltage, O/U Frequency, Surge Protection (MOV) Overloads, Short circuit, Surge Protection (MOV) Over Temperature | | | <ul style="list-style-type: none"> Voltage, Charger O/P Amps, Power, Cumulative Energy Voltage, Current, Battery State Phase Voltage, Frequency, Power, Power Factor Voltage & Current, Frequency, Power, Export kWh Mode of Operation, Active Faults | |
| E. MISCELLANEOUS | | | | | |
| Switchgear Protection | MCB/MCCB provided on PV, Battery, Load & Grid path | | | | |
| LED Indications | Power On, Inverter ON, Solar Present/Charging, Load On Grid/Charging, Battery Low, System Trip | | | | |
| Data Port (RS485/ RS 232) | Optional (Available on Request) | | | | |
| Remote Monitoring | Optional through GPRS based Modem/WIFI | | | | |
| Ingress Protection | IP-20 (Indoor Type) | | | | |
| Cooling Method | Force Cooling (Temp Controlled) | | | | |
| Operating Temperature | 0-50 degrees (without Derating) | | | | |
| Humidity | Max. 95% Non-Condensing | | | | |
| Altitude | 1000m above sea level | | | | |