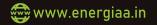


# SINGLE PHASE HYBRID MPPT PCU (1-50 KVA)\*

#### Genuine 'Hybrid' - Not just 'Off-Grid'

Our HBD series offers hybrid solar inverters of 1-250KVA to residential/commercial/industrial customers. This series is built to resolve the two challenges posed by unreliable grids and power cuts – intermittent electricity and high electricity costs. Energiaa's HBD series inverters are essentially grid-tie inverters with storage. They also work as standalone systems in case of no grid. They not only store electricity in the attached batteries but also export unconsumed solar power to the grid, or store and mix with the grid as programmed in its 'behind-the-meter' use.

\*Other customised ratings available on request





# HBD SERIES

#### **KEY FEATURES**

| Bi-directional                  | Seamless switching to and from grid (both import and export) and battery supply, high-efficiency MPPT technology  |
|---------------------------------|---|
| Grid-interactive                | Blends solar and grid-power for optimisation  |
| Energiaa's Benchmark Solar Tech | We use the latest DSP-based 'Active Front End' technology with IoT to achieve 'flexible' or 'smart' energy  |
| IEC certified                   | IEC certifications available  |
| Behind-the-Meter                | Latest global tech enabled where in the absence of Net-Meter policy, we can store solar energy into battery and then blend it with Grid during high-tariff times or with DG-set for DG-set optimisation |
| Easy-to-monitor                 | Optional GPRS-based remote monitoring and controlling   |
| 3-Priority working modes        | HBD with export/ HBD without export/ Off-Grid   |
| Pure sine wave technology       | Recommended for longer life of Industrial/ Commercial equipment   |
| Intelligent battery charging    | 3-Stage charging (Float, Bulk & Absorption) for more battery life (for Lead Acid batteries).  Communication-based charging for Lithium chemistries available  |
| Compatible charger              | Supports wide range of batteries – Flooded Lead Acid Tubular/GEL/VRLA. On request product for Li+chemistries available  |

### **KEY BENEFITS**

| Customisable Energy Shift | Store power and use later  |
|---------------------------|--|
| Runs AC at home           | Can sustain jerk loads like Air Conditioner  |
| Protection                | Protects against grid fluctuations, overload, short circuit, array reverse, battery reverse and thermal fluctuations |
| Galvanic Isolation        | Uses galvanic isolation at output – Ideal for Rural/Microgrid applications   |
| Long life                 | Lifespan of 15+ years  |
| Almost zero-servicing     | Our robust HBD series inverters are IoT-based and require zero to negligible servicing and maintenance               |
| Largest-in-class display  | Beautiful display units showing all inverter+solar+battery data  |

**TOLL-FREE SERVICING SUPPORT: 1800-891-3319** 



# 1-P LOW VOLTAGE (48V) 1-10KVA HYBRID MPPT PCU





Petrol Pumps



Lithium ESS



Residences



Bungalow



Telecom BTS



**Rural Micro Grids** 

| RATINGS                                | 1KVA/48V         | 2KVA/48V                 | 3KVA/48V       | 4KVA/48V   | 5KVA/48V              | 6KVA/48V  | 8KVA/48V       | 10KVA/48V      |
|--|------------------|--------------------------|----------------|--|-----------------------|---|----------------|----------------|
| Model No.                              | HBD-048-01K-1P   | HBD-048-2K-1P            | HBD-048-03K-1P | HBD-048-04K-1P   | HBD-048-05K-1P        | HBD-048-06K-1P                                    | HBD-048-08K-1P | HBD-048-10K-18 |
|  |                  |                          |                |  |                       |   |                |                |
| Type (Buck)                            |                  |                          |                | M  | PPT                   | U s   | u.             | J):            |
| PV Nominal Capacity (Total KWp)        | 1                | 2                        | 3              | 4  | 5                     | 6   | 8              | 10             |
| Max PV Strings in Parallel             | 1                | 2                        | 3              | 4  | 5                     | 6   | 8              | 10             |
| No of MPPT Channels/ No. of Inputs     |                  |                          |                | 1  | /1                    |   |                |                |
| Max. Open Circuit PV Volts (Voc)       |                  |                          |                | 1  | 90                    |   |                |                |
| MPPT Voltage Range (Vmp)               |                  |                          |                | 75-  | 160                   |   |                |                |
| Max Output Current (A)                 | 20               | 40                       | 60             | 80   | 100                   | 120   | 160            | 200            |
| Peak Charging Efficiency               | 9.               | 2%                       |                |  | 9                     | 4%  |                |                |
|  |                  |                          |                |  |                       |   |                |                |
| Nominal Capacity                       | 1KVA             | 2KVA                     | 3KVA           | 4KVA   | 5KVA                  | 6KVA  | 8KVA           | 10KVA          |
| Output Current (A)                     | 3.5              | 7                        | 10             | 14   | 17                    | 21  | 28             | 35             |
| Battery Voltage (V)                    |                  |                          |                | 4  | 18                    |   | 1              |                |
| Output Voltage/ Freq/ Phase            |                  |                          |                | 230V(± 2%)   | / 50Hz/ 1P+N          |   |                |                |
| Load Power Factor                      |                  |                          |                | All marks  | unity                 |   |                |                |
| Peak Efficiency                        |                  |                          | >86 %          |  |                       |   | >88 %          |                |
| Over Loads: 60 sec/ 30 sec/ 5 sec      |                  |                          |                | 101-110%/111-  | 125%/126- 150%        |   | 2000000        |                |
| Auto Bypass Feature                    |                  |                          |                |  | vided                 |   |                |                |
| Anti Islanding/ Power Export to Grid   |                  |                          |                | TO ACTUAL TO A STATE OF THE STA | C 62116 & IEC 61727)  |   |                |                |
|  |                  |                          |                | Provided ( As per ico  | . 02110 & ICC 01727)  |   |                |                |
| C. GRID CHARGER                        | · ·              |                          |                | 141000000  |                       |   |                |                |
| Grid Voltage Range                     |                  |                          |                |  | 1% & -20%)            |   |                |                |
| Grid freq Range                        |                  |                          |                |  | % & -5%)              |   |                |                |
| Max Grid Import Power                  | 1.5KVA           | 3KVA                     | 4.5KVA         | 6KVA   | 7.5KVA                | 9KVA  | 12KVA          | 15KVA          |
| D. PROTECTIONS & DISPLAY PARAME        | TERS             |                          |                |  |                       |   |                |                |
|  |                  | PROTE                    | CTIONS         |  |                       | DISPLAY PA  | ARAMETERS      |                |
| PV Side                                |                  | Power Limit, Surge Pro   |                |  |                       | P Amps, Power, Cumula                             | ative Energy   |                |
| Battery Side                           |                  | J Voltage, Current Limi  |                |  | Voltage, Current, Ba  |   |                |                |
| Grid Side                              |                  | equency, Surge Protect   |                |  |                       | iency, Power, Power Fa                            |                |                |
| Load Side<br>System Protection         | Over Temperature | uit, Surge Protection (# | viovi          |  |                       | requency, Power, Expo<br>Active Faults, Status Mi |                |                |
| E. MISCELLANEOUS                       |                  |                          |                |  |                       |   |                |                |
| Switchgear Protection                  |                  |                          | MC             | B/MCCB provided on P\  | / Rattery Load & Grid | nath  |                |                |
| LED Indications                        |                  |                          | Wic            |  | m, Buzzer Mute        | potri   |                |                |
| Data Port (RS485/ RS 232)              |                  |                          |                | 100000000000000000000000000000000000000  | able on Request)      |   |                |                |
| Remote Monitoring                      |                  |                          |                |  | GPRS based Modem      |   |                |                |
| 20000000000000000000000000000000000000 |                  |                          |                |  |                       |   |                |                |
| ngress Protection                      |                  |                          |                | 000000000000000000000000000000000000000  | loor Type)            |   |                |                |
| Cooling Method                         |                  |                          |                |  | Temp Controlled)      |   |                |                |
| Operating Temperature                  |                  |                          |                | 0-50 degrees (w  |                       |   |                |                |
| Humidity                               |                  |                          |                |  | n-Condensing          |   |                |                |
| Altitude                               |                  |                          |                | 1000m abo  | ve sea level          |   |                |                |
| 1000000                                |                  |                          |                |  |                       |   |                |                |
| Color Shade                            |                  |                          |                | RAL7035 /DA  | GREY HE1SOOS          | +   |                |                |

<sup>\*\*</sup>Statcon Energiaa Pvt. Ltd. reserves the right to modify or withdraw any of the ratings or technical specifications



# 1-P HIGH VOLTAGE (96/120/240V) 5-15KVA HYBRID MPPT PCU



**Petrol Pumps** 



Office Buildings



**Process Industries** 



Bank ATM



Mini Grids







Rural Micro Grids







| RATINGS   | 5KVA/96V   | 6KVA/96V   | 8KVA/96V       | 8KVA/ 120V   | 10KVA/120V             | 15KVA/120V         | 15KVA/240V     |
|---|--|--|----------------|--|------------------------|--------------------|----------------|
| Model No.   | HBD-096-05K-1P   | HBD-096-06K-1P   | HBD-096-08K-1P | HBD-120-08K-1P   | HBD-120-10K-1P         | HBD-120-15K 1P     | HBD-240-15K-1P |
| A. MPPT CHARGER                                   |  |  | d.             |  |                        |                    |                |
| Type (Buck)                                       |  |  |                | MPPT   |                        |                    |                |
| PV Nominal Capacity (Total KWp)                   | 5  | 6  | 8              | 8  | 10                     | 15                 | 15             |
| Max PV Strings in parallel                        | 4  | 5  | 6              | 6  | 6                      | 9                  | 5              |
| No of MPPT Channel/ No. of Inputs                 |  |  | 1              | 1/1  |                        |                    |                |
| Max. Open Circuit PV Volts ( Voc)                 |  | 360  |                |  | 360                    |                    | 675            |
| MPPT Voltage Range (Vmp)                          |  | 140-299  |                |  | 165-299                |                    | 330-560        |
| Max Output Current (A)                            | 50   | 60   | 80             | 64   | 80                     | 120                | 60             |
| Peak Charging Efficiency                          |  |  |                | 94%  |                        |                    |                |
|   |  |  |                |  |                        |                    |                |
| Nominal Capacity                                  | 5KVA   | 6KVA   | 8KVA           | 8KVA   | 10KVA                  | 15KVA              | 15KVA          |
| Output Current (A)                                | 17   | 21   | 28             | 28   | 35                     | 52                 | 52             |
| Battery Voltage (V)                               |  | 96   |                |  | 120                    |                    | 240            |
| Output Voltage/ Freq/ Phase                       |  |  |                | 230V(± 2%) / 50Hz/ 1P+N  |                        |                    |                |
| oad Power Factor                                  |  |  |                | 0.8 - Unity  |                        |                    |                |
| Peak Efficiency                                   |  |  | >88 %          |  |                        | >9                 | 0 %            |
| Over Loads: 60 sec/ 30 sec/ 5 sec                 |  |  | 10             | 01-110%/ 111-125%/ 126-1   | 50%                    |                    |                |
| Auto Bypass Feature                               |  |  |                | Provided   |                        |                    |                |
| Anti Islanding/ Power Export to Grid              |  |  | Provid         | led( As per IEC 62116 & IEC  | 61727)                 |                    |                |
| C. GRID CHARGER                                   | <u>'</u>   |  |                |  |                        |                    |                |
| Grid Voltage Range                                |  |  |                | 230V (+10% & -20%)   |                        |                    |                |
| Grid fr <mark>eq Rang</mark> e                    |  |  |                | 50Hz (+5% & -5%)   |                        |                    |                |
| Max Grid Import Power                             | 7.5KVA   | 9KVA   | 12KVA          | 12KVA  | 15KVA                  | 22.5KVA            | 22.5KVA        |
| D. PROTECTIONS & DISPLAY PARAMETER                | RS   |  |                |  |                        |                    |                |
|   |  | PROTECTIONS  |                |  |                        | DISPLAY PARAMETERS |                |
| PV Side<br>Battery Side<br>5rid Side<br>.oad Side | <ul> <li>Reverse Polarity, O/U \</li> <li>O/U Voltage, O/U Freq</li> </ul> | ower Limit, Surge Protectio<br>/oltage, Current Limit<br>uency, Surge Protection (M<br>t, Surge Protection (MOV) |                | <ul> <li>Voltage, Charger O/P Amps, Power, Cumulative Energy</li> <li>Voltage, Current, Battery State</li> <li>Phase Voltage, Frequency, Power, Power Factor</li> <li>Voltage &amp; Current, Frequency, Power, Export KVAh.</li> </ul> |                        |                    |                |
| System Protection                                 | Over Temperature   | ,  |                |  | Mode of Operation, Act |                    |                |

| E. IVIISCELLAINEUUS       |             |   |             |
|---------------------------|-------------|---|-------------|
| Switchgear Protection     | MCB/MCCB p  | provided on PV, Battery, Load & Grid path |             |
| LED Indications           | N           | lains On, Alarm, Buzzer Mute.             |             |
| Data Port (RS485/ RS 232) | 0           | ptional (Available on Request)            |             |
| Remote monitoring         | Opti        | onal through GPRS based Modem             |             |
| Ingress Protection        |             | IP-20 (Indoor Type)                       |             |
| Cooling Method            | Fo          | orce Cooling (Temp Controlled)            |             |
| Operating Temperature     | 0-          | 50 degrees (without Derating)             |             |
| Humidity                  |             | Max. 95% Non-Condensing                   |             |
| Altitude                  |             | 1000m above sea level                     |             |
| Color Shade               |             | RAL7035 /DA GREY HE1S005                  |             |
| Dimensions (H X W X D)    | 400X600X500 | 650X400X700                               | 825X845X550 |



## 1-P HIGH VOLTAGE (240/360V) 20-50KVA HYBRID MPPT PCU







**Cold Storage** 



**Process Industries** 



Mini Grids



Hospitals/PHC



**Urban Office Buildings** 



**EV Station** 

| RATINGS   | 20KVA/240V   | 25KVA/240V  | 30KVA/240V   | 40KVA/ 240V  | 50KVA/240V   | 40KVA/360V  | 50KVA/360V               |
|---|--|---|--|--|--|---|--------------------------|
| Model No.   | HBD-240-20K-1P   | HBD-240-25K-1P  | HBD-240-30K-1P   | HBD-240-40K-1P   | HBD-240-50K-1P   | HBD-360-40K-1P  | HBD-360-50K-1P           |
| A. MPPT CHARGER   |  |   |  |  |  |   |                          |
| Type (Buck)   |  |   |  | MPPT   |  |   |                          |
| PV Nominal Capacity (Total KWp)   | 20   | 25  | 30   | 40   | 50   | 40  | 50                       |
| Max PV Strings in parallel  | 6  | 8   | 9  | 12   | 15   | 8   | 10                       |
| No of MPPT Channel/ No. of Inputs   |  |   |  | 1/1  |  |   |                          |
| Max. Open Circuit PV Volts ( Voc)   |  |   | 675  |  |  | 83  | 20                       |
| MPPT Voltage Range (Vmp)  |  |   | 330-560  |  |  | 495   | 681                      |
| Max Output Current (A)  | 80   | 100   | 120  | 160  | 200  | 108   | 135                      |
| Peak Charging Efficiency  |  |   |  | 95%  |  |   |                          |
|   |  |   |  |  |  |   |                          |
| Nominal Capacity  | 20KVA  | 25KVA   | 30KVA  | 40KVA  | 50KVA  | 40KVA   | 50KVA                    |
| Output Current (A)  | 70   | 87  | 104  | 139  | 174  | 139   | 174                      |
| Battery Voltage (V)   |  |   | 240  |  |  | 36  | 50                       |
| Output Voltage/ Freq/ Phase   |  |   |  | 230V(± 2%) / 50Hz/ 1P+   | N  |   |                          |
| Load Power Factor   |  |   |  | 0.8 - Unity  |  |   |                          |
| Peak Efficiency   |  |   |  | >91 %  |  |   |                          |
| Over Loads: 60 sec/ 30 sec/ 5 sec   |  |   | 101-   | 110%/ 111-125%/ 126-   | 150%   |   |                          |
| Auto Bypass Feature   |  |   |  | Provided   | 55.100-11  |   |                          |
|   | Provided   |   |  |  |  |   |                          |
|   |  |   | Provider   | d( As per IEC 62116 & IE   | C 61727)   |   |                          |
| Anti Islanding/ Power Export to Grid  |  |   | Provide  | d( As per IEC 62116 & IE   | C 61727)   |   |                          |
| Anti Islanding/ Power Export to Grid  |  |   | Provide  |  | C 61727)   |   |                          |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range   |  |   | Provide  | 230V (+10% & -20%)   | C 61727)   |   |                          |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  | 30KVA  | 37.5KVA   |  | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | P. Wateres   | 60KVA   | 75KVA                    |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power   | 30KVA  | 37.5KVA   | Provided 45KVA   | 230V (+10% & -20%)   | C 61727)<br>75KVA  | 60KVA   | 75KVA                    |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  |  |   | 45KVA  | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | P. Wateres   |   | 75KVA                    |
| Anti Islanding/ Power Export to Grid C. GRID CHARGER Grid Voltage Range Grid freq Range Max Grid Import Power D. PROTECTIONS & DISPLAY PARAME   | TERS   | PROTE   | 45KVA  | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | 75KVA  | DISPLAY PARAMETERS  |                          |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side   | • Reverse Polarity, PV P   | PROTE   | 45KVA  | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | 75KVA  • Voltage, Charger O/P  | DISPLAY PARAMETERS Amps, Power, Cumulati  |                          |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side   | Reverse Polarity, PV P     Reverse Polarity, O/U   | PROTE   | 45KVA CTIONS ction (MOV)   | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | 75KVA  • Voltage, Charger O/P  • Voltage, Current, Batt  | DISPLAY PARAMETERS Amps, Power, Cumulati  | ve Energy                |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Free                       | PROTE<br>lower Limit, Surge Prote<br>Voltage, Current Limit                           | 45KVA CTIONS ction (MOV)   | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque  | DISPLAY PARAMETERS<br>Amps, Power, Cumulati<br>ery State  | ve Energy<br>or          |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side   | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Free                       | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA CTIONS ction (MOV)   | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fn  | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact                        | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA CTIONS ction (MOV)   | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fn  | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  E. MISCELLANEOUS   | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS  ction (MOV)  n (MOV)  | 230V (+10% & -20%)<br>50Hz (+5% & -5%)   | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Frequu Voltage & Current, Fre Mode of Operation, A  | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  System Protection  E. MISCELLANEOUS  Switchgear Protection   | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS ction (MOV) n (MOV) DV)  MCB/MCCB pro                            | 230V (+10% & -20%)<br>50Hz (+5% & -5%)<br>60KVA  | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fre Mode of Operation, A  | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  System Protection  E. MISCELLANEOUS  Switchgear Protection  LED Indications  | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS ction (MOV) n (MOV) DV)  MCB/MCCB pro                            | 230V (+10% & -20%)<br>50Hz (+5% & -5%)<br>60KVA  | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fre Mode of Operation, A  | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  System Protection  E. MISCELLANEOUS  Switchgear Protection  LED Indications  Data Port (RS485/ RS 232)   | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS ction (MOV)  n (MOV)  MCB/MCCB pro  Ma                           | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  ovided on PV, Battery, L  | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fre Mode of Operation, A boad & Grid path ute. Just)                                    | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  System Protection  E. MISCELLANEOUS  Switchgear Protection  LED Indications  Data Port (RS485/ RS 232)  Remote monitoring  | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS ction (MOV)  n (MOV)  MCB/MCCB pro  Ma                           | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  ovided on PV, Battery, L ins On, Alarm, Buzzer M ional (Available on Req  | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fre Mode of Operation, A boad & Grid path ute. Just)                                    | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  Load Side  System Protection  E. MISCELLANEOUS  Switchgear Protection  LED Indications  Data Port (RS485/ RS 232)  Remote monitoring  Ingress Protection                         | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS  ction (MOV)  n (MOV)  MCB/MCCB pro  Ma  Opti                    | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  ovided on PV, Battery, L ins On, Alarm, Buzzer M ional (Available on Requal through GPRS based  | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fre Mode of Operation, A bad & Grid path ute.  Modem  Modem                             | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  System Protection  E. MISCELLANEOUS  Switchgear Protection  LED Indications  Data Port (RS485/ RS 232)  Remote monitoring  Ingress Protection  Cooling Method                    | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS  ction (MOV)  n (MOV)  MCB/MCCB pro  Ma  Opti  Optior            | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  bovided on PV, Battery, L ins On, Alarm, Buzzer M ional (Available on Requal through GPRS based IP-20 (Indoor Type)   | • Voltage, Charger O/P • Voltage, Current, Batt • Phase Voltage, Freque • Voltage & Current, Fre • Mode of Operation, A bad & Grid path ute. uest)  Modem                    | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER Grid Voltage Range Grid Voltage Range Max Grid Import Power D. PROTECTIONS & DISPLAY PARAME  PV Side Battery Side Grid Side Load Side System Protection E. MISCELLANEOUS Switchgear Protection LED Indications Data Port (RS485/ RS 232) Remote monitoring Ingress Protection Cooling Method Operating Temperature          | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS  ction (MOV)  n (MOV)  MCB/MCCB pro  Ma  Opti  Optior  For  0-50 | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  byided on PV, Battery, L ins On, Alarm, Buzzer M ional (Available on Requal through GPRS based IP-20 (Indoor Type) the Cooling (Temp Control  | 75KVA  • Voltage, Charger O/P • Voltage, Current, Batt • Phase Voltage, Freque • Voltage & Current, Frit • Mode of Operation, A bad & Grid path ute.  Juest)  Modem  billed) | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER  Grid Voltage Range  Grid freq Range  Max Grid Import Power  D. PROTECTIONS & DISPLAY PARAME  PV Side  Battery Side  Grid Side  Load Side  System Protection  | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS  ction (MOV)  n (MOV)  MCB/MCCB pro  Ma  Opti  Optior  For  0-50 | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  byided on PV, Battery, L ins On, Alarm, Buzzer M ional (Available on Requal through GPRS based IP-20 (Indoor Type) the Cooling (Temp Control degrees (without Dera                        | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fre Mode of Operation, A bad & Grid path ute.  Just Modem  Silled)                      | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |
| Anti Islanding/ Power Export to Grid  C. GRID CHARGER Grid Voltage Range Grid Voltage Range Max Grid Import Power D. PROTECTIONS & DISPLAY PARAME  PV Side Battery Side Grid Side Load Side System Protection E. MISCELLANEOUS Switchgear Protection LED Indications Data Port (RS485/ RS 232) Remote monitoring Ingress Protection Cooling Method Operating Temperature Humidity | Reverse Polarity, PV P Reverse Polarity, O/U O/U Voltage, O/U Fre Overloads, Short circu | PROTE<br>ower Limit, Surge Prote<br>Voltage, Current Limit<br>quency, Surge Protectio | 45KVA  CTIONS  ction (MOV)  n (MOV)  MCB/MCCB pro  Ma  Option  For  0-56       | 230V (+10% & -20%) 50Hz (+5% & -5%) 60KVA  byided on PV, Battery, L ins On, Alarm, Buzzer M ional (Available on Requial through GPRS based IP-20 (Indoor Type) the Cooling (Temp Contro) degrees (without Dera fax. 95% Non-Condensi | Voltage, Charger O/P Voltage, Current, Batt Phase Voltage, Freque Voltage & Current, Fr. Mode of Operation, A bad & Grid path ute.  Just Modem  Silled) ting)                | DISPLAY PARAMETERS Amps, Power, Cumulativery State ency, Power, Power Fact equency, Power, Export | ve Energy<br>or<br>KVAh. |

<sup>\*\*</sup>Statcon Energiaa Pvt. Ltd. reserves the right to modify or withdraw any of the ratings or technical specifications