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Orient Solar is a group company of the TPH Orient group of companies. Orient Solar is owned and managed by top industry professionals with immense experience in mechanical and electrical engineering, bringing over 70 years of experience in the same.

Orient Solar was founded on the principles of bringing the power of renewable energy to the average population at an affordable price through a strong belief in local manufacturing and expertise. With this goal in mind, Orient Solar boasts one of the largest fully automated panel manufacturing capacities and is one of the leading panel suppliers in the country. This includes M-10, M-6 and the most cutting edge panels available in the market today.

Our core principles rooted in innovation have also led to the creation of a host of smart city products for the average population and our societies everyday infrastructure. These products include inverters, batteries, solar benches, solar street lights, solar water pumps etc. Orient Solar also acts as a principle and lead EPC solution provider for ensuring the completion of each Solar Plant from concept life of a Solar Power Plant. These products use solar energy to create a more sustainable and future ready society and are necessities in todays world to ensure a sustainable future for us as a populous.

What We Have

Orient Renewables has a 800MW solar panel manufacturing plant in Delhi NCR which is currently expanding to 1.2 GW. This is a fully automated plant capable of producing the highest efficiency modules available anywhere in the world.

We have adopted best-in-class technology platforms and have collaborated with leading technology providers. We manufacture module sizes starting from 2.5 Wp to 700 Wp. These modules are used for various on-grid and off-grid applications. We have a sole aim to procure the best quality raw material, to produce the most immaculate PV panels available. We have a vendor-agnostic approach, which allows us to recommend the best solution for all. Our broad-reaching procurement process guarantees you the best technology and our manufacturing infrastructure ensures the best quality. We also have in-house inverter and battery manufacturing capacity.

Why Choose Us

We are an IEC UL Certified Company. We are also impaneled with the Ministry of New & Renewable Energy(MNRE) for all segments including Solar Rooftop, Solar farming & other applications. We are also a BIS & ISO Certified Company, and are doing complete EPC Solutions for our patrons.

Our Infrastructure is one of the most technically advanced setups achieving global standards. Our team and years of technical expertise along with state of the art infrastructure and distinguished clientele allows us to be leaders in our segmentand an ideal solar energy partner for our customers.









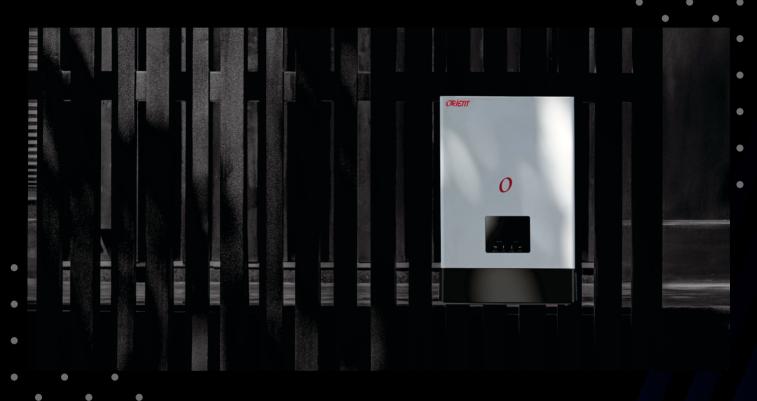
Orient Solar Inverter — Helios Series

Cutting edge solar inverters ensuring reliability along with immense efficiency.

Take control of your own energy!

Solar off grid systems refer to solar energy systems that produce and store energy independently using a solar panel, inverter, and battery storage. As such, with an off grid system, as the name suggests, you would not rely on the grid to provide you any energy and be completely energy independent.





 An efficient maximum power point tracking (MPPT) method plays an important role to improve the efficiency of a photovoltaic (PV) generation system. This study provides an extensive review of the current status of MPPT methods for PV systems which are classified into eight categories. The category is based on the tracking characteristics of the discussed



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ORIENT HELIOS SERIES – MPPT SYSTEM

| | | / | | | | | | |
|--|--|--|--|--|---|--|---------------------|------------------------|
| | | | Technical Spe | cifications | | | | |
| Parameters | Units | | | | Rating | | | |
| Model | | 2 E KVA / 2 E KVA | 5 KVA | 6 KVA / 7.5 K | • | 15 KVA | 15 KVA | 20 KVA |
| Operating DC Voltage | HELIOS | 2.5 KVA / 3.5 KVA 24 | | · | | | | |
| | Volts | | 48 | 96 | 120 | 180 | 240 | 240 |
| System Capacity | KW | 2 | 4 | 5/6 | 8 165 - 200 | 12 | 12 | 18 |
| Battery Capacity (Min/Max) | AH | | SPV Parar | motors | 100 - 200 | | | |
| SPV Open Circuit Voltage Range (Min-Max) | Volts | 36-100 | 72-200 | 144-400 | 180-450 | 270-450 | 360-600 | 360-600 |
| Max SPV Power | KW | 2.5 | 5 | 6 / 7.5 | 100-450 | 10 | 15 | 20 |
| Solar Charge Controller Rating | A | 50 | 70 | 60 | 70 | 60 | 60 | 70 |
| Compatible SPV Panels | ^ | 30 | 70 | 60 | 70 | 80 | 80 | 70 |
| Companible 3F v Fanets | | | MPPT Based C | harge Controller | | | | |
| Switching Element | | Mosfe | | | | IGBT Module | | |
| Controller | | | | | DSP | | | |
| Type Of Charger | | | | | MPPT | | | |
| MPPT Battery Curent Limiting(Default) | | 25A | | | | 40A | | |
| Efficiency | | | | | > 95% | | | |
| Parameters | | Battery | | Default Value | | | | |
| PCU Working Mode Selection by Dip Switch / Selection | Mode | SMARTI HY | YBRID PCU | SMART | Mode Sei | ection: Hybrid / PCU / Smart, I | INV / UPS Selection | · |
| Switch | | | | | | | | |
| Grid Disconnect Solar Present (PCU/Smart) | Volts | According Battry Type Ac Disconnect Aft | hive Boost (Mains er 2Min) | TUBULAR | According Battry Type Achive Boo | st (Mains Disconnect After 21 | Min) | TUBULAR |
| Grid Reconnect (SMART/PCU) | Volts | | 11.8 /Batt ±2% | | 11-1 | 121/ | | 12V |
| Low Cut Off | | | w result && /0 | | | | | 14. |
| Low Cut Off Recovery by SPV | Volts | | | | 10.5 / Batt ±2% 11.5 / Batt ±2% | | | |
| Low Buzzer | Volts | | | | 11.5 / Batt ±2% 10.7 / Batt ±2% | | | |
| High Cut Off | Volts | | | | | | | |
| High Cut Off Recovery | Volts | | | | 16.5/ Batt ±2% | | | |
| Boost Charging Volt by SPV TUB/SMF | Volts Volts | 14.2V±2% | | 14.8V Batt ±2% | 15.0 / Batt ±2% | | | |
| Grid Boost Charging Volt TUB/SMF | Volts | 14.2V12% SMF 14.0V±2% | TUB | 14.8V Batt 12% | | | | |
| Float Charging Voltage | Volts | 13.5V±-2 | 700 | 13.7V±2% | | | | |
| Grid Charging Current Enable by Dip Switch (Normal) | Amps | 13.5VI-2 12A ±29 | v | 13.7VI276 NA | | SETABLE THROUGH L | .CD | |
| | | | | | | | | |
| Grid Charging Current Enable by Dip Switch (High) | Amps | 15A\±29 | | High | | | | |
| Grid Charging Current Disable by Dip Switch | Amps | 0Amp | | Enable | | | | |
| Out and Mallace Mallaced | W.0 | | Ou | tput | 000 - 01/ | | | |
| Output Voltage Noload | Volts | | | | 230 ± 2% | | | |
| Output Frequency | Hz | 0.4 | 10 / /17 2 | 17.2/2/ | 50 ± 2% | 0/7 | 50.0 | |
| Overload | Amps | 8.6 | 10.4 / 17.3 | 17.3/26 | 26/34.7 | 34.7 | 52.2 | 69.5 |
| | | | | | | | | |
| Over Load Retry UPS Mode | - | | | | 50 ± 2% | | | |
| Over Load Retry UPS Mode Overload Retry Inverter Mode | | | Ċ | rid | 50 ± 2% 50 ± 2% | | | |
| Overload Retry Inverter Mode | | | Gi | rid 5 (SAR | 50 ± 2% | alla et | | |
| Overload Retry Inverter Mode Battery Charging Stages | | | Gi | | 50 ± 2% start, Boost, Absorbtion, Float, Equa | tlise) | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase | · · | | G | | 50 ± 2% start, Boost, Absorbtion, Float, Equa 1Phase-3Wire P,N,E | tlise) | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) | V | | G | | 50 ± 2% start, Boost, Absorbtion, Float, Equa 1Phase-3Wire P,N,E 100-280 ±2% | tilse) | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) | | | G | | 50 ± 2% start, Boost, Absorbtion, Float, Equa 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% | nlise) | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) | V | | | 5 (Soft | 50 ± 2% start, Boost, Absorbtion, Float, Equa 1Phase-3Wire P,N,E 100-280 ±2% | tilse) | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) Frequency Range | · · · · · · · · | | Dis | | 50 ± 2% start, Boost, Absorbtion, Float, Equa 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% | | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) | · · · · · · · · · · · · · · · · · · · | | | 5 (Soft | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% | 20X4 LCD With Switch Confi | guration | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) Frequency Range | · · · · · · · · | | Dis | 5 (Soft | 50 ± 2% start, Boost, Absorbtion, Float, Equa 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% | 20X4 LCD With Switch Confi | iguration | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) Frequency Range | · · · · · · · · · · · · · · · · · · · | | Dis | 5 (Soft | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% | 20X4 LCD With Switch Confi | guration | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) Frequency Range | V V Hz Alphanumeric Output (Inverter) Input (Grid) | | Dis | 5 (Soft iplay Vo | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency | 20X4 LCD With Switch Confi | guration | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voitage Range(UPS Mode) Frequency Range Display | V V V Hz Alphanumeric Output (Inverter) Input (Grid) Soler | | Dis | 5 (Soft iplay Vo | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency (Option, Current, Power and Energy (Option, Current, Power and Energy (Option) | 20X4 LCD With Switch Confi | guration | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voitage Range(UPS Mode) Frequency Range Display | V V Hz Alphanumeric Output (inverter) Input (Grid) Soler Battery | | Dis 16X2 LCD | 5 (Soft iplay Vo Voltag | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phrase-9Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Optice Voltage, Current | 20X4 LCD With Switch Confi y | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voitage Range(UPS Mode) Frequency Range Display | V V V Hz Alphanumeric Output (Inverter) Input (Grid) Soler | | Dis 16X2 LCD | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency (Option, Current, Power and Energy (Option, Current, Power and Energy (Option) | 20X4 LCD With Switch Confi y | | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voitage Range(UPS Mode) Frequency Range Display Parameters | V V Hz Alphanumeric Output (inverter) Input (Grid) Soler Battery | | Dis 16X2 LCD Inverter Status, Mair Inve | 5 (Soft iplay Vo Voltag | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phrase-9Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Optice Voltage, Current | 20X4 LCD With Switch Confi (anal) harging Stages/Over Temp, Sy | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) Frequency Rango Display Parameters Switching Element | V V Hz Alphanumeric Output (inverter) Input (Grid) Soler Battery | | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phrase-9Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Optice Voltage, Current | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(UPS Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) | V V Hz Alphanumeric Output (inverter) Input (Grid) Solar Battery Status/Faults | | Dis 16X2 LCD Inverter Status, Mair Inve | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% Itage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Optic Voltage, Current | 20X4 LCD With Switch Confi (anal) harging Stages/Over Temp, Sy | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Renge(UPS Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults | | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current S, Solar Status and Battery Status/Ol | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Frequency Range Display Parameters Switching Element INVIUPS (IT mode) Output voltage Efficiency | V V Hz Alphanumeric Output (inverter) Input (Grid) Solar Battery Status/Faults | 280% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ±2% 175-265 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency voltage, Current Voltage, Current S, Solar Status and Battery Status/Ol | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battary Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Froquency Rango Display Parameters Switching Element INVIUPS (IT mode) Output voltage Efficiency Phase | V V Hz Alphanumeric Output (inverter) Input (Grid) Solar Battery Status/Faults | ≥80% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency Voltage, Current Voltage, Current Status and Battery Status/Ol 230 ±2% 230 ±2% ≥85% 1Phase-9Wire P,M,E | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battary Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Froquency Rango Display Parameters Switching Element INVIUPS (IT mode) Output voltage Efficiency | V V Hz Alphanumeric Output (inverter) Input (Grid) Solar Battery Status/Faults | 280% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current S, Solar Status and Battery Status/Oltage, Current S, Solar Status and Battery S, Solar Status A, Solar S, Solar Status A, Solar S, | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Weveform Frequency | V V Hz Alphanumeric Output (inverter) Input (Grid) Solar Battery Status/Faults | 280% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency Voltage, Current Voltage, Current Status and Battery Status/Ol 230 ±2% 230 ±2% ≥85% 1Phase-9Wire P,M,E | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Weveform Frequency Changeover (Mains to Inverter) | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Fauits Voita | ≥80% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current S, Solar Status and Battery Status/Oltage, Current S, Solar Status and Battery S, Solar Status A, Solar S, Solar Status A, Solar S, | 20X4 LCD With Switch Confi y onal) narging Stages/Over Temp, Sy IGB | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz | ≥80% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status er ler | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current S, Solar Status and Battery Status/Cl 230 ±2% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 | 20X4 LCD With Switch Confi (inal) harging Stages/Over Temp, Sy IGE Front Switch | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Froquency Rango Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Froquency Changeover (Mains to Inverter) Output Power Factor Switches | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | ≥80% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status erter | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current) Voltage, Current S, Solar Status and Battery Status/Cl 230 ±2% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 cs Selection: Hybrid / PCU / Smart, I | 20X4 LCD With Switch Confi (inal) narging Stages/Over Temp, Sy IGB Front Switch | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Froquency Rango Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Froquency Changeover (Mains to Inverter) Output Power Factor | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | 280% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voltag ns Status, Charger Status erter | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current S, Solar Status and Battery Status/Cl 230 ±2% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 | 20X4 LCD With Switch Confi (inal) narging Stages/Over Temp, Sy IGB Front Switch | rstem Uptime | |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Froquency Rango Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Froquency Changeover (Mains to Inverter) Output Power Factor Switches | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | ≥80% | Dis 16X2 LCD Inverter Status, Mair Inve MOSFET | 5 (Soft iplay Vo Voitag ns Status, Charger Status erler System ON/OFF, Mod Inverter On, Mains In | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current) Voltage, Current S, Solar Status and Battery Status/Cl 230 ±2% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 cs Selection: Hybrid / PCU / Smart, I | 20X4 LCD With Switch Confi y narging Stages/Over Temp, Sy IGB Front Switch NV / UPS Selection In, Overload, Faults | rstem Uptime | |
| Overload Retry Inverter Mode Battary Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft iplay Vo Voltag ns Status, Charger Status erier System ON/OFF, Mod Inverter On, Mains In Battlery Low, Ov. | start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current S, Solar Status and Battery Status/Cl 230 ±2% 240 ±25% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 cs Selection: Hybrid / PCU / Smart, I Range, Battery Low/High, Charger Corload, Charger On, Inverter On, Sol | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voitage Range(Inverter Mode) Froquoncy Rango Display Parameters Switching Element INV/UPS (IT mode) Output voitage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft iplay Vo Voltag ns Status, Charger Status erier System ON/OFF, Mod Inverter On, Mains In Battlery Low, Ov. | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,N,E 100-280 ± 2% 175-255 ± 2% 45 - 55 ± 2% ttage, Current, Power and Frequency Voltage and Frequency Voltage, Current, Power and Energy (Option Voltage, Current, Power and Energy (Option Voltage, Current) 230 ± 2% 285% 1Phase-9Wire P,N,E Pure Sine Wave 50 ± 2% <10ms 0.8 cs Selection: Hybrid / PCU / Smart, I Range, Battery Low/High, Charger C | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Cverioad Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Froquency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Voltag In Status, Charger Status Folia System CNNOFF, Mod Inverter On, Mains in Battery Low, Ov | start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,N,E 100-280 ±2% 175-285 ±2% 45 - 55 ±2% Itage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current Voltage, Current S, Solar Status and Battery Status/Ol 230 ±2% 1Phase-9Wire P,N,E Pure Sine Wave 50 ±2% 1Phase-9Wire P,N,E Pure Sine Wave 50 ±2% 10ms 0.8 as Selection: Hybrid / PCU / Smart, IRange, Battery Low/High, Charger Corload, Charger On, Inverter On, Sol votection (MOV Varistors), Reverse Voltage Protection | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Cverioad Retry Inverter Mode Battary Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) Protection | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Voltag In Status, Charger Status Folia System CNNOFF, Mod Inverter On, Mains in Battery Low, Ov | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency Voltage and Frequency Voltage, Current, Power and Energy (Option Voltage, Current) 230 ±2% 230 ±2% 285% 1Phase-9Wire P,M,E Pure Sine Wave 50 ±2% <10ms 0.8 as Soloction: Hybrid J PCU / Smart, I Range, Battery Low/High, Charger Cerdod, Charger On, Inverter On, Solorotection (MOV Varistors), Reverse | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Cverioad Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Froquency Rango Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Fraquency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) Protection Cooling Operating Temp | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms Pf | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Voltag In Status, Charger Status Folia System CNNOFF, Mod Inverter On, Mains in Battery Low, Ov | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ± 2% 175-255 ± 2% 45 - 55 ± 2% ttage, Current, Power and Frequency Voltage and Frequency Voltage and Frequency Voltage, Current Voltage, Current Status and Battery Status/Ol 230 ± 2% 230 ± 2% 1Phase-9Wire P,M,E Pure Sine Wave 50 ± 2% <10ms 0.8 as Selection: Hybrid J PCU / Smart, I Range, Battery Low/High, Charger Cerdod, Charger On, Inverter On, Sol rotection (MOV Varistors), Reverse Voltage Protection orced Air cooling (Temp Controlled) | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Frequency Rango Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alerm (Audible) Protection Caoling Operating Temp Nolse @ 1Meter Distance | V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms Pf | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Voltag In Status, Charger Status Folia System CNNOFF, Mod Inverter On, Mains in Battery Low, Ov | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-9Wire P,M,E 100-280 ± 2% 175-255 ± 2% 45 - 55 ± 2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current Status and Battery Status/Ol 230 ± 2% 1Phase-9Wire P,M,E Pure Sine Wave 50 ± 2% <10ms 0.8 as Selection: Hybrid / PCU / Smart, I Range, Battery Low/High, Charger Orload, Charger On, Inverter On, Sol rotection (MOV Varistors), Reverse Voltage Protection orced Air cooling(Temp Controlled) 0-50 | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Overload Retry Inverter Mode Battary Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Frequency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Fraquency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) Protection Cooling Operating Temp | V V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms Pf | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Voltag In Status, Charger Status Folia System CNNOFF, Mod Inverter On, Mains in Battery Low, Ov | 50 ± 2% start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency e, Current, Power and Energy (Option Voltage, Current) 230 ±2% 230 ±2% 240 ±2% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 as Selection: Hybrid / PCU / Smart, I, Range, Battery Low/High, Charger Controlled, Charger On, Inverter On, Solvotection (MOV Varistors), Reverse Voltage Protection orced Air cooling (Temp Controlled) 0-50 50dB | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Overload Retry Inverter Mode Battery Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Frequency Rango Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) Protection Cooling Operating Temp Noise @ 1Meter Distance Operating Humidity Protection Class | V V V Hz Alphanumeric Output (Inverter) Input (Grid) Solar Battery Status/Faults Volta Hz ms Pf | | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Vo Voltag Ins Status, Charger Status er ler System ON/OFF, Mod Inverter On, Mains in Battery Low, Ow V Surge and Transient F | start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% Itage, Current, Power and Frequency Voltage and Frequency Voltage and Frequency Voltage, Current, Power and Energy (Optic Voltage, Current, Power and Energy (Optic Voltage, Current S, Solar Status and Battery Status/Cl Voltage, Current Voltage, Current S, Solar Status and Battery Status/Cl Voltage, Current S, Solar Status and Battery Status/Cl Voltage, Current S, Solar Status and Battery Status/Cl Voltage, Current Wave Solar Status and Battery Status/Cl Voltage Protection (MOV Varistors), Reverse Voltage Protection Oroced Air cooling (Temp Controlled) 0-50 50dB 95 | 20X4 LCD With Switch Confidential) Inarging Stages/Over Temp, Sylection NV / UPS Sciection On, Overload, Faults ar Charger On | rstem Uptime 8T | Under Voltage and Over |
| Overload Retry Inverter Mode Battary Charging Stages No of Phase Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(Inverter Mode) Voltage Range(IPS Mode) Froquency Range Display Parameters Switching Element INV/UPS (IT mode) Output voltage Efficiency Phase Output Waveform Froquency Changeover (Mains to Inverter) Output Power Factor Switches Indication (LED) Alarm (Audible) Protection Caoling Operating Temp Nolse @ 1Meter Distance Operating Humicity | V V V Hz Alphanumeric Output (Inverter) Input (Grid) Soller Battery Status/Faults Volta | Overload, Short Circuit Prob | Dis 16X2 LCD Inverter Status, Mair Inverter Status, Mair MOSFET By Dip Switch | 5 (Soft Foliay Vo Voltag Ins Status, Charger Status er ler System ON/OFF, Mod Inverter On, Mains in Battery Low, Ow V Surge and Transient F | start, Boost, Absorbtion, Float, Equal 1Phase-3Wire P,N,E 100-280 ±2% 175-255 ±2% 45 - 55 ±2% ttage, Current, Power and Frequency Voltage and Frequency yoltage, Current Voltage, Current S, Solar Status and Battery Status/Ol 230 ±2% 285% 1Phase-3Wire P,N,E Pure Sine Wave 50 ±2% <10ms 0.8 as Selection: Hybrid / PCU / Smart, I Range, Battery Low/High, Charger Orload, Charger On, Inverter On, Sol rotection (MOV Varistors), Reverse Voltage Protection o-50 50dB 96 IP20 | 20X4 LCD With Switch Confi (anal) marging Stages/Over Temp, Sy IGB Front Switch NV / UPS Selection On, Overload, Faulis ar Charger On Polarity of Battery, Over temp | rstem Uptime 8T | |









KIAN SERIES - PWM SYSTEM

Orient Solar Inverter — Kian Series

Cutting edge solar inverters ensuring reliability along with immense efficiency.

Most homes use alternating current (AC) energy, not DC, so the energy produced by your solar panels isn't useful on its own. When your solar panels collect sunlight and turn it into energy, it gets sent to the inverter, which takes the DC energy and turns it into AC energy.





Features

- ***** Intelligent logic control
- * Pure sine wave UPS with 85% Efficiency ISOT: Intelligent solar optimization technique Inbuilt charge controller with 98% efficiency Intelligent battery monitoring
- * Battery charging commences at 110 Volt AC&DC Output





KIAN SERIES - PWM SYSTEM

| | | | / | | | | |
|--|--|--|---|--|--|--|--|
| | | Tech | nical Specificati | ons | | | |
| Parameters | Unit | | | Rating | | | |
| Model | KIAN | 1100 (850VA) | | 1550 (1000VA) | | 2150(1500VA) | |
| Operating DC Voltage | Volts | 12 | | 12 | | 12 | |
| Calan Mada Calantian bu | | | SPV Parameters | | | | |
| Solar Working Mode Selection by Dip Switch | | SMART | | | HYBRID | | |
| SPV Open Circuit Voltage Range | voc | 16-30/-2V | | 16-30/-2v | | 32 - 60+/-2v | |
| (Min-Max) Max SPV Power | w | 600 | | 800 | | 1200 | |
| Max Batt Current | Amps | 50 | | 60 | | 50 | |
| Recommended Panel Cell | CELL | 36 | | 36 | | 60/72 | |
| THE STATE OF THE S | | | ased Charge Co | | | | |
| Switching Element | | | | MOSFET | | | |
| Controller | | | | DSP | | | |
| Efficiency | | | | 95% | | | |
| | | | Battery | | | | |
| Low Cut Off | Volts | | | 10.5/Batt | +/-2% | | |
| Low Cut Off Recovery by (SPV | Volts | | | 11.5/Batt | +/-2% | | |
| Charging) Low Buzzer | Volts | | | 10.7/Batt | +/-2% | | |
| High Cut Off | Volts | | | 15.5/Batt | | | |
| High Cut Off Recovery | Volts | | | 15.0/Batt | | | |
| Battery Selection by Dip Switch | Volts | TUB | 14.4V+/-2% | SMF | 14V+/-2% | 6 | |
| Boost Charging Volt by SPV | Volts | TUB | 14.8V+/-2% | SMF | 14.4+/-29 | | SETABLE |
| Boost Charging Volt by Grid | Volts | TUB | 14.4V+/-2% | SMF | 14V+/-2% | | THROUGH LCD |
| Float Charging Volt by Grid | Volts | TUB | 13.8+/-2% | SMF | 13.5V+/-2 | | |
| Grid Charging Current selection | | | | | | | |
| by Dip Switch / Configuration Setting | Normal | 10A +/-2% | High | 12A +/-2% | Disable | 0, | A |
| | | | Output | | | | |
| Output@ No load | | | | 230 +/- 2% | | | |
| Output Frequency | | | | 50 +/- 2% | | | |
| | | 680w | | 800w | | 1.6KW | |
| Overload | | 3.1 | | 3.6 | | 6.9 | |
| | 1 | 55 | | 67 | | 67 | |
| Typical Efficiency | | ≥82% | | ≥82% | | ≥82% | |
| | | | | | | | |
| | | | Display | | | | |
| Display | Alphanumeric | | Display | 16X2 LCD | | | |
| Display | Output | | | 16X2 LCD tage, Current (Load | %) and Frequenc | ey | |
| Display | | | | | | ey | |
| Display Parameters | Output (Inverter) | | | tage, Current (Load | requency | e y | |
| | Output (Inverter) Input (Grid) | | | tage, Current (Load Voltage and F | requency | ру | |
| | Output (Inverter) Input (Grid) Solar | Inverter Sta | Vol tus, Mains Status, (| tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol | requency urrent urrent ar Status and Bat | tery Status/Charg | ging Stages, |
| | Output (Inverter) Input (Grid) Solar Battery | Inverter Sta | Vol tus, Mains Status, (| tage, Current (Load Voltage and F Voltage, C Voltage, C | requency urrent urrent ar Status and Bat | tery Status/Charg | ging Stages, |
| | Output (Inverter) Input (Grid) Solar Battery | Inverter Sta | Vol tus, Mains Status, t OverHeat, Cl | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol | requency urrent urrent ar Status and Bat CHG High/Low, S | tery Status/Charg | ging Stages, |
| Parameters | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Sta | Vol tus, Mains Status, t OverHeat, Cl | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, | requency urrent urrent ar Status and Bat CHG High/Low, Sl re P,N,E | tery Status/Charg | ging Stages, |
| Parameters No of Phase | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Sta | Vol tus, Mains Status, t OverHeat, Cl | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi | requency urrent urrent ar Status and Bat CHG High/Low, SI re P.N,E | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Sta | Vol tus, Mains Status, t OverHeat, Cl | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 | requency urrent urrent ar Status and Bat CHG High/Low, SI re P,N,E N-2% | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 | requency urrent urrent ar Status and Bat CHG High/Low, SI re P,N,E N-2% -2% | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz | Inverter Sta | Vol tus, Mains Status, d OverHeat, Cl Grid | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 +/ | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N.E N-2% -2% at, Equalise) | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 + Ost, Absorbtion, Flo | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E N-2% -2% -at, Equalise) | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, SolidG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ ost, Absorbtion, Flo | requency urrent urrent ar Status and Bat CHG High/Low, Sl re P.N.E */-2% */-2% oat, Equalise) ET | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, SolidG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi | requency urrent urrent ar Status and Bat CHG High/Low, Sl re P.N.E */-2% */-2% -at, Equalise) ET 2% re P,N,E | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V Y Hz - V | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 +/ ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi Pure Sine | requency urrent urrent ar Status and Bat CHG High/Low, Sl re P.N.E */-2% */-2% -at, Equalise) ET 2% re P,N,E | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V Y Hz - V - Hz | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+/ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% -2% lat, Equalise) ET 2% re P,N,E | tery Status/Charg | ging Stages, |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+/ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% -2% lat, Equalise) ET 2% re P,N,E | tery Status/Charg | ging Stages, |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V Y Hz - V - Hz | Inverter Sta | Vol tus, Mains Status, o OverHeat, Cl Grid 5 (Softstart, Bo | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N.E h/-2% -2% -at, Equalise) ET 2% re P,N,E Wave | tery Status/Charg | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+/ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% -2% -at, Equalise) ET 22% re P,N,E Wave | tery Status/Charç MF/Tubular | |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | | tus, Mains Status, OverHeat, Ch Grid 5 (Softstart, Bo Inverter | voltage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sold G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N.E h/-2%2%2%2% | tery Status/Charç MF/Tubular | Switch Configuration |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | ON/OFF, Mod | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter | voltage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol. G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 +/ ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N.E h/-2% -2% sat, Equalise) ET 2% re P.N.E Wave s | tery Status/Charg MF/Tubular HG.HI, CHG. | Switch Configuration Setting |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | ON/OFF, Mod | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Sol. IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+1 ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Lov | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% -2% hat, Equalise) ET 2% re P,N,E Wave s s s s /SMF, CHG.LO/CHf | tery Status/Charg MF/Tubular HG.HI, CHG. | Switch Configuration Setting |
| No of Phase Voltage Range(Inverter) Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | ON/OFF, Mod | tus, Mains Status, OverHeat, Ch Grid 5 (Softstart, Bo Inverter | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Sol. IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+1 ost, Absorbtion, Flo MOSF 230+1- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Loverload, Charger On | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% h2%2% teat, Equalise) ET 2% re P,N,E Wave s s s vSMF, CHG.LO/CHf t/High, Charger O, Inverter On, Solice | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On | Switch Configuration Setting Its |
| No of Phase Voltage Range(Inverter) Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz - Hz | ON/OFF, Mod | tus, Mains Status, d OverHeat, Cl Grid 5 (Softstart, Bo Inverter Inverter Werter On, Mains In Battery Low, Overt Circuit Protection | voltage, Current (Load Voltage, C Voltage, C Voltage, C Charger Status, Solid Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+/ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Loverload, Charger On, Over Voltage, SPV temperature Prote | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2%2% lat, Equalise) ET 22% re P,N,E Wave s s s s s (SMF, CHG.LO/CHf f //High, Charger O /, Inverter On, Sols Surge and Transi ction, under voltage | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On tent protection (M | Switch Configuration Setting its |
| No of Phase Voltage Range(Inverter) Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V Hz ms Pf | ON/OFF, Mod | tus, Mains Status, d OverHeat, Cl Grid 5 (Softstart, Bo Inverter Inverter Werter On, Mains In Battery Low, Overt Circuit Protection | voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Solid Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Lovery Lovery Voltage, SPV temperature Prote orced Air cooling(T | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2%2% lat, Equalise) ET 22% re P,N,E Wave s s s s //SMF, CHG.LO/Chf f //High, Charger O , Inverter On, Sols Surge and Transi ction, under voltagemp Controlled) | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On tent protection (M | Switch Configuration Setting its |
| No of Phase Voltage Range(Inverter) Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V - Hz ms Pf | ON/OFF, Mod | tus, Mains Status, d OverHeat, Cl Grid 5 (Softstart, Bo Inverter Inverter Werter On, Mains In Battery Low, Overt Circuit Protection | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Solid Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Lov erload, Charger On 1,0ver Voltage,SPV temperature Prote orced Air cooling(T | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2%2% lat, Equalise) ET 22% re P,N,E Wave s s s s //SMF, CHG.LO/Chf f //High, Charger O , Inverter On, Sols Surge and Transi ction, under voltagemp Controlled) | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On tent protection (M | Switch Configuration Setting its |
| No of Phase Voltage Range(Inverter) Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V Hz ms Pf | ON/OFF, Mod | tus, Mains Status, d OverHeat, Cl Grid 5 (Softstart, Bo Inverter Inverter Werter On, Mains In Battery Low, Overt Circuit Protection | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Sol. IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 +/ Ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Lov erload, Charger On 1,0ver Voltage,SPV temperature Prote orced Air cooling(T 0-50 95 | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N,E h/-2%2%2% | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On tent protection (M | Switch Configuration Setting its |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity Protection Class | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V Hz ms Pf | ON/OFF, Mod | tus, Mains Status, d OverHeat, Cl Grid 5 (Softstart, Bo Inverter Inverter Werter On, Mains In Battery Low, Overt Circuit Protection | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Sol. IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 +/ ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Loverload, Charger On 1,0ver Voltage,SPV temperature Prote orced Air cooling(T 0-50 95 | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N.E h/-2%2%2% | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On tent protection (M | Switch Configuration Setting its |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity Protection Class Noise @ 1Meter Distance | Output (Inverter) Input (Grid) Solar Battery Status/Faults | ON/OFF, Mod Inv Overload,Shor Reverse Polar | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter Inverter He: Hybrid / Smart/F EN/ verter On, Mains In Battery Low, Overt Circuit Protection rity of Battery,Over | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Solid Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+ Ost, Absorbtion, Flo MOSF 230+/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Loverload, Charger On 1,0ver Voltage, SPV temperature Prote orced Air cooling(T 0-50 95 1P20 50dE | requency urrent urrent ar Status and Bat CHG High/Low, Si re P.N.E h/-2%2%2% | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On ent protection (M ge and over volta | Switch Configuration Setting its |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Temp Operating Humidity Protection Class Noise @ 1Meter Distance Weight | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - Hz ms Pf C % - Kg | ON/OFF, Mod Inv Overload,Shor Reverse Polar | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter de: Hybrid / Smart/fi EN/verter On, Mains In Battery Low, Overt Circuit Protection rity of Battery, Over | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Sol. IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+l ost, Absorbtion, Flo MOSF 230+l- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time CU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Loverload, Charger On,Over Voltage,SPV temperature Prote orced Air cooling(T 0-50 95 IP20 50dE | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% h/-2% -2% sat, Equalise) ET 2% re P,N,E Wave s s s s /SMF, CHG.LO/CHf u/High, Charger O, Inverter On, Sola Surge and Transi ction, under voltagemp Controlled) | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On ent protection (M ge and over volta | Switch Configuration Setting Its OV Varistors), ge Protection |
| No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity Protection Class Noise @ 1Meter Distance | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V V Hz | ON/OFF, Mod Inv Overload,Shor Reverse Polar | tus, Mains Status, overHeat, Cl Grid 5 (Softstart, Bo Inverter de: Hybrid / Smart/fi EN/verter On, Mains In Battery Low, Overt Circuit Protection rity of Battery, Over F | Voltage and F Voltage, C Voltage, C Voltage, C Voltage, C Charger Status, Sol. IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55+l ost, Absorbtion, Flo MOSF 230+l- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Time CU, INV /UPS, TUB CHG.DIS, Scroll Of Range, Battery Loverload, Charger On,Over Voltage,SPV temperature Prote orced Air cooling(T 0-50 95 IP20 50dE | requency urrent urrent ar Status and Bat CHG High/Low, Si re P,N,E h/-2% h/-2%2% sat, Equalise) ET 2% re P,N,E Wave s s s s /SMF, CHG.LO/CHf u/High, Charger O, Inverter On, Sola Surge and Transi ction, under voltagemp Controlled) | tery Status/Charg MF/Tubular HG.HI, CHG. On, Overload, Fau ar Charger On ent protection (M ge and over volta 15.96 432×381×215 | Switch Configuration Setting Its OV Varistors), ge Protection |







ORIENT

KIAN SERIES - PWM SYSTEM

Orient Solar Inverter — Kian Series

Cutting edge solar inverters ensuring reliability along with immense efficiency.

Pulse Width Modulated Inverters (PWM Inverter) have a wide range of applications. Practically these are used in power electronics circuits. The inverters based on the PWM technology and possess MOSFETs in the switching stage of the output.





Features

- •DSP-based; fewer components, small size less electricity bill more efficiency.
- Soft Start features; protects appliances at startup.
- Last Fault Display and record: the system records the last fault and you can analyze it.
- •The adaptive loss reduction process gives a more efficient charging system.
- •5-stage battery charge control system for lower gassing and faster Charging
- •In-built SBM (Smart Battery Management) system to provide a higher degree of battery production & life Battery usage data is recorded for better evaluation of the battery.
- Supply the highest quality pure sine wave power; protects your expensive



ORIENT

KIAN SERIES - PWM SYSTEM

| | | Tech | nical Specificati | ons | | | |
|--|--|---|---|---|--|--|---|
| Parameters | Unit | | | Rating | | | |
| Model | KIAN | 2800 (2000 VA) | | 4150 (3500VA) | | 5550(5000VA) | |
| Operating DC Voltage | Volts | 24 | | 48 | | 48 | |
| | | 1 | SPV Parameters | | | | |
| Solar Working Mode Selection by Dip Switch | | | | PCU | | | |
| SPV Open Circuit Voltage Range | | | | | | | |
| (Min-Max) | voc | 32-60+/-2V | | 64-120+/-2V | | 64-120+/-2V | |
| Max SPV Power | w | 1600 | | 2800 | | 4000 | |
| Max Batt Current | Amps | 60 | | 80 | | 80 | |
| Recommended Panel Cell | CELL | 36/72 | | 60/72 | | 60/72 | |
| Outliebing Flamout | | PWM B | ased Charge Co | 100 70 1070 1 | | | |
| Switching Element | | | | MOSFET | | | |
| Controller | | | | DSP 95% | | | |
| Efficiency | | | Battery | 9376 | | | |
| Low Cut Off | Volts | | Dattery | 10.5/Batt | +/-2% | | |
| Low Cut Off Recovery by (SPV | | | | | | | |
| Charging) | Volts | | | 11.5/Batt | | | |
| Low Buzzer | Volts | | | 10.7/Batt | | | |
| High Cut Off | Volts | | | 15.5/Batt | | | |
| High Cut Off Recovery | Volts | | | 15.0/Batt | | | |
| Battery Selection by Dip Switch | Volts | TUB | 14.4V+/-2% | SMF | 14V+/-29 | | |
| Boost Charging Volt by SPV | Volts | TUB | 14.8V+/-2% | SMF | 14.4+/-29 | | SETABLE |
| Boost Charging Volt by Grid | Volts | TUB | 14.4V+/-2% | SMF | 14V+/-29 | | THROUGH LCD |
| Float Charging Volt by Grid | Volts | TUB | 13.8+/-2% | SMF | 13.5V+/-2 | 2% | |
| Grid Charging Current selection by Dip Switch / Configuration | Normal | 10A +/-2% | High | 12A +/-2% | Disable | (|)A |
| Setting | | | | | | | |
| Output@ No load | | | Output | | | | |
| | | | | 230 +/- 2% | | | |
| Output Frequency | | 4 01014 | | 50 +/- 2% | | 415141 | |
| | | 1.6KW | | 3KW | | 4KW | |
| Overload | | 6.9 | | 13 | | 17.3 | |
| | | 67 | | 83 | | 83 | |
| Typical Efficiency | | ≥85% | | ≥85% | | ≥85% | |
| | | | | | | | |
| | | | Display | | | | |
| Display | Alphanumeric | | Display | 20x4 LCD | | | |
| Display | Output | | | 20×4 LCD tage, Current (Load | d%) and Frequence | су | |
| Display | | | | | | ру | |
| Display Parameters | Output (Inverter) | | | tage, Current (Load | Frequency | су | |
| | Output (Inverter) Input (Grid) | | | tage, Current (Load Voltage and F | Frequency Current | э | |
| | Output (Inverter) Input (Grid) Solar | Inverter Stal | Vol tus, Mains Status, | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol | Frequency Current Current Iar Status and Bal | ttery Status/Char | ging Stages, |
| | Output (Inverter) Input (Grid) Solar Battery | Inverter Stat | Vol tus, Mains Status, | tage, Current (Load Voltage and F Voltage, C Voltage, C | Frequency Current Current Iar Status and Bal | ttery Status/Char | ging Stages, |
| | Output (Inverter) Input (Grid) Solar Battery | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol | Frequency Current Current Iar Status and Bal CHG High/Low, S | ttery Status/Char | ging Stages, |
| Parameters | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stal | Vol tus, Mains Status, OverHeat, Cl | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E | ttery Status/Char | ging Stages, |
| Parameters No of Phase | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stal | Vol tus, Mains Status, OverHeat, Cl | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi | Frequency Current Current ar Status and Bat CHG High/Low, S ire P,N,E +/-2% | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl | tage, Current (Load Voltage and f Voltage, C Voltage, C Charger Status, Sol IC Enable/Disable, 1Phase-3Wi 100-280 | Frequency Current Current ar Status and Bat CHG High/Low, S ire P,N,E +/-2% | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% +1-2% | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol 4G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% +1-2% | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol 4G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + | Frequency Jurrent current ar Status and Bal CHG High/Low, S ire P.N.E +/-2% +/-2% oat, Equalise) | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol HG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Flo | Frequency Current current ar Status and Bal CHG High/Low, S aire P,N,E +1-2% +1-2% and, Equalise) | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(Ips) Frequency Range Battery Charging Stages Switching Element | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fid | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% +1-2% oat, Equalise) | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% -1-2% oat, Equalise) ET 22% | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voitage Range(Inverter) Voitage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voitage Phase | Output (Inverter) Input (Grid) Solar Battery Status/Faults | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% -1-2% oat, Equalise) ET 22% | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz | Inverter Stal | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol HC Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine | Frequency current current ar Status and Bal CHG High/Low, S ire P,N,E +/-2% +/-2% pat, Equalise) ET 22% ire P,N,E | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol HG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 4/-2% 4/-2% bat, Equalise) ET 22% ire P,N,E Wave | ttery Status/Char | ging Stages, |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | Inverter Stat | Vol tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo | tage, Current (Load Voltage and F Voltage, C Voltage, C Charger Status, Sol 4G Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m | Frequency current current ar Status and Bal CHG High/Low, S ire P.N.E 4/-2% 4/-2% at, Equalise) ET 22% ire P.N.E Wave | ttery Status/Char | |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | | tus, Mains Status, OverHeat, Ci Grid 5 (Softstart, Bo Inverter | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 41-2% 41-2% and, Equalise) ET 2% Ire P,N,E Wave Is BSMSMF, CHG.LO/CI. | ttery Status/Char MF/Tubular | Switch |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | ON/OFF, Mod | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 41-2% 41-2% and, Equalise) ET 2% University ET 2% University ET 2% University ET EX | ttery Status/Char MF/Tubular | Switch Configuration Setting |
| Parameters No of Phase Voitage Range(Inverter) Voitage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voitage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | ON/OFF, Mod | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Lox | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% -1 | ttery Status/Char MF/Tubular HG.HI, CHG. | Switch Configuration Setting |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(UPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | ON/OFF, Mod | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter le: Hybrid / Smart/l EN/ rerter On, Mains In Battery Low, Ov | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol HC Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.88 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Loverload, Charger On | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 4/-2% 4/-2% -2-2% -2-2% | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Fat ar Charger On | Switch Configuration Setting ults |
| Parameters No of Phase Voitage Range(Inverter) Voitage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voitage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter ie: Hybrid / Smart/l EN/ ereter On, Mains | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + cost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Low erload, Charger On n, Over Voltage, SPV | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 41-2% 41-2% 24-2-2% Lat, Equalise) ET 22% are P,N,E a Wave BS SSSMF, CHG,LO/Cl ff W/High, Charger C , Inverter On, Sol Surge and Transi | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voitage Range(Inverter) Voitage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voitage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter EN/ erter On, Mains In Battery Low, Over to Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol HC Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.88 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Loverload, Charger On | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E +1-2% +1-2% -1-2% part, Equalise) ET 2% Ire P,N,E Wave 18 8 8/SMF, CHG,LO/Cl ff If Inverter On, Sol Surge and Transs Surge and Transs Surge and Transs Surge and Transs Culon, under volta | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voitage Range(Inverter) Voitage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voitage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L V Hz | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter EN/ erter On, Mains In Battery Low, Over to Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + dest, Absorbtion, Fid MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Loverload, Charger On , Over Voltage, SPV temperature Prote | Frequency Current Current For Status and Bal CHG High/Low, S Fre P,N,E Frey Frey Frey Frey Frey Frey Frey Frey | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V Hz ms Pf | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter EN/ erter On, Mains In Battery Low, Over to Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Flo MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.88 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Loverload, Charger On temperature Prote forced Air cooling(T | Frequency Current Current For Status and Bal CHG High/Low, S Fre P,N,E Frey Frey Frey Frey Frey Frey Frey Frey | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L T Hz ms Pf | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter EN/ erter On, Mains In Battery Low, Over to Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280- 175-255- 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.88 2 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Lov erload, Charger On ,Over Voltage, Prove torced Air cooling (Tocod Air cooling) | Frequency Current Current Car Status and Bal CHG High/Low, S ire P,N,E +1-2% - | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(IUPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L T Hz ms Pf | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter EN/ erter On, Mains In Battery Low, Over to Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sine 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE CHG.DIS, Scroll Of Range, Battery Lov erload, Charger On 0, Over Voltage, SPV temperature Prote orced Air cooling(10) 0-50 | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 4/-2% 4/-2% -1/-2% | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(Inverter) Voltage Range(Ips) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity Protection Class | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - L T Hz ms Pf | ON/OFF, Mod Inv | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter EN/ erter On, Mains In Battery Low, Over to Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fic MOSF 230 +/- 1Phase-3Wi Pure Sime 50 <10m 0.8 3 Tim PCU, INV /UPS, TUE GRange, Battery Loverload, Charger Con, Over Voltage,SPV temperature Protect orced Air cooling(T 0-56 | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 4/-2% 4/-2% -1/-2% | ttery Status/Char MF/Tubular HG.HI, CHG. On, Overload, Far ar Charger On ient protection (fi | Switch Configuration Setting uits |
| Parameters No of Phase Voltage Range(Inverter) Voltage Range(IPS) Frequency Range Battery Charging Stages Switching Element Output voltage Phase Output Waveform Frequency Changeover (Mains to Inverter) Output Power Factor Overload Retry Switches Indication Alarm Protection Cooling Operating Temp Operating Humidity Protection Class Noise @ 1Meter Distance | Output (Inverter) Input (Grid) Solar Battery Status/Faults - V V Hz - V | ON/OFF, Mod Inv Overload, Shor Reverse Polar | tus, Mains Status, OverHeat, Cl Grid 5 (Softstart, Bo Inverter te: Hybrid / Smart/I EN/ erter On, Mains In Battery Low, Ov t Circuit Protection ity of Battery,Over | tage, Current (Load Voltage and F Voltage, C Voltage, C Voltage, C Charger Status, Sol IG Enable/Disable, 1Phase-3Wi 100-280 175-255 45-55 + ost, Absorbtion, Fit MOSF 230 +/- 1Phase-3Wi Pure Sina 50 <10m 0.8 3 Tim CPU, INV /UPS, TUE Range, Battery Lox erload, Charger On n, Over Voltage, SPV temperature Protect forced Air cooling(T 0-56 95 IP20 50df | Frequency Current Current ar Status and Bal CHG High/Low, S ire P,N,E 4/-2% 4/-2% 4/-2% at, Equalise) ET 2% Ire P,N,E Wave BS SSMF, CHG.LO/Clff W/High, Charger Co, Surge and Transiction, under volta femp Controlled) | HG.HI, CHG. On, Overload, Far ar Charger On lent protection (fige and over voltage and ove | Switch Configuration Setting uits AOV Varistors), age Protection |









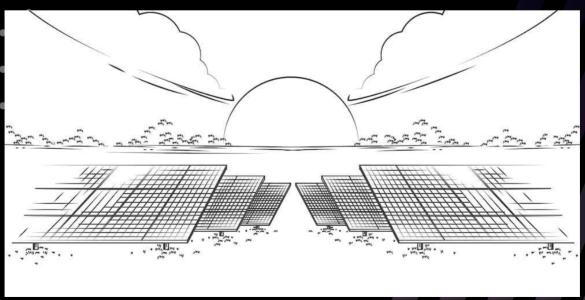


Solar on grid systems refer to solar energy systems that do not store the energy independently but supply it back to the grid. As such, in case your solar system over or under produces energy it does not matter as you will be supplied your energy needs from the grid as per normal and the solar energy you produced will be subtracted from your monthly bill.





Go green with our on grid solar power generating systems.





DATA SHEET

| | | | | | | Single P | hase (| (1KW - | 6.2KW) | | | | | | |
|--------------------------------------|------|---------------------------|------|--------|-------|---|---------|----------|-------------|----------|-------|--------|-------|-------|-------|
| Model (KSY)(KW) | 1 | 1.2 | 2 | 2.3 | 3 | 3.3 / 3.4 | 4 | 4.2 | 4 / 4.2 | 4.4/4.6 | 5 | 5.2 | 5.4 | 6 | 6.2 |
| Input (DC) | | | | | | | | | | | | | | | |
| Max Peak DC Input Power (KW) | 1.2 | 1.44 | 2.4 | 2.76 | 3.3 | 3.60 | 4.0 | 4.2 | 4.6 | 4.80 | | 6 | | | 7.0 |
| Max. DC I/P (V dc) | | | 5 | 00Vdc | | | 550 | 0Vdc | | | 5 | 50Vdc | | | |
| Max. MPPT I/P Current (A) | | | | | | 16A | | | | | | 13A | | | |
| MPPT Short Circuit Current (A) | | | | | | | | 2 | 20A | | | | | | |
| MPPT Tracking Voltage (Vdc) | | | | 80-500 | - | | 80-5 | 550V | | | |)-550V | | | |
| Min. Start Voltage (V) | | | | | 80V | dc | | | | | 10 | 00Vdc | | | |
| Number of MPPT Tracker | | 1 2 | | | | | | | | | | | | | |
| Strings per MPPT Trackers | | | | | | | | 1 | | | | | | | |
| Output (AC) Rated output power (kw) | 1 | 1.2 | 2 | 2.3 | 3 | 3.3 /3.4 | 4 | 4.2 | 4 / 4.2 | 4.4/ 4.6 | 5.0 | 5.2 | 5.4 | 6 | 6.2 |
| Rated Grid Voltage (V) | 1 | 1.2 | 2 | 2.5 | 3 | 3.3/3.4 | 0 | | 10V - 300V | | 3.0 | 3.2 | 3.4 | O | 0.2 |
| | | | | | | 50 | | • | -52Hz) / (5 | • | | | | | |
| Nominal Grid Freq.(Hz) | | | | | | | | | 1 1 | | | | | | |
| Max. output Current AC (A) | 4.33 | 5.22 | 8.69 | 10.00 | 13.04 | 14.34 | 17.39 | | 1 | 20.00 | 21.7 | 22.6 | 23.47 | 26.08 | 26.95 |
| AC Connection (With PE) | | | | | | | | P + N | I + E | | | | | | |
| THDI (%) | | | | | | | <3% | (At Ra | ted Power | -) | | | | | |
| Output Power Factor (%) | | 0.8 Leading 1 0.8 Lagging | | | | | | | | | | | | | |
| Efficiency | | | | | | | | | | | | | | | |
| Max. Conversion Eff.(%) | | 98.0 | | | | | | | | | | | | | |
| Max. Euro Efficiency (%) | | | | | | | | 97. | .5 | | | | | | |
| Protection | | | | | | | | | | | | | | | |
| Anti-Islanding Protection | | | | | | | | Yes Inte | grated | | | | | | |
| Insulation Resistance Detection | | | | | | | , | Yes Inte | grated | | | | | | |
| Residual Current Monitoring | | | | | | | , | Yes Inte | grated | | | | | , | |
| Over Voltage Protection | | | | | | | , | Yes Inte | grated | | | | | | |
| DC Switch | | | | | | | | Optic | onal | | | | | | |
| Surge Protection | | | | | | | М | | D / Filters | | | | | | |
| General Data | | | | | | | | | | | | | | | |
| Dimensions(W*H*D) mm | | | _ | 297×22 | 3×11 | 7mm | | | | 393 | ×324. | 5×154 | mm | | |
| Weight (Kg) | | | | | 8Kg | , | | | | | | OKg | | | |
| Noise Emission (db) | | | | 7. | OINE | | | <300 | l dB | | - | OINB | | | |
| Display | | | | | | | LEI | | .CD Display | / | | | | | |
| DC Connection Type | | | | | | | | MC | | , | | | | | |
| AC Connection Type | | | | | | | Plug in | | tor / Wire | e cables | | | | | |
| Communication Interface | | | | | | | | | RS/ RS 485 | | | | | | |
| Cooling Method | | | | | | | | 10.5% | Convection | | | | | | |
| Operating Ambient | | | | | | | | | - +60°C | | | | | | |
| Relative Humidity | | | | | | | | 0% - 1 | | | | | | | |
| Max. Operating Altitude(m) | | | | | | | 200 | | 0 Derating | d | | | | | |
| Protection Class | | | | | | | 200 | ا 1P6 | - | 01 | | | | | |
| Night Stand By Power Consumption (w) | | | | | | | | <1 | | | | | | | |
| | | | | | | | | | | | | | | | |
| Standard Warranty | | | | | | | | 8 1 | /ear | | | | | | |

BIS, IEC 62109 -1/2, IEC 61727, IEC 61683, IEC 60068, IEC 62116, IEC 61000 EMC

 * Note - All specification are subject to change without notice due to continuous upgradation in Modules Wp capacity









DATA SHEET

| | | Three Phase (3KW - 25KW) | | | | | | | | | | |
|--------------------------------------|------|--------------------------|------|------|----------|-----------|--------------|-------------|---------|--------|---------|-------|
| Model (KSY)(KW) | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12(LM) | 15 | 18 | 20 | 25 |
| Input (DC) | | | | | | | | | | | | |
| Max Peak DC Input Power (KW) | 3.60 | 4.80 | 6.00 | 7.20 | 8.40 | 9.60 | 12.00 | 12.00 | 18.00 | 21.60 | 24.00 | 27.50 |
| Max. DC I/P (V dc) | | | | | | | 1000Vdc | 1 | | | | |
| Max. MPPT I/P Current (A) | | | | | 13A | | 1000 | | | 2 | 6A | |
| MPPT Short Circuit Current (A) | | 20A 40A | | | | | | | | | | |
| MPPT Tracking Voltage (Vdc) | | 200-1000Vdc | | | | | | | | | | |
| Min. Start Voltage (V) | | | | | | | 200Vdc | | | | | |
| Number of MPPT Tracker | | | 1/2 | | | | | | 2 | | | |
| Strings per MPPT Trackers | | | 1 | | | | | | | | 2 | |
| Output (AC) | | | | | | | | | | | | |
| Rated output power (kw) | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 15 | 18 | 20 | 25 |
| Rated Grid Voltage (V) | | | | | | 380V-4/ | 00V (300V | - 500V) | | | | |
| Nominal Grid Freq.(Hz) | | | | | | 5 | 50Hz / 60Hz | Z | | | | |
| Max. output Current AC (A) | 4.3 | 5.8 | 7.2 | 8.6 | 10.1 | 11.56 | 14.5 | 17.32 | 21.7 | 26.01 | 28.90 | 36.12 |
| AC Connection (With PE) | | | | | | | 3P + N + E | | | | | |
| THDI (%) | | | | | | <3% (| (At Rated P | ower) | | | | |
| Output Power Factor (%) | | | | | | 0.8 Lead | ling 1 0. | .8 Lagging | | | | |
| Efficiency | | | | | | | | | | | | |
| Max. Conversion Eff.(%) | | | | | | | 98.0 | | | | | |
| Max. Euro Efficiency (%) | | | | | | | 97.5 | | | | | |
| Protection | | | | | | | | | | | | |
| Anti-Islanding Protection | | | | | | Yes | s Integrate | ∌d | | | | |
| Insulation Resistance Detection | | | | | | Yes | s Integrate | d | | | | |
| Residual Current Monitoring | | | | | | Yes | s Integrated | d | | | | , |
| Over Voltage Protection | | | | | | Yes | s Integrated | d | | | | |
| DC Switch | | | | | | | Inbuilt | | | | | |
| Surge Protection | | | | | | MOV | / SPD / Filt | ters | | | | |
| General Data | | | | | | | | | | | | |
| Dimensions(W*H*D) mm | | | | 42! | 5*346*16 | 0mm | | | | 425*35 | 1*200mm | |
| Weight (Kg) | | | | | 13.7Kg | | | | | 2 | .0Kg | |
| Noise Emission (db) | | | | | | | <30dB | | | | | |
| Display | | | | | | LED v | with LCD D | isplay | | | | |
| DC Connection Type | | | | | | | MC-4 | | | | | |
| AC Connection Type | | | | | | Plu | ug in Conne | ector | | | | |
| Communication Interface | | | | | | WiF | i/ GPRS/ R | S 485 | | | | |
| Cooling Method | | | | | Nat | ural Conv | vection / S | Smart Fan C | Cooling | | | |
| Operating Ambient | | | | | | -1 | 25C - +60°C | С | | | | |
| Relative Humidity | | | | | | (| 0% - 100% | | | | | |
| Max. Operating Altitude(m) | | | | | | 2000 / | (>2000 Dei | rating) | | | | |
| Protection Class | | | | | | | IP65 | | | | | |
| Night Stand By Power Consumption (w) | | | | | | | <1 | | | | | |
| Standard Warranty | | | | | | | 8 Year | | | | | |

BIS ,IEC 62109 -1/2, IEC 61727, IEC 61683, IEC 60068, IEC 62116, IEC 61000 EMC

*Note - All specification are subject to change without notice due to continuous upgradation in Modules Wp capacity



DATA SHEET

| | Three Phase (30KW - 60KW) | | | | | | | | |
|--|---------------------------|-------|---------------------------------------|-------------------|--|-------|-------|--|--|
| Model (KSY)(KW) | 30 | 33 | 35 | 40 | 45 | 50 | 60 | | |
| Input (DC) | | | , | <u>'</u> | | ' | | | |
| Max Peak DC Input Power (KW) | 36 | 39.6 | 42 | 48 | 54 | 60 | 60 | | |
| Max. DC I/P (V dc) | | | | 1100Vdc | | | | | |
| Max. MPPT I/P Current (A) | | | | 30A | | | | | |
| MPPT Short Circuit Current (A) | | | | 46A | | | | | |
| MPPT Tracking Voltage (Vdc) | | | | 200-1000Vdc | | | | | |
| Min. Start Voltage (V) | | | | 200Vdc | | | | | |
| Number of MPPT Tracker | | 3 | | | | 4 | | | |
| Strings per MPPT Trackers | | | | 2 | | | | | |
| Output (AC) | | | | | | | | | |
| Rated output power (kw) | 30 | 33 | 35 | 40 | 45 | 50 | 60 | | |
| Rated Grid Voltage (V) | | | 380 | V-400V (300V - 5 | 00V) | | | | |
| Nominal Grid Freq.(Hz) | 50Hz / 60Hz | | | | | | | | |
| Max. output Current AC (A) | 43.35 | 47.68 | 50.57 | 57.80 | 65.02 | 72.25 | 86.70 | | |
| AC Connection (With PE) | | | | 3P + N + E | | | | | |
| THDI (%) | | | < | 3% (At Rated Pov | ver) | | | | |
| Output Power Factor (%) | 0.8 Leading 1 0.8 Lagging | | | | | | | | |
| Efficiency | | | | | | | | | |
| Max. Conversion Eff.(%) | | 98.0 | | | g | 98.7 | | | |
| Max. Euro Efficiency (%) | | 97.5 | | | 9 | 98.3 | | | |
| Protection | | | | | | | | | |
| Anti-Islanding Protection | | | | Yes Integrated | | | | | |
| Insulation Resistance Detection | | | | Yes Integrated | | | | | |
| Residual Current Monitoring | | | | Yes Integrated | | | , | | |
| Over Voltage Protection | | | | Yes Integrated | | | | | |
| DC Switch | | | | Inbuilt | | | | | |
| Surge Protection | | | | MOV / SPD / Filte | re | | | | |
| General Data | | | | NOV / SED / FILLE | 3 | | | | |
| Dimensions(W*H*D) mm | | | | F00*425*242 | | | | | |
| | | | | 580*435*242mm | 1 | | | | |
| Weight (Kg) | | | | 40Kg <30dB | | | | | |
| Noise Emission (db) Display | | | | LED with LCD Disp | lav | | | | |
| DC Connection Type | | | | MC-4 | ~, | | | | |
| AC Connection Type | | | | Terminal Block | | | | | |
| Communication Interface | | | | WiFi/ GPRS/ RS 4 | 25 | | | | |
| Cooling Method | | | | Convection / Sma | | ī | | | |
| Operating Ambient | | | T T T T T T T T T T T T T T T T T T T | -25 C - +60°C | | | | | |
| Relative Humidity | | | | 0% - 100% | | | | | |
| Max. Operating Altitude(m) | | | 2.6 | 000 (>2000 Derati | ing) | | | | |
| Protection Class | | | | IP65 | , and the second | | | | |
| Night Stand By Power Consumption (w) | | | | <1 | | | | | |
| Standard Warranty | | | | 8 Year | | | | | |
| and the state of t | | | | | | | | | |



*Note - All specification are subject to change without notice due to continuous upgradation in Modules Wp capacity







ORIENT ARC SERIES HYBRID SYSTEM 5KVA/48V Single Phase

Get the best of both worlds and see the benefits of solar with our Hybrid Solar Systems.

Solar hybrid systems refer to solar energy systems that produce and store energy independently using a solar panel, inverter, and battery storage and are also tied to the grid. As such, with a hybrid system you get the best of both worlds where you would not rely on the grid for energy and be energy independent but in case you over or under produce energy you would still have the grid and receive the benefits of an on-grid system





Features

- Intelligent Off-grid & Hybrid modes
- Off-grid seamless switching
- Wide PV input voltage range
- Great battery compatibility
- Single phase / Unbalanced 3-phase
- Support up to 16 pcs in parallel host inverter automatically generated to manage the entire system
- Separated generator port available





ORIENT ARC SERIES HYBRID SYSTEM 5KVA/48V Single Phase

| SpecifiCation | | | | |
|--|------------------|-------------------------------|-----------------------|---|
| INPUT (PV DC) | | | | |
| Max. PV array power(W) | 6000 (3000/3000) | 8000 (4000/4000) | 8000 (4000/4000) | 8000 (4000/4000) |
| Rated PV input voltage(V) | | 32 | 20 | |
| Number of independent MPPT inputs | | 2 | | |
| PV input voltage range(V) | | 100 | | |
| MPPT voltage range(V) | | 120 | | |
| Start-up voltage(V) | | 10 | | |
| | | | | |
| Max. PV input current per MPPT(A) | | 17/ | | |
| Max. PV short-circuit current input per MPPT(A) | | 25/ | 25 | |
| Battery Compatible battery type | | Lithium-ion | // and Asid | |
| | | | | |
| Rated battery voltage(V) | | 48 | | |
| Battery voltage range(V) | 7274 | 38.4 | | 39299 |
| Max. charging/discharging current(A) | 70 | 90 | 110 | 140 |
| Max. discharging/discharging power(W) | 3000 | 4000 | 5000 | 6000 |
| Recomand capacity of battery per inverter | >100AH | >200AH | >200AH | >200AH |
| Force wake up battery from PV function | | YE | S | |
| Force wake up battery from Grid function | | YE | S | |
| Grid | | <u> </u> | | |
| Rated AC voltage(V) | | 23 | 0 | |
| Rated ACfrequency(Hz) | | 50/ | | |
| Rated AC output current(A) | 13.5 | 17.5 | 22 | 26.5 |
| Rated ACoutput current(A) | 3000 | 4000 | 5000 | 6000 |
| | No. Bottom. | 0.0014174174 | | 200000000000000000000000000000000000000 |
| Max. AC intput current(A) | 26 | 35 | 35 | 39.5 |
| Max. AC intput power(W) | 6000 | 8000 | 8000 | 9000 |
| PF | | 0.9 | 9 | |
| THDI | | <5 | % | |
| Rated AC current of BYPASS relays(A) | | 40 |) | |
| UPS | | | | |
| Rated output power(W) | 3000 | 4000 | 5000 | 6000 |
| Rated output voltage(V) | | 23 | 0 | |
| Rated output current(A) | 13.5 | 17.5 | 22 | 26.5 |
| Rated output frequency(Hz) | 388 | 50/ | | 588 |
| A benegative the state of Estate and the state of the state of the Estate of the Estate of the Estate of the State of the | | | | |
| Surge power, duration | | 2Pn, | | |
| Switching time | | <15ms@Single/< | | |
| Wave form | | Sine | | |
| THDV | | 39 | 6 | |
| Efficiency | | | | |
| Max. MPPT efficiency | | 0.9 | 9 | |
| Max. efficiency | | 9.0 | 93 | |
| EU efficiency | | 1 | | |
| Max. charging efficiency | | 0.9 | 93 | |
| Max. discharging efficiency | | 0.9 | | |
| Protection | | | | |
| Over current/voltage protection | | YE | =9 | |
| AC Short-circuit current protection | | YE | | |
| | | | | |
| Grid monitoring | | YE | | |
| AC Surge protection Type III | | YE | | |
| Battery reverse polarity protection | | YE | S | |
| General | | | | |
| Dimensions(W* H* D) | | 303* 505* 135mr | m/11.9* 19.9* 5.3inch | |
| Weight | | 14.5 kg/ | 32lbs | |
| Ingress protection rating | | IP | 20 | |
| Operating environment temperature range | | 0.15 | 50°C | |
| Storage temperature range | | 179A-17 | 60°C | |
| Relative humidity | | | 95% | |
| A CONTRACTOR OF THE CONTRACTOR | | | | |
| | | | | |
| of westign for the - | | | | |
| | | | | |
| | | Transfor | mer-less | |
| Altitude | | <200 | 00m | |
| Noise emission(typical) | | <50 | dB | |
| | | | | |
| Display & Communication interface Warranty Cooling method Topology Altitude Noise emission(typical) Standards & Certification IEC 62109-1, IEC 62109-2, IEC 61000 | | 2ye FA Transfor <200 | NN mer-less IOm | |





X-PRESS SERIES

MONO PERC HALF CUT SOLAR PV MODULE 540-555 W



The Orient Solar X-Cel range is our 10 BB mono perc module. This product is our 540 W module. Orient Solar prides itself on being a renowned supplier of modules which are rigorously tested in accordance to global testing standards

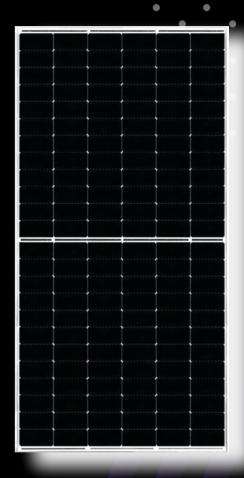
Best in Class Efficiency 21.50%

MBB Technology M10 Half Cut Cells

Non-Destructive Cell Cutting (NDC)

FEATURES

- High Power Generation
- High Efficiency
- 100% Pre and Post EL Inspection
- Undeniable Reliability
- Lower LID / LETID
- Efficient Temperature Coefficient
- Reduced Degradation
- Enhanced Low Light Performance
- Extraordinary PID Resistance



























^{*}All certifications under test



MONO PERC HALF CUT SOLAR PV MODULE 540-555 W

| ELECTRICAL DATA - STC* & NOCT** | | | | | | | | | |
|---------------------------------|------|-------------------------|------------|-------|------------|-------|------------|-------|-------|
| Model | Unit | Orient- | Orient-540 | | Orient-545 | | Orient-550 | | 555 |
| Parameters | Onit | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Capacity Rating Wp | Pmax | 540 | 399 | 545 | 403 | 550 | 407 | 555 | 410 |
| Max. Power Voltage in V | Vpm | 41.64 | 39.35 | 41.80 | 39.50 | 41.93 | 39.62 | 42.05 | 39.74 |
| Max. Power Current in A | Ipm | 12.97 | 10.15 | 13.04 | 10.20 | 13.12 | 10.26 | 13.20 | 10.33 |
| Open Circuit Voltage in V | Voc | 49.60 | 46.59 | 49.75 | 46.74 | 49.90 | 46.88 | 50.00 | 46.97 |
| Short Circuit Current in A | Isc | 13.86 | 10.87 | 13.92 | 10.92 | 13.98 | 10.97 | 14.05 | 11.02 |
| Module Efficiency | % | 20.92 21.12 21.31 21.50 | | | | | 50 | | |
| Power Tolerance | Wp | | | | -0/+4. | 99 | | | |

^{*}STC: lrradiance 1000 W/m², cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1. Measurement uncertainty $\pm 3\%$

^{**}NOCT irradiance 800 W/m^2 , ambient temperature 20°C, wind speed 1 m/sec.

| MECHANICAL DATA | |
|--------------------------|---|
| Dimensions (L x W x H) | 2277 mm x 1133 mm x 40mm |
| Weight | 30 kgs |
| Junction Box | Split JB, IP 68 with 3 bypass diodes |
| Cable | Solar Cable 4.0 mm², 400 mm (Higher cable option available on request) |
| Front Glass | 3.2 mm, High Transmission, AR coated tempered glass |
| Solar Cells | Mono PERC Crystalline - M10 (144 pcs Half Cut) |
| Cell Encapsulation | EVA - Ethylene Vinyl Acetate |
| Backsheet | Composite Film |
| Frame | Anodized Aluminium Alloy |
| Mechanical Load Strength | 5400 Pa (Snow Load), 2400 Pa (Wind Load) |

| TEMPERATURE RATINGS | | |
|---|-------------|--|
| Nominal Operating Cell Temperature (NOCT) | 45°C (±2°C) | |
| Temperature Coefficient of Voc | -0.27%/°C | |
| Temperature Coefficient of Isc | 0.045%/°C | |
| Temperature Coefficient of Pmax | -0.35%/°C | |

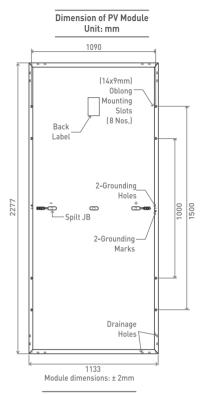
| PERMISSIBLE OPERATING CONDITIONS | | | | | | |
|----------------------------------|----------------|--|--|--|--|--|
| Temperature Range | -40°C to +85°C | | | | | |
| Maximum System Voltage | 1500 V DC | | | | | |
| Max. Series Fuse Rating | 25 A | | | | | |

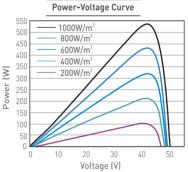
| WARRANTY AND CERTIFICATIONS | | | | | |
|------------------------------|-------------------------------------|--|--|--|--|
| Product Warranty | 10 years Product Warranty | | | | |
| Performance Warranty | 25 year Linear Performance Warranty | | | | |
| General Terms & Conditions a | re applied | | | | |

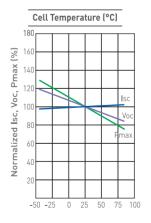
PACKAGING CONFIGURATION

Modules per Pallet

* Module dimension / hole to hole dimensions may vary.









25







X-AMP SERIES

MONO PERC HALF CUT SOLAR PV MODULE 590 W



The Orient Solar X-Cel range is our 10 BB mono perc module. This product is our 590 W module. ADM Orient prides itself on being a renowned supplier of modules which are rigorously tested in accordance to global testing standards.

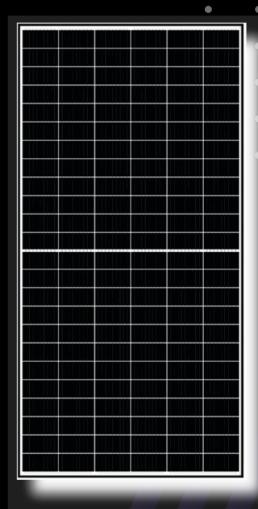
Best in Class Efficiency 21.50%

MBB Technology M10 Half Cut Cells

Non-Destructive Cell Cutting (NDC)

FEATURES

- High Power Generation
- High Efficiency
- 100% Pre and Post EL Inspection
- Undeniable Reliability
- Lower LID / LETID
- Efficient Temperature Coefficient
- Reduced Degradation
- Enhanced Low Light Performance
- Extraordinary PID Resistance



























^{*}All certifications under test



MONO PERC HALF CUT SOLAR PV MODULE - 590 W

| ELECTRICAL DATA - STC* | | | | | | |
|----------------------------|-------|------------|--|--|--|--|
| Model | Unit | ORIENT-590 | | | | |
| Parameters | Oilit | STC | | | | |
| Capacity Rating Wp | Pmax | 590 | | | | |
| Max. Power Voltage in V | Vpm | 45.99 | | | | |
| Max. Power Current in A | Ipm | 12.85 | | | | |
| Open Circuit Voltage in V | Voc | 53.51 | | | | |
| Short Circuit Current in A | Isc | 13.47 | | | | |
| Module Efficiency | % | 21.5 | | | | |
| Power Tolerance | Wp | -0/+4.99 | | | | |

^{*}STC: lrradiance 1000 W/m², cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at $200 \, \text{W/m²}$ according to EN 60904-1. Measurement uncertainty $\pm 3\%$

^{**}NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec.

| MECHANICAL DATA | |
|--------------------------|---|
| Dimensions (L x W x H) | 2460 mm x 1133 mm x 40 mm |
| Weight | 31 kgs |
| Junction Box | Split JB, IP 68 with 3 bypass diodes |
| Cable | Solar Cable 4.0 mm², 400 mm (Higher cable option available on request) |
| Front Glass | 3.2 mm, High Transmission, AR coated tempered glass |
| Solar Cells | Mono PERC Crystalline - M10 (156 pcs Half Cut) |
| Cell Encapsulation | EVA – Ethylene Vinyl Acetate |
| Backsheet | Composite Film |
| Frame | Anodized Aluminium Alloy |
| Mechanical Load Strength | 5400 Pa (Snow Load), 2400 Pa (Wind Load) |

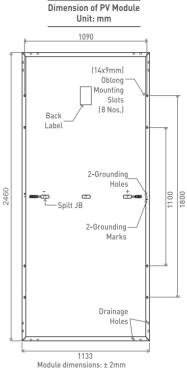
| TEMPERATURE RATINGS | | |
|---|-------------|--|
| Nominal Operating Cell Temperature (NOCT) | 45°C (±2°C) | |
| Temperature Coefficient of Voc | -0.27%/°C | |
| Temperature Coefficient of Isc | 0.045%/°C | |
| Temperature Coefficient of Pmax | -0.35%/°C | |

| PERMISSIBLE OPERATING COND | ITIONS |
|----------------------------|----------------|
| Temperature Range | -40°C to +85°C |
| Maximum System Voltage | 1500 V DC |
| Max. Series Fuse Rating | 25 A |

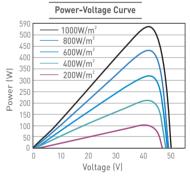
| WARRANTY AND CERTIFICATIONS | | | | | |
|--|-------------------------------------|--|--|--|--|
| Product Warranty | 10 years Product Warranty | | | | |
| Performance Warranty | 25 year Linear Performance Warranty | | | | |
| General Terms & Conditions are applied | | | | | |

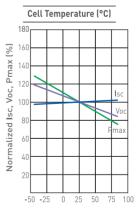
PACKAGING CONFIGURATION

Modules per Pallet



Module differisions: ± 2mm







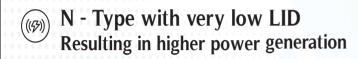




^{*} Module dimension / hole to hole dimensions may vary.



BIFACIAL-N TOPCON 144 CELLS (DUAL GLASS) 560W-590W SGE XXX - 144 TGG (XXX: 560-590Wp)



Positive Tolerance
Power output is guaranteed with a positive tolerance of 0~+4.99Wp

Better temperature coefficent (-0.30%/°c) higher power generation under higher ambient temperature conditions

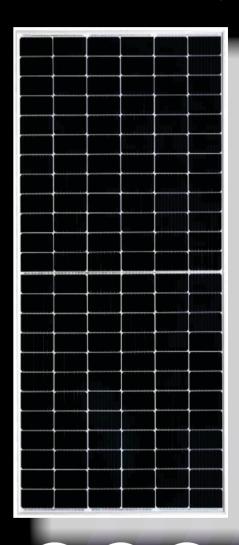
Higher Module Efficiency Module Eff. Up-to 22.5%

Advanced Technology MBB - MULTI BUS -BAR(16BB)
HALF-CUT N-TOPCON CELL

Wind Load (2400Pascal)
Snow Load (5400Pascal)

Withstanding a harsh environment
Reliable quality leads to better sustainability,
even in harsh environments such as deserts,
Farms, coastal and the areas with ammonia exposure

Rigorous Testing Criteria
100% EL inspection, ensures defect-free modules





















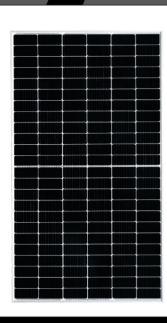


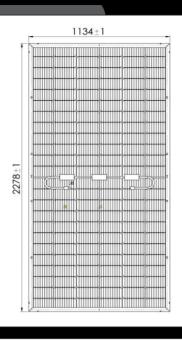


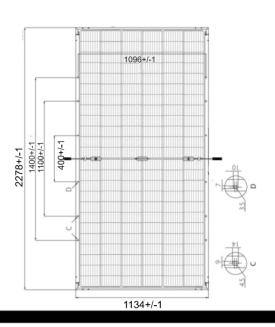




BIFACIAL-N TOPCON 144 CELLS (DUAL GLASS) 560W-590W





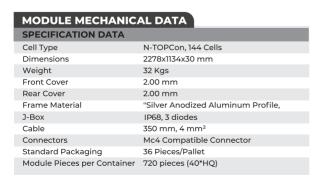


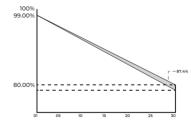
ELECTRICAL DATA PERFORMANCE

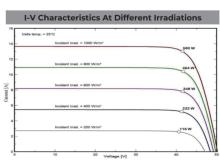
| Conditions | | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
|----------------------------------|---|-------|----------|-------|-------|----------|----------|----------|-----------|---------|--------|-------|----------|-------|--------------|
| Conditions | | 310 | NOCI | 310 | NOCI | 310 | NOCI | 310 | NOCI | 310 | NOCI | 310 | NOCI | 310 | NOCI |
| Peak Power, Pmax (Wp) | W | 560 | 421 | 565 | 425 | 570 | 429 | 575 | 432 | 580 | 436 | 585 | 440 | 590 | 444 |
| Voltage at Maximum power, Vmp | V | 42.41 | 40.20 | 42.53 | 40.32 | 42.65 | 39.69 | 42.82 | 39.89 | 42.94 | 39.98 | 43.06 | 40.82 | 43.18 | 40.93 |
| Current at maximum power, Imp | Α | 13.22 | 10.47 | 13.3 | 10.54 | 13.37 | 10.80 | 13.43 | 10.84 | 13.51 | 10.91 | 13.59 | 10.78 | 13.67 | 10.84 |
| Open circuit voltage, Voc | V | 50.68 | 48.04 | 50.86 | 48.22 | 51.04 | 48.39 | 51.22 | 48.56 | 51.41 | 48.74 | 51.59 | 48.91 | 51.77 | 49.08 |
| Short circuit current, Isc | Α | 13.88 | 11.21 | 13.96 | 11.27 | 14.04 | 11.34 | 14.10 | 11.38 | 14.19 | 11.46 | 14.26 | 11.51 | 14.33 | 11.57 |
| Fill Factor | % | 80% | 78% | 80% | 78% | 80% | 78% | 80% | 78% | 80% | 78% | 80% | 78% | 80% | 78% |
| Module Efficiency (%) | | 21.6 | 58% | 21. | 87% | 22 | .07% | 22. | 26% | 22 | .45% | 22 | .65% | 22.8 | 3 4 % |
| Operating Temperature (°C) | | -4 | 0°C~+8 | 5°C | | Tempe | rature c | oefficie | nts of Is | ic | | | +0.046 | %/°C | |
| Maximum system voltage | | | 1500 VD | C | | Nomin | al opera | ting cel | ll tempe | erature | (NOCT) | | 45±2°C | | |
| Maximum series fuse rating | | | 30A | | | Fire Sat | fety | | | | | | Class-C | | |
| Power tolerance (Wp) | | | 0~+3% | | | Protect | ion Clas | s II | | | | | Class-A | \ | |
| Temperature coefficients of Pmax | | | -0.30%/° | C | | Safety | Class | | | | | | Class-II | | |

Temperature coefficients of Voc

Linear Performance warranty Product Warranty 12 Years Material & Processing First Year Degradation up to 90% for 10Years 80% up to balance 20 Years







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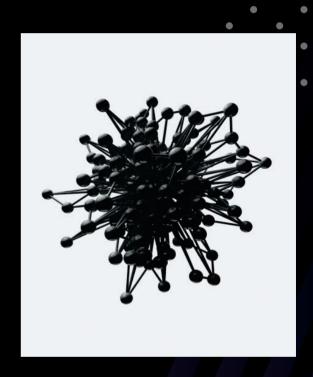
ORIENT APOLLO SERIES SMART LI-ION BATTERY



Storage systems batteries and inverters

A lithium-ion (Li-ion) battery is an advanced battery technology that uses lithium ions as a key component of its electrochemistry. During a discharge cycle, lithium atoms in the anode are ionized and separated from their electrons. The lithium ions move from the anode and pass through the electrolyte until they reach the cathode, where they recombine with their electrons and electrically neutralize.

Lithium Ion batteries have a number of advantages to traditional batteries. Iithium ion batteries have one of the highest energy densities of any battery technology today. This means that they can deliver large amounts of current for highpower applications. Li-ion batteries also have low self-discharge rate of around 1.5-2% per month. Li-ion batteries charge almost 4 times faster than their alternatives. Crucially Li-ion batteries are much easier to dispose of and so are better for the environment as compared to their competitors.





The future is now...
join it with
Orient Solar



ORIENT APOLLO SERIES SMART LI-ION BATTERY

SOLAR APPLICATION

Salient Benefits

- Long Life Cycle
- High Performance
- Eco-Friendly
- Maintenance Free
- High Safety Performance
- Wide operating temperature range
- Completely recyclable



Technical Specification:

| | Model Name | ORIENT128100ESS | | | | |
|---|--|---|--|--|--|--|
| | Nominal Voltage (V) | 12.8 | | | | |
| | Capacity (Ah) | 100 | | | | |
| General | No. of cell in series | 4 | | | | |
| Characteristics | No. of cell in parallel | 1 | | | | |
| | Total No. of cell | 4 | | | | |
| | Cell Type | Prismatic | | | | |
| | Chemistry | LFP | | | | |
| | Maximum cut-off voltage (V) | 14.6 | | | | |
| | Minimum cut-off voltage (V) | 11 | | | | |
| | Charging Voltage (V) | 14.5 | | | | |
| | Recommended charging current (A) | 30 | | | | |
| Electrical | Maximum charging current (A) | 50 | | | | |
| Characteristics | Maximum discharging current (A) | 100 | | | | |
| | Cell Discharging Protection level (V) | 2.75 | | | | |
| | Cell charging protection level (V) | 3.65 | | | | |
| | Balancing current (mA) | 50 | | | | |
| | Cycle Life | 3000 | | | | |
| | Cell under voltage protection | Yes | | | | |
| | Cell over voltage Protection | Yes | | | | |
| Protection | Over current protection | Yes | | | | |
| 11000000 | Short circuit protection | Yes | | | | |
| | Temperature protection | Yes | | | | |
| | Working Temperature (°C) | 0 - 55 | | | | |
| Temperature | Storage Temperature (°C) | 0 - 45 | | | | |
| | Dimension (mm) | | | | | |
| Others | Weight (Kg) | 275x95x245 (mm) 10 Approx. | | | | |
| | | | | | | |
| | Model Name | ORIENT128200ESS | | | | |
| | | | | | | |
| | Nominal Voltage (V) | 12.8 | | | | |
| | Capacity (Ah) | 12.8 200 | | | | |
| General Characteristics | Capacity (Ah) No. of cell in series | 12.8 200 4 | | | | |
| | Capacity (Ah) No. of cell in series No. of cell in parallel | 12.8 200 | | | | |
| | Capacity (Ah) No. of cell in series | 12.8 200 4 2 | | | | |
| | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell | 12.8 200 4 2 8 | | | | |
| | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type | 12.8 200 4 2 8 Prismatic | | | | |
| | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry | 12.8 200 4 2 8 Prismatic LFP 14.6 | | | | |
| | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 | | | | |
| | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 | | | | |
| Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Balancing current (mA) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Balancing current (mA) Cycle Life | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 | | | | |
| Characteristics Electrical | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Cycle Life Cell under voltage protection | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes | | | | |
| Characteristics Electrical Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Balancing current (MA) Cycle Life Cell under voltage Protection Cell over voltage Protection | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes Yes | | | | |
| Characteristics Electrical Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Maximum charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Ealancing current (mA) Cycle Life Cell under voltage Protection Cell over voltage Protection Over current protection Temperature protection Temperature protection Temperature protection | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes Yes Yes Yes Yes Yes | | | | |
| Characteristics Electrical Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Cell charging current (A) Cycle Life Cell under voltage Protection Cell over voltage Protection Over current protection Short circuit protection Temperature protection Working Temperature (°C) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes | | | | |
| Characteristics Electrical Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Balancing current (mA) Cycle Life Cell under voltage Protection Cell over voltage Protection Tell current protection Short circuit protection Working Temperature (°C) Storage Temperature (°C) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes Yes Yes Yes Yes Yes Yes O-55 0-45 | | | | |
| Characteristics Electrical Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Balancing current (mA) Cycle Life Cell under voltage Protection Cell over voltage Protection Tell over voltage Protection Working Temperature (°C) Storage Temperature (°C) Dimension of Rack (LxWxH) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes Yes Yes Yes Yes Yes Yes O-55 0-45 TDB. | | | | |
| Characteristics Electrical Characteristics | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Balancing current (mA) Cycle Life Cell under voltage Protection Cell over voltage Protection Tell current protection Short circuit protection Working Temperature (°C) Storage Temperature (°C) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes Yes Yes Yes Yes Yes Yes O-55 0-45 | | | | |
| Electrical Characteristics Protection Temperature | Capacity (Ah) No. of cell in series No. of cell in parallel Total No. of cell Cell Type Chemistry Maximum cut-off voltage (V) Minimum cut-off voltage (V) Charging Voltage (V) Recommended charging current (A) Maximum charging current (A) Maximum discharging current (A) Cell Discharging Protection level (V) Cell charging protection level (V) Balancing current (mA) Cycle Life Cell under voltage Protection Cell over voltage Protection Tell over voltage Protection Working Temperature (°C) Storage Temperature (°C) Dimension of Rack (LxWxH) | 12.8 200 4 2 8 Prismatic LFP 14.6 11 14.4 30 40 100 2.75 3.65 50 3000 Yes Yes Yes Yes Yes Yes Yes O-55 0-45 TDB. | | | | |

| | Model Name | ORIENT256100ESS | | | |
|-----------------|---|---------------------|--|--|--|
| | Nominal Voltage (V) | 25.6 | | | |
| | Capacity (Ah) | 100 | | | |
| General | No. of cell in series | 8 | | | |
| Characteristics | No. of cell in parallel | 1 | | | |
| | Total No. of cell | 8 | | | |
| | Cell Type | Prismatic | | | |
| | Chemistry | LFP | | | |
| | Maximum cut-off voltage (V) | 29.2 | | | |
| | Minimum cut-off voltage (V) | 22 | | | |
| | Charging Voltage (V) | 28.8 | | | |
| | Recommended charging current (A) | 30 | | | |
| Electrical | Maximum charging current (A) | 40 | | | |
| Characteristics | Maximum discharging current (A) | 50 | | | |
| | Cell Discharging Protection level (V) | 2.75 | | | |
| | Cell charging protection level (V) | 3.65 | | | |
| | Balancing current (mA) | 50 | | | |
| | Cycle Life | 3000 | | | |
| | Cell under voltage protection | Yes | | | |
| | Cell over voltage Protection | Yes | | | |
| Protection | Over current protection | Yes | | | |
| | Short circuit protection | Yes | | | |
| | Temperature protection | Yes | | | |
| | Working Temperature (°C) | 0 – 55 | | | |
| Temperature | Storage Temperature (°C) | 0 - 45 | | | |
| | Dimension of Rack (LxWxH) | TDB. | | | |
| | | | | | |
| Others | Weight (Kg) | 25 Approx. | | | |
| | Wire | Wire gauge 16 sq.mm | | | |
| | Model Name | ORIENT256200ESS | | | |
| | Nominal Voltage (V) | 25.6 | | | |
| | Capacity (Ah) | 200 | | | |
| General | No. of cell in series | 8 | | | |
| Characteristics | No. of cell in parallel | 2 | | | |
| | Total No. of cell | 16 | | | |
| | Cell Type | Prismatic | | | |
| | Chemistry | LFP | | | |
| | Maximum cut-off voltage (V) | 29.2 | | | |
| | Minimum cut-off voltage (V) | 22 | | | |
| | Charging Voltage (V) | 29 | | | |
| | Recommended charging current (A) | 10 | | | |
| Electrical | Maximum charging current (A) | 20 | | | |
| Characteristics | Maximum discharging current (A) | 20 | | | |
| | Cell Discharging Protection level (V) | 2.75 | | | |
| | Cell charging protection level (V) | 3.65 | | | |
| | Balancing current (mA) | 50 | | | |
| | Cell under voltage protection | Yes | | | |
| | Cell over voltage Protection | Yes | | | |
| Protection | | Yes | | | |
| Frotection | Over current protection Short circuit protection | Yes | | | |
| | onort that protession | | | | |
| | Temperature protection | Yes | | | |
| Temperature | Working Temperature (°C) | 0 - 55 | | | |
| | Storage Temperature (°C) | 0 - 45 | | | |
| | | TBD | | | |
| | Dimension (mm) | | | | |
| Others | Weight (Kg) | 55 Approx. | | | |
| Others | ` ' | | | | |







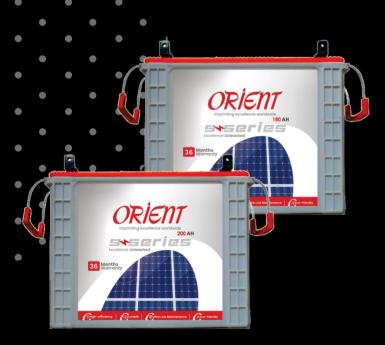


Tubular Batteries: S-Series

Orient Tubular Batteries are manufactured with Heat Sealed Polypropylene Co-Polymer Monobloc casing material. Tubular positive plates are made of highly corrosion-resistant special lead alloy and Pasted Negative Plates with high discharge performance to ensure cycling capabilities and also reduce topping-up frequency. Individual cells are ?tted with Micro Porous aqua-trap ceramic vent plugs with sealed ?oat, which prevent acid mist from coming out from the cells to make it convenient for living room ambiance.

ADM Orient Tubular Plate Batteries are specially designed for inverter applications and are made with ultra-thick charged plates for long life & performance. They are user-friendly batteries with quick initial charging capability, very low internal resistance, and a steady voltage pro?le during short & long-duration discharges. The sealed ?oat and ceramic ?lter plugs help easy maintenance of electrolyte level and ensure no fume emissions. These batteries have great charge acceptance and retention properties even in arduous working conditions.





Features

- Quick charged
- Suitable for frequent power-cuts
- Tubular-designed positive plates provide long life Very low maintenance & long life
- Eco-friendly aqua trap vent plugs to ensure no acid fumes Electrolyte contains special additives to get quick recovery from deep discharge
- Excellent charge acceptance



Tubular Batteries: S-Series



SUPER POWER SUPER BACKUP

SOLAR & INVERTER BATTERY

SPECIFICATIONS

| Model | Storage Capacity | Dimensions in mm | | | Gross Weight | Application | Warranty | |
|----------------|------------------|------------------|-------|--------|--------------|------------------|-----------|--|
| Model | @C20 27°C | Length | Width | Height | +/- 2% | Application | warrancy | |
| S-Series 17000 | 150Ah | 495 | 185 | 410 | 57Kg | Solar & Inverter | 36Months | |
| S-Series 18000 | 180Ah | 495 | 185 | 410 | 60Kg | Solar & Inverter | 36 Months | |
| S-Series 20000 | 200Ah | 495 | 185 | 410 | 63Kg | Solar & Inverter | 36 Months | |









EPC Services

EPC Services

Orient is a trusted EPC service provider. With decades of engineering expertise along with a robust solar module infrastructure we are a prime partner for your solar plant engineering, procurement, and construction needs. From the concept stage to the entire plants lifespan including execution, running, and maintenance we will support you at every stage.

Our goal is to create a more renewable society and city infrastructure in a timely and cost effective manner



Engineering



Procurement



Construction

Types of EPC projects we cater to



Residential
Be it an apartment building,
independent home, estate, or farm
house Orient Solar is equipped to
provide EPC services to all of the
above.



Schools and colleges
The requirement for education
institutes to reduce energy costs and
use renewable energy is crucial in
the years to come.



Corporate
A number of corporate buildings and offices are in dire need for trusted and economically conscious EPC Providers. As such, Orient Solar hopes to fill that void.



Commercial / Industrial
Almost all factories, large or small
are considering if they have not
already done it, to use the benefits
of solar energy to improve energy
efficiency, reduce the costs, and
make use of renewable energy in its
business. Orient Solar aims to help
these industrial units achieve those
goals.



Government

Various government projects require a dedicated and compliance friendly, knowledgeable team to execute their solar projects. Orient Solar as a certified module manufacturer and expert in this field, we are able fulfill all of the requirements of government projects



Independent Power Projects (IPP's)
Solar energy supply as an independent power producer is a crucial and fast growing business today. These providers require cost efficient and highly qualified EPC providers. Understanding such a need Orient Solar is a key supplier for various IPP projects.



| NOTES |
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ORIENT











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