



OCEAN SOLAR



## SINGLE PHASE *Hybrid Inverter*

### OCE3K~6K Hybrid Inverter

Solar hybrid inverter combines PV conversion, battery charging, and backup power functions. It converts solar DC to AC, manages battery storage, and ensures stable electricity supply.

- Wide MPPT range
- 2 MPPT trackers
- Type II SPD on DC/AC
- Max 10 inverters in parallel
- 19A MPPT input current per string
- Ip66 protection level
- Support generator and smart loads
- Integrated and concise design

Optimal, Clean, Efficient Energy For Home

| Model                                     | OCE3K                                                                                                         | OCE3K6                                      | OCE4K                        | OCE5K     | OCE6K    |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------------|-----------|----------|
| PV Input                                  |                                                                                                               |                                             |                              |           |          |
| Max. PV Input Power (KW)                  | 4.5                                                                                                           | 5.5                                         | 6                            | 7.5       | 9        |
| Max. PV Open Circuit Voltage(V)           |                                                                                                               |                                             | 550                          |           |          |
| MPPT Range@Operating Voltage(VDC)         |                                                                                                               |                                             | 80~520                       |           |          |
| Full Power MPPT Voltage Range(VDC)        | 117 -500V                                                                                                     | 145 -500V                                   | 158 -500V                    | 197 -500V | 250-500V |
| Start-up Voltage(VDC)                     |                                                                                                               |                                             | 90                           |           |          |
| Max. Input Current per MPPT(A)            |                                                                                                               |                                             | 19/19                        |           |          |
| Max. Short-circuit Current(A)             |                                                                                                               |                                             | 25/25                        |           |          |
| MPPT Tracker/Strings                      |                                                                                                               |                                             | 2 / 1                        |           |          |
| Nominal Input Voltage(V)                  |                                                                                                               |                                             | 360                          |           |          |
| AC Output(On-Grid)                        |                                                                                                               |                                             |                              |           |          |
| Nominal Output Power to Grid(kW)          | 3                                                                                                             | 3.68                                        | 4                            | 5         | 6        |
| Max. Apparent Power to Grid(kVA)          | 3                                                                                                             | 3.68                                        | 4                            | 5         | 6        |
| Max. Apparent Power from Grid(kVA)        | 3                                                                                                             | 3.68                                        | 4                            | 5         | 6        |
| Max. Apparent C urrent from Grid(A)       | 13.1                                                                                                          | 16                                          | 17.4                         | 21.8      | 26.1     |
| Nominal Output C urrent from Grid(A)      | 13.1                                                                                                          | 16                                          | 17.4                         | 21.8      | 26.1     |
| Max. Output C urrent to Grid(A)           | 13.1                                                                                                          | 16                                          | 17.4                         | 21.8      | 26.1     |
| Nominal Voltage/Frequency                 |                                                                                                               | 230V(176V~280V), 50/60Hz, L+N+PE            |                              |           |          |
| Adjustable Power Factor                   |                                                                                                               | 0.8leading~0.8lagging                       |                              |           |          |
| THDI                                      |                                                                                                               | <2%                                         |                              |           |          |
| AC Output(BackUp)                         |                                                                                                               |                                             |                              |           |          |
| Nominal Output Power(kW)                  | 3                                                                                                             | 3.68                                        | 4                            | 5         | 6        |
| Max. Apparent Power(kVA)                  | 3                                                                                                             | 3.68                                        | 4                            | 5         | 6        |
| Nominal Output C urrent(A)                | 13.1                                                                                                          | 16                                          | 17.4                         | 21.8      | 26.1     |
| Max. Output C urrent(A)                   | 13.1                                                                                                          | 16                                          | 17.4                         | 21.8      | 26.1     |
| Nominal Voltage/Frequency                 |                                                                                                               | 230V(176V~238V), 50/60Hz, L+N+PE            |                              |           |          |
| Auto matic Switch Time(ms)                |                                                                                                               | <20                                         |                              |           |          |
| THDu                                      |                                                                                                               | <2%                                         |                              |           |          |
| Overload Capacity                         |                                                                                                               | 110%,10 s /150%,5s /180%,1s /200%,100ms     |                              |           |          |
| Efficiency                                |                                                                                                               |                                             |                              |           |          |
| Max. Efficiency                           |                                                                                                               |                                             | 96.65%                       |           |          |
| Europe Efficiency                         |                                                                                                               |                                             | 97.50%                       |           |          |
| MPPT Efficiency                           |                                                                                                               |                                             | 99.00%                       |           |          |
| Max. Batt ery Charge/Discharge Efficiency |                                                                                                               |                                             | 94.60%                       |           |          |
| Battery                                   |                                                                                                               |                                             |                              |           |          |
| Batt eryVoltage Range(V)                  |                                                                                                               |                                             | 40~60                        |           |          |
| Recommended Batt ery Voltage(V)           |                                                                                                               |                                             | 48                           |           |          |
| Max. Charging Voltage(V)                  |                                                                                                               |                                             | 60                           |           |          |
| Max. Charging/Discharging Current(A)      | 80/80                                                                                                         | 80/80                                       | 80/80                        | 120/120   | 120/120  |
| Batt eryType                              |                                                                                                               | Lithiu m and Lead Acid Batt ery             |                              |           |          |
| Protection                                |                                                                                                               |                                             |                              |           |          |
| DC Switch                                 |                                                                                                               |                                             | Yes                          |           |          |
| DC Reverse Polarity Protection            |                                                                                                               |                                             | Yes                          |           |          |
| DC/AC Surge Protection                    |                                                                                                               |                                             | Type II/Type II              |           |          |
| AC Overvoltage Prote ction                |                                                                                                               |                                             | Yes                          |           |          |
| AC Short-circuit Protection               |                                                                                                               |                                             | Yes                          |           |          |
| Ground Fault Monitoring                   |                                                                                                               |                                             | Yes                          |           |          |
| Anti-islanding Protection                 |                                                                                                               |                                             | Yes                          |           |          |
| Resid ual-current Monitoring              |                                                                                                               |                                             | Yes                          |           |          |
| Insulation Resistance Monitoring          |                                                                                                               |                                             | Yes                          |           |          |
| Peak/Valley Time Setting                  |                                                                                                               |                                             | Yes                          |           |          |
| General Data                              |                                                                                                               |                                             |                              |           |          |
| HMI                                       |                                                                                                               |                                             | Touch LCD & APP              |           |          |
| BMS                                       |                                                                                                               |                                             | RS485; CAN                   |           |          |
| EMS/Meter                                 |                                                                                                               |                                             | RS485                        |           |          |
| Communication                             |                                                                                                               |                                             | WiFi/LAN                     |           |          |
| Ingress Protection                        |                                                                                                               |                                             | IP66                         |           |          |
| Operating Temperature Range               |                                                                                                               |                                             | - 25~60 °C                   |           |          |
| Relative Humidity                         |                                                                                                               |                                             | 0~95%(Non-conde nsing)       |           |          |
| Max. Operating Altitude                   |                                                                                                               |                                             | 4000m(Derating above 3000m ) |           |          |
| Cooling                                   |                                                                                                               |                                             | Natural                      |           |          |
| Noise Emission                            |                                                                                                               |                                             | ≤ 29dB                       |           |          |
| Dimensions(W*H*D)                         |                                                                                                               | 485*525*225mm(without terminal and bracket) |                              |           |          |
| Net Weight(kg)                            | 23.5                                                                                                          | 23.5                                        | 23.5                         | 24        | 24       |
| Self-co nsumption(W)                      |                                                                                                               |                                             | <15                          |           |          |
| Standard Compliance                       |                                                                                                               |                                             |                              |           |          |
| Safety Regulation                         |                                                                                                               | IEC/EN62109-1/-2                            |                              |           |          |
| EMC                                       |                                                                                                               | IEC/EN61000-6-1/-2/-3 /-4                   |                              |           |          |
| GridRegulation                            | IEC61727; IEC62116; Europe: EN50549; Belgium: C10/11; Spain: UNE217002; Italy: CEI 021; South Africa: NRS 097 |                                             |                              |           |          |



## Ocean Solar

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