

# DUAL 6KW

MPPT PV INPUT 7KW

HYBRID INVERTER

ON-GRID | OFF-GRID



**LIFETIME**  
FREE SERVICE WARRANTY

**2 YEAR**

UNLIMITED PARTS REPLACEMENT



Max PV Input  
7000W



Max PV Voltage  
500VDC



Max PV Input  
Current 27A



MPPT Range  
120 ~ 450VDC



DUAL AC Output  
6000W



120A Max  
Charging Current



Work With &  
Without Battery  
48VDC



Short-Circuit  
Protection



Colored LCD  
& Touch Buttons



Net Metering  
Feed into Grid



Zero Export  
Built-in



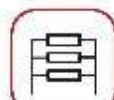
Smart & Safe



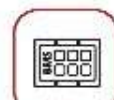
Smart Power  
Management Set  
Multiple Schedule



Monitor & Control  
with Built-in Wifi



Support Parallel  
Operations  
(Upto 9 Units)



(BMS)  
Battery Management  
System

User programmable RGB lighting for different operations



## Cycling

Quickly scroll with a colour of your choice in a continuous circular motion



## Wheel

Illuminates with twinkling lights in a color of your choice



## Chasing

Radiates your selected color upward from the bottom of the ring



# SolarMax® Orion Dual Series On-Grid Inverter with Energy Storage

| MODEL                                          | SM-ORION-DUAL-6KW                                                                 |
|------------------------------------------------|-----------------------------------------------------------------------------------|
| PHASE                                          | 1-phase in / 1-phase out                                                          |
| MAXIMUM PV INPUT POWER                         | 7000W                                                                             |
| RATED OUTPUT POWER                             | 6000W DUAL                                                                        |
| MAXIMUM CHARGING POWER                         | 6000W                                                                             |
| <b>GRID-TIE OPERATION</b>                      |                                                                                   |
| <b>PV INPUT (DC)</b>                           |                                                                                   |
| Nominal DC Voltage / Maximum DC Voltage        | 360 VDC / 500 VDC                                                                 |
| Start-up Voltage / Initial Feeding Voltage     | 120 VDC / 150 VDC                                                                 |
| MPPT Voltage Range                             | 120 VDC ~ 450 VDC                                                                 |
| Number of MPP Trackers / Maximum Input Current | 1 / 27 A                                                                          |
| <b>GRID OUTPUT (AC)</b>                        |                                                                                   |
| Nominal Output Voltage                         | 220/230/240 VAC                                                                   |
| Output Voltage Range                           | 184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)                                   |
| Nominal Output Current                         | 26.1A                                                                             |
| <b>EFFICIENCY</b>                              |                                                                                   |
| Maximum Conversion Efficiency (DC/AC)          | 96%                                                                               |
| <b>OFF-GRID OPERATION</b>                      |                                                                                   |
| <b>AC INPUT</b>                                |                                                                                   |
| AC Start-up Voltage / Auto Restart Voltage     | 120 - 140 VAC / 180 VAC                                                           |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC                                                     |
| Maximum AC Input Current                       | 40 A                                                                              |
| <b>PV INPUT (DC)</b>                           |                                                                                   |
| Maximum DC Voltage                             | 500 VDC                                                                           |
| MPPT Voltage Range                             | 120 VDC ~ 450 VDC                                                                 |
| Number of MPP Trackers / Maximum Input Current | 1 / 27 A                                                                          |
| <b>BATTERY MODE OUTPUT (AC)</b>                |                                                                                   |
| Nominal Output Voltage                         | 220/230/240 VAC                                                                   |
| Output Waveform                                | Pure sinewave                                                                     |
| Efficiency (DC to AC)                          | 93%                                                                               |
| <b>HYBRID OPERATION</b>                        |                                                                                   |
| <b>PV INPUT (DC)</b>                           |                                                                                   |
| Nominal DC Voltage / Maximum DC Voltage        | 360 VDC / 500 VDC                                                                 |
| Start-up Voltage / Initial Feeding Voltage     | 120VDC / 150VDC                                                                   |
| MPPT Voltage Range                             | 120 VDC ~ 450 VDC                                                                 |
| Number of MPP Trackers / Maximum Input Current | 1 / 27 A                                                                          |
| <b>GRID OUTPUT (AC)</b>                        |                                                                                   |
| Nominal Output Voltage                         | 220/230/240 VAC                                                                   |
| Output Voltage Range                           | 184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)                                   |
| Nominal Output Current                         | 26A                                                                               |
| <b>AC INPUT</b>                                |                                                                                   |
| AC Start-up Voltage / Auto Restart Voltage     | 120 - 140 VAC / 180 VAC                                                           |
| Acceptable Input Voltage Range                 | 90 - 280 VAC or 170 - 280 VAC                                                     |
| Maximum AC Input Current                       | 40A                                                                               |
| <b>BATTERY MODE OUTPUT (AC)</b>                |                                                                                   |
| Battery Supported                              | LEAD-ACID   VRLA   AGM   DEEP CYCLE   GEL   FLOODED   LITHIUM-IRON (BMS BUILT-IN) |
| Nominal Output Voltage                         | 220/230/240 VAC                                                                   |
| Efficiency (DC to AC)                          | 93%                                                                               |
| <b>BATTERY &amp; CHARGER</b>                   |                                                                                   |
| Nominal DC Voltage                             | 48 VDC                                                                            |
| Maximum Solar Charging Current                 | 120A                                                                              |
| Maximum AC Charging Current                    | 120A                                                                              |
| Maximum Charging Current                       | 120A                                                                              |
| <b>GENERAL</b>                                 |                                                                                   |
| <b>PHYSICAL</b>                                |                                                                                   |
| Dimension, D x W x H (mm)                      | 140 x 295 x 468                                                                   |
| Net Weight (kgs)                               | 12                                                                                |
| <b>INTERFACE</b>                               |                                                                                   |
| Parallel Function                              | Yes, 9 units                                                                      |
| Communication Port                             | USB/RS232/RS485/WIFI/Dry-contact                                                  |
| <b>ENVIRONMENT</b>                             |                                                                                   |
| Humidity                                       | 0 ~ 90% RH (Non-condensing)                                                       |
| Operating Temperature                          | -10 to 50°C                                                                       |

Product specifications are subject to change without further notice.