

SM-ORION
DUAL PV6000+
HYBRID INVERTER
ON-GRID | OFF-GRID



LIFETIME
FREE SERVICE WARRANTY

2 YEAR
UNLIMITED PARTS REPLACEMENT

*Terms & Conditions Apply



Max PV Input
6500W⁺



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



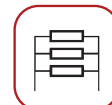
Smart & Safe



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-PV6000+
PHASE	1-phase in / 1-phase out
MAXIMUM PV INPUT POWER	6500W±
RATED OUTPUT POWER	6000W DUAL
MAXIMUM CHARGING POWER	6000W
GRID-TIE OPERATION	
PV INPUT (DC)	
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
GRID OUTPUT (AC)	
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
EFFICIENCY	
Maximum Conversion Efficiency (DC/AC)	96%
OFF-GRID OPERATION	
AC INPUT	
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
PV INPUT (DC)	
Maximum DC Voltage	500 VDC
MPPT Voltage Range	120 VDC ~ 450 VDC
Number of MPP Trackers / Maximum Input Current	1 / 27 A
BATTERY MODE OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Waveform	Pure sinewave
Efficiency (DC to AC)	93%
HYBRID OPERATION	
PV INPUT (DC)	
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
GRID OUTPUT (AC)	
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184 - 264.5 VAC or 195.5 - 253 VAC (Selectable)
Nominal Output Current	26A
AC INPUT	
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
BATTERY MODE OUTPUT (AC)	
Battery Supported	LEAD ACID VRLA AGM DEEP CYCLE GEL FLOODED LITHIUM-ION (BMS BUILT-IN)
Nominal Output Voltage	220/230/240 VAC
Efficiency (DC to AC)	93%
BATTERY & CHARGER	
Nominal DC Voltage	48 VDC
Maximum Solar Charging Current	120A
Maximum AC Charging Current	120A
Maximum Charging Current	120A
GENERAL	
PHYSICAL	
Dimension, D x W x H (mm)	140 x 295 x 468
Net Weight (kgs)	12
INTERFACE	
Parallel Function	Yes, 9 units
Communication Port	USB/RS232/RS485/WIFI/Dry-contact
ENVIRONMENT	
Humidity	0 ~ 90% RH (Non-condensing)
Operating Temperature	-10 to 50°C

Product specifications are subject to change without further notice.