

# HYBRID INVERTER GEM SERIES



## WE MAKE THINGS WORK THE WAY YOU WISH THEY WOULD.

- Continuous operation during grid blackouts  
(Built in emergency power supply)
- Water and dust proof design (IP65 rated)
- Extremely low noise (no fan)
- Exceptional inverter efficiency of 99.5% (Euro-ETA)
- Remote monitoring (WI-FI / hard-wired)
- Off-site remote control of inverter via SCADA technology
- Wide voltage range
- Flexible export restriction mode
- Full demand response mode (DRM-Compliant)
- 5 year warranty / optional 7 year or 10 year warranty  
upgrade available



[www.sapphire-solar.com](http://www.sapphire-solar.com)  
[info@sapphire-solar.com](mailto:info@sapphire-solar.com)



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SPECIFICATIONS	GEM 5000
<b>Input Data (DC)</b>	
Max. DC power	5400W
Max. DC voltage	600V
Start voltage	100V
DC nominal voltage	360V
PV voltage range	100V-600V
MPP voltage range	120V-550V
Max. input current per string of tracker A/tracker B	11A/11A
Number of independent MPP inputs	2
<b>Output Data (AC)</b>	
Nominal AC output power	5000W
Max. AC apparent power	5000VA
Max. output current	22.8A
AC nominal voltage; range	220V/230V/240V; 180V-280V
AC grid frequency; range	50,60Hz;±5 Hz
Power factor at rate power	1
Power factor	0.8leading...0.8lagging
THDi	<3%
AC connection	Single phase
<b>Battery</b>	
Battery type	LiFePO4
Nominal voltage	51.2V
Battery capacity	>=100Ah(depending requirement)
Energy	5.0 kWh
Max. discharging /charging power	2500W / 2500W
Charging curve	3-stage adaptive with maintenance
Operating voltage range	46V-57V
Max. charging/discharging current	50A / 50A
<b>Backup Output</b>	
Output rate power	2300VA
Peak power	3450VA,10s
Output voltage	230V±2%, 50Hz (60Hz Optional)±0.2%, THDv<3%(linear load)
<b>Efficiency</b>	
	97.10%
Max. efficiency	96.50%
Euro - eta	99.50%
MPPT efficiency	
<b>Protection Devices</b>	
DC reverse polarity protection	Yes
DC switch rating for each MPPT	Yes
Output over current protection	Yes
Output overvoltage protection-varistor	Yes
Ground fault monitoring	Yes
Grid monitoring	Yes
Integrated all - pole sensitive leakage current monitoring unit	Yes
<b>General Data</b>	
Dimensions (W / H / D)	495/420/165mm
Weight	24kg
Operating temperature range	-25...+60°C (-13...+ 140°F) With derating above 45°C (113°F)
Noise emission (typical)	≤ 25 dB(A)
Altitude	Up to 2000m (6560ft) Without power derating
Relative humidity	95%
Consumption: operating (standby) / night	<5W / < 0.5 W
Topology	Transformerless
Cooling concept	Natural
Environmental Protection Rating	IP65
<b>Features</b>	
DC connection	H4/MC4
AC connection	Screw terminal
Display	LED
Interfaces:	WiFi/USB
Warranty	5 years (with 7 or 10 year upgrade available)
Certificates and approvals	CE,IEC 62109-1&2, VDE 0126-1-1,G59, AS4777&AS/NZS 3100