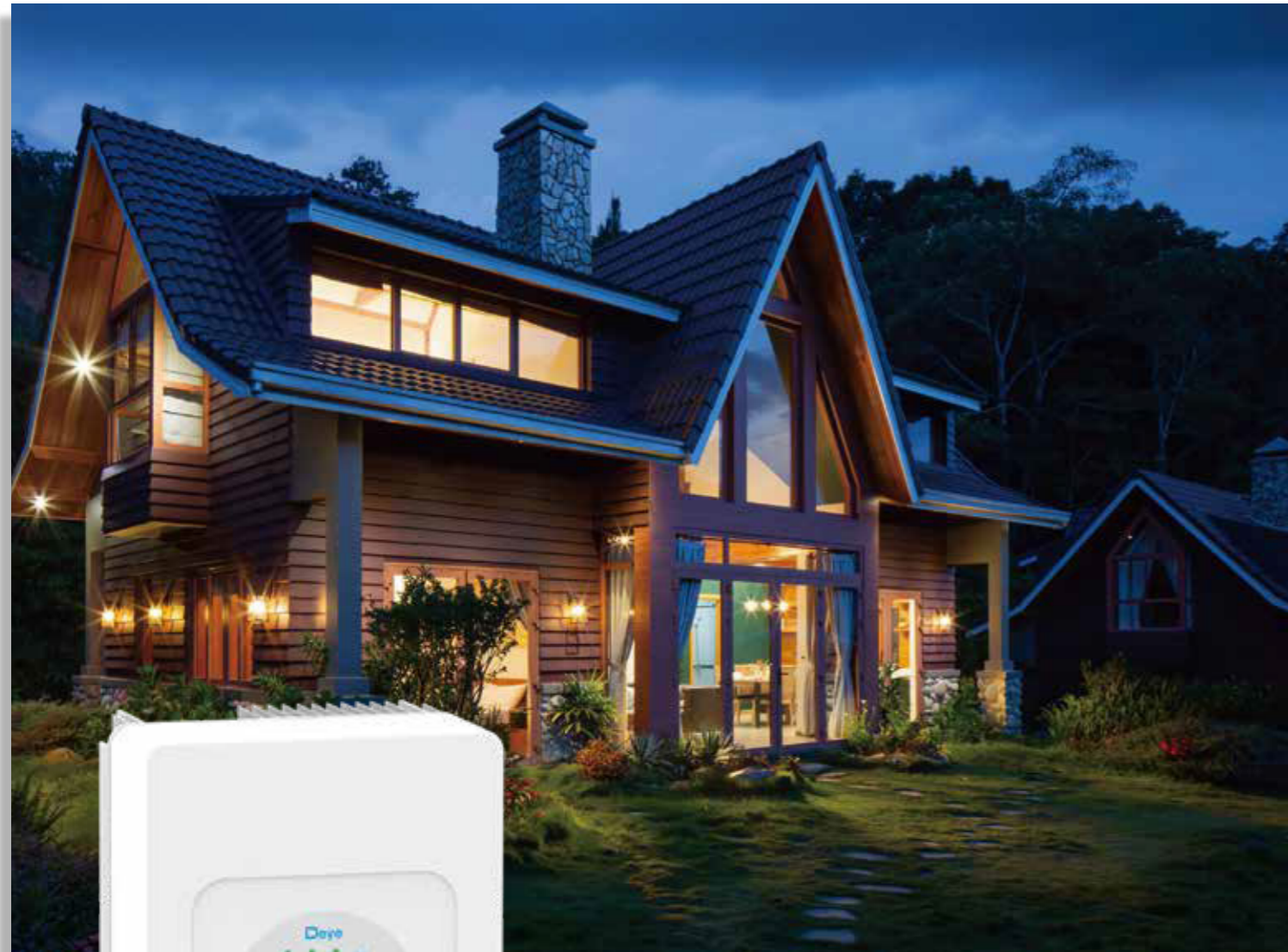





# OPTONICA

## 1-PHASE HYBRID INVERTERS



-  Colorful touch LCD, IP65 protection degree
-  AC couple to retrofit existing solar system
- 16** Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 135** Max. charging/discharging current of 135A
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

### Technical Data

Model	SUN-3.6K-SG03LP1-EU
<b>Battery Input Data</b>	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40-60
Max. Charging Current (A)	90
Max. Discharging Current (A)	90
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Number of Battery Input	1
<b>PV String Input Data</b>	
Max. DC Input Power (W)	4680
Max. DC Input Voltage (V)	500
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Rated DC Input Voltage (V)	370
Max. Operating PV Input Current (A)	13+13
Max. Input Short-Circuit Current (A)	17+17
No. of MPP Trackers/ No. of Strings per MPP Tracker	2/1+1
<b>AC Input/Output Data</b>	
Rated AC Input/Output Active Power (W)	3600
Max. AC Input/Output Apparent Power (VA)	3960
Rated AC Input/Output Current (A)	16.4/15.7
Max. AC Input/Output Current (A)	18/17.2
Max. Continuous AC Passthrough (grid to load) (A)	35
Peak Power (off-grid) (W)	2 times of rated power, 10s
Power Factor Adjustment Range	0.8 leading to 0.8 lagging
Rated Input/Output Voltage/Range (V)	220/230 0.85Un-1.1Un
Rated Input/Output Grid Frequency/Range(Hz)	50/45-55 , 60/55-65
Grid Connection Form	L+N+PE
Total Current Harmonic Distortion THDi	<3% (of nominal power)
DC Injection Current	<0.5% In
<b>Efficiency</b>	
Max. Efficiency	97.6%
Euro Efficiency	96.5%
MPPT Efficiency	>99%
<b>Equipment Protection</b>	
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Overvoltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level
Surge Protection Level	TYPE II(DC), TYPE II(AC)
<b>Interface</b>	
Communication Interface	WIFI, RS485, CAN
<b>General Data</b>	
Operating Temperature Range ( . . )	-40 to +60°C, >45°C Derating
Permissible Ambient Humidity	0-100%
Permissible Altitude	2000m
Noise (dB)	<30
Ingress Protection(IP) Rating	IP 65
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Cabinet Size (WxHxD mm)	330x580x232 (Excluding Connectors and Brackets)
Weight (kg)	25
Type of Cooling	Intelligent Air Cooling
Warranty	5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2