




Hybrid Inverter

SUN- 3 / 3.6 / 5 / 6 K-SG04LP1-EU



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 140** Max. charging/discharging current of 140A
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator




Technical Data

Model	SUN-3K -SG04LP1-24-EU	SUN-3K -SG04LP1-EU	SUN-3.6K -SG04LP1-EU	SUN-5K -SG04LP1-EU	SUN-6K -SG04LP1-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	20~30	40~60	40~60	40~60	40~60
Max. Charging Current (A)	140	70	85	120	135
Max. Discharging Current (A)	140	70	85	120	135
Number of battery input	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	3900	3900	4680	6500	7800
Rated PV Input Voltage (V)	370 (125~500)				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Full Load DC Voltage Range (V)	300-425				
PV Input Current (A)	13		13+13		
Max. PV ISC (A)	17		17+17		
Number of MPPT / Strings per MPPT	1/1		2/1+1		
AC Output Data					
Rated AC Output and UPS Power (W)	3000		3600	5000	6000
Max. AC Output Power (W)	3300		3690	5500	6600
AC Output Rated Current (A)	13.6		16.4	22.7	27.5
Max. AC Current (A)	15		18	25	30
Max. Continuous AC Passthrough (A)			35		40
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)				
Grid Type	Single Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection				
Certifications and Standards					
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (°C)	-45~60°C, >45°C derating				
Cooling	Natural cooling				
Noise (dB)	<30 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	11.4			14	
Size (mm)	330W x 433H x 248D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

Hybrid Inverter

SUN-3.6/5/8K-SG03LP1-EU



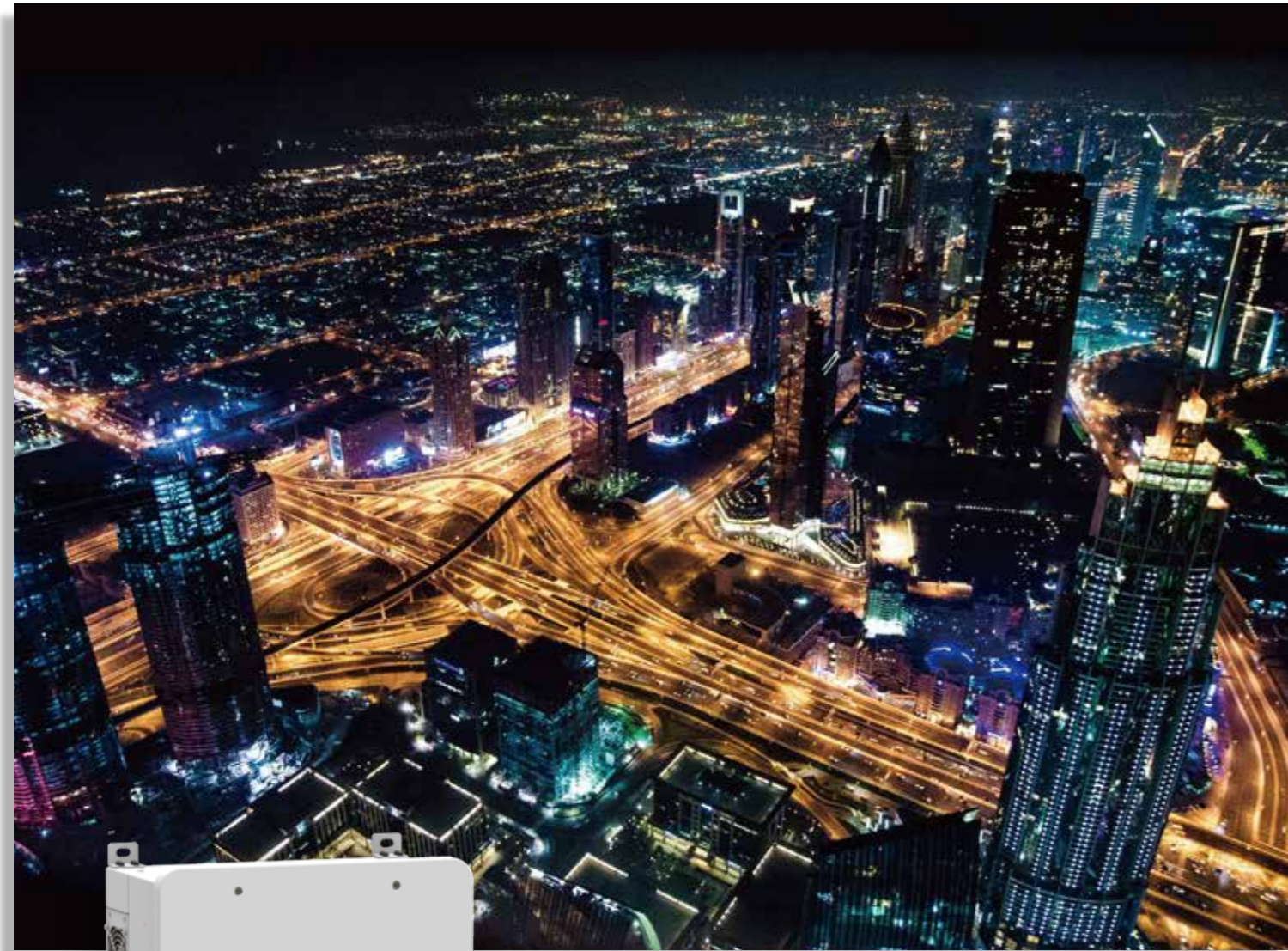
-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 190** Max. charging/discharging current of 190A
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator




Technical Data

Model	SUN-3.6K -SG03LP1-EU	SUN-5K -SG03LP1-EU	SUN-8K -SG03LP1-EU
Battery Input Data			
Battery Type	Lead-acid or Li-Ion		
Battery Voltage Range (V)	40~60		
Max. Charging Current (A)	90	120	190
Max. Discharging Current (A)	90	120	190
External Temperature Sensor	Yes		
Charging Curve	3 Stages / Equalization		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	4680	6500	10400
Rated PV Input Voltage (V)	370 (125~500)		
Start-up Voltage (V)	125		
MPPT Voltage Range (V)	150-425		
Full Load DC Voltage Range (V)	300-425		200-425
PV Input Current (A)	13+13		26+26
Max. PV ISC (A)	17+17		34+34
Number of MPPT / Strings per MPPT	2/1+1		2/2+2
AC Output Data			
Rated AC Output and UPS Power (W)	3600	5000	6000
Max. AC Output Power (W)	3690	5500	6600
AC Output Rated Current (A)	16.4	22.7	36.4
Max. AC Current (A)	18	25	40
Max. Continuous AC Passthrough (A)		35	50
Peak Power (off grid)	2 time of rated power, 10 S		
Power Factor	0.8 leading to 0.8 lagging		
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)		
Grid Type	Single Phase		
DC injection current (mA)	THD<3% (Linear load<1.5%)		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	97.00%		
MPPT Efficiency	99.90%		
Protection			
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection		
Certifications and Standards			
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
General Data			
Operating Temperature Range (°C)	-45~60°C, >45°C derating		
Cooling	Natural cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	20.5		
Size (mm)	330W x 580H x 232D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		

Hybrid Inverter

SUN-5/6K-SG01LP1-US SUN-7.6/8K-SG01LP1-US/EU



-  Colorful touch LCD, IP65 protection degree
-  DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 190** Max. charging/discharging current of 190A
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Technical Data

Model	SUN-5K -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7.6K -SG01LP1-US/EU	SUN-8K -SG01LP1-US/EU
Battery Input Data				
Battery Type	Lead-acid or Li-Ion			
Battery Voltage Range (V)	40~60			
Max. Charging Current (A)	120	135	190	190
Max. Discharging Current (A)	120	135	190	190
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. DC Input Power (W)	6500	7800	9880	10400
Rated PV Input Voltage (V)	370 (125~500)			
Start-up Voltage (V)	125			
MPPT Voltage Range (V)	150-425			
Full Load DC Voltage Range (V)	300-425	200-425		
PV Input Current (A)	13+13	26+13	26+26	
Max. PV ISC (A)	17+17	34+17	34+34	
Number of MPPT / Strings per MPPT	2/1+1	2/2+1	2/2+2	
AC Output Data				
Rated AC Output and UPS Power (W)	5000	6000	7600	8000
Max. AC Output Power (W)	5500	6600	8360	8800
AC Output Rated Current (A)	20.8/24	25/28.8	31.7/36.5	34.5
Max. AC Current (A)	22.9/26.4	27.5/31.7	34.8/40.2	38
Max. Continuous AC Passthrough (A)	40		50	
Peak Power (off grid)	2 time of rated power, 10 S			
Power Factor	0.8 leading to 0.8 lagging			
Output Frequency and Voltage	50 / 60Hz; L1/L2/N(PE) 120/240Vac (split phase), 208Vac (2/3 phase), L/N/PE 220/230Vac (single phase)			
Grid Type	Split phase; 2/3 phase; Single Phase			
DC injection current (mA)	THD<3% (Linear load<1.5%)			
Efficiency				
Max. Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
Protection				
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection			
Certifications and Standards				
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
General Data				
Operating Temperature Range (°C)	-45~60 °C, >45°C derating			
Cooling	Smart cooling			
Noise (dB)	<30 dB			
Communication with BMS	RS485; CAN			
Weight (kg)	32			
Size (mm)	420W×670H×233D			
Protection Degree	IP65			
Installation Style	Wall-mounted			
Warranty	5 years			

Hybrid Inverter

SUN- 5 / 6 / 8 / 10 / 12 K-SG04LP3-EU



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 240** Max. charging/discharging current of 240A
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- Truck** Support storing energy from diesel generator

Technical Data

Model	SUN-5K -SG04LP3-EU	SUN-6K -SG04LP3-EU	SUN-8K -SG04LP3-EU	SUN-10K -SG04LP3-EU	SUN-12K -SG04LP3-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	40~60				
Max. Charging Current (A)	120	150	190	210	240
Max. Discharging Current (A)	120	150	190	210	240
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	6500	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160~800)				
Start-up Voltage (V)	160				
MPPT Voltage Range (V)	200-650				
Full Load DC Voltage Range (V)	350-650				
PV Input Current (A)	13+13			26+13	
Max. PV ISC (A)	17+17			34+17	
Number of MPPT / Strings per MPPT	2/1+1			2/2+1	
AC Output Data					
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000
Max. AC Output Power (W)	5500	6600	8800	11000	13200
AC Output Rated Current (A)	7.6	9.1	12.1	15.2	18.2
Max. AC Current (A)	11.4	13.6	18.2	22.7	27.3
Max. Continuous AC Passthrough (A)	45				
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
DC injection current (mA)	THD<3% (Linear load<1.5%)				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection				
Certifications and Standards					
Grid Regulation	CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11				
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				
General Data					
Operating Temperature Range (°C)	-45~60°C, >45°C derating				
Cooling	Smart cooling				
Noise (dB)	<45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	33.6				
Size (mm)	422W x 702H x 281D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

Three Phase Hybrid Inverter

SUN- 6 / 8 / 10 / 12 / 15 K-SG01HP3-EU



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 37** Max. charging/discharging current of 37A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- GEN** Support storing energy from diesel generator

Technical Data

Model	SUN-6K -SG01HP3-EU	SUN-8K -SG01HP3-EU	SUN-10K -SG01HP3-EU	SUN-12K -SG01HP3-EU	SUN-15K -SG01HP3-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	96~600				
Max. Charging Current (A)	37				
Max. Discharging Current (A)	37				
Number of battery input	1				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	7800	100400	13000	15600	19500
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	160				
MPPT Range (V)	200-850				
Full Load DC Voltage Range (V)	300-850				
Rated DC Input Voltage (V)	150				
PV Input Current (A)	36+18				
Max. PV ISC (A)	50+25				
Number of MPPT / Strings per MPPT	2/2+1				
AC Output Data					
Rated AC Output and UPS Power (W)	6000	8000	10000	12000	15000
Max. AC Output Power (W)	6600	8800	11000	13200	16500
AC Output Rated Current (A)	9.1	12.1	15.2	18.2	22.7
Max. AC Current (A)	13.6	18.2	22.7	27.3	34.1
Max. Continuous AC Passthrough (A)	50				
Peak Power (off grid)	2 time of rated power, 10 S				
Generator input/Smart load /AC couple current (A)	9.1 / *180 / 9.1	12.1 / *180 / 12.1	15.2 / *180 / 15.2	18.2 / *180 / 18.2	22.7 / *180 / 22.7
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
DC injection current (mA)	<0.5%In				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection				
Certifications and Standards					
Grid Regulation	EN50549, AS4777.2, VDE0126, IEC61727, VDEN4105, G99, NBT32004, CEI0-21, NRS097, NBR16149/16150, RD1699				
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4				
General Data					
Operating Temperature Range (°C)	-45~60°C, >45°C derating				
Cooling	Smart cooling				
Noise (dB)	<45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	26				
Size (mm)	396Wx580Hx230D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				

Three Phase Hybrid Inverter

SUN- 20 / 25 / 30 / 40 / 50 K-SG01HP3-EU



- 100** 100% unbalanced output, each phase; Max. output up to **50%** rated power
- DC** DC couple and AC couple to retrofit existing solar system
- 16** Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 74** Max. charging/discharging current of 74A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
- GEN** Support storing energy from diesel generator

Technical Data

Model	SUN-20K -SG01HP3-EU	SUN-25K -SG01HP3-EU	SUN-30K -SG01HP3-EU	SUN-40K -SG01HP3-EU	SUN-50K -SG01HP3-EU
Battery Input Data					
Battery Type	Lead-acid or Li-Ion				
Battery Voltage Range (V)	200~700				
Max. Charging Current (A)	37		37+37		
Max. Discharging Current (A)	37		37+37		
Number of battery input	1		2		
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data					
Max. DC Input Power (W)	26000	32500	39000	52000	65000
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	160				
MPPT Range (V)	200-850				
Min. DC Input Voltage (V)	150				
Full Load DC Voltage Range (V)	360-850	365-850	435-850	450-850	450-850
Rated DC Input Voltage (V)	500	625	500	500	625
PV Input Current (A)	36+36		36+36+36	36+36+36+36	
Max. PV ISC (A)	50+50		50+50+50	50+50+50+50	
Number of MPPT / Strings per MPPT	2/2+2		3/2+2+2	4/2+2+2+2	
AC Output Data					
Rated AC Output and UPS Power (W)	20000	25000	30000	40000	50000
Max. AC Output Power (W)	22000	27500	33000	44000	55000
AC Output Rated Current (A)	30.3	38	45.6	60.8	75.8
Max. AC Current (A)	45.4	41.8	50.1	66.9	83.3
Max. Continuous AC Passthrough (A)	100				
Peak Power (off grid)	2 time of rated power, 10 S				
Generator input/Smart load /AC couple current (A)	30.3 / *180 / 30.3	38 / *180 / 38	45.6 / *180 / 45.6	60.8 / *180 / 60.8	75.8 / *180 / 75.8
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
DC injection current (mA)	<0.5%1n				
Efficiency					
Max. Efficiency	97.60%				
Euro Efficiency	97.00%				
MPPT Efficiency	99.90%				
Protection					
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Surge protection				
Certifications and Standards					
Grid Regulation	EN50549, AS4777.2, VDE0126, IEC61727, VDEN4105, G99, NBT32004, CEI0-21, NRS097, NBR16149/16150, RD1699				
Safety EMC / Standard	IEC62109-1/-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4				
General Data					
Operating Temperature Range (°C)	-45~60°C, >45°C derating				
Cooling	Smart cooling				
Noise (dB)	<45 dB				
Communication with BMS	RS485; CAN				
Weight (kg)	60				
Size (mm)	560.5W×837H×319D				
Protection Degree	IP65				
Installation Style	Wall-mounted				
Warranty	5 years				