



DEYE Products Catalogue

Deye

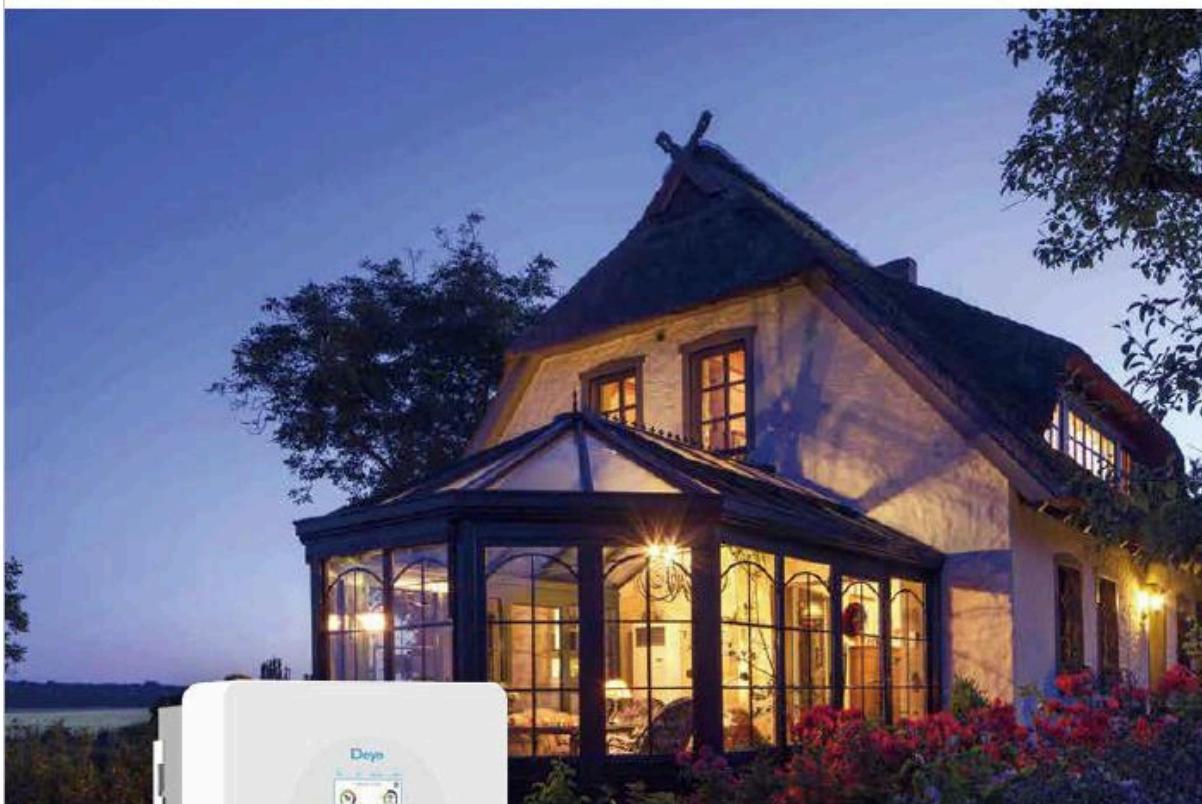
Hybrid Inverters – Single Phase – Low Voltage:

3Kw, 5Kw, 6Kw single phase hybrid inverters (LV):

Single Phase Hybrid Inverter

SUN-3K-SG04LP1-24-EU

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



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 140A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117SH

Technical Data

www.deyeinverter.com

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 Lithium-ion				
Battery Voltage Range (V)	20-30	40-60	40-60	40-60	40-60
Max Charging Current (A)	140	70	90	120	135
Max Discharging Current (A)	140	70	90	120	135
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max PV Access Power (W)	6000	6000	7200	10000	12000
Max PV Input Power (W)	4800	4800	5760	8000	9600
Max PV Input Voltage (V)	500				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated PV Input Voltage (V)	370				
Max Operating PV Input Current (A)	13	13+13			
Max. Input Short-Circuit Current (A)	17	17+17			
No. of MPP Trackers/ No. of Strings MPP Tracker	1/1	2/1+1			
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	3000	3600	5000	6000	
Max AC Input/Output Apparent Power (VA)	3300	3960	5500	6600	
Rated AC Input/Output Current (A)	13.6/13	16.4/15.7	22.7/21.7	27.3/26.1	
Max AC Input/Output Current (A)	15/14.3	18/17.2	25/23.9	30/28.7	
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				
Efficiency					
Max Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE III(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-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)	330x433x229 (Excluding Connectors and Brackets)				
Weight (kg)	17				
Type of Cooling	Natural Cooling				Intelligent Air Cooling
Warranty	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, VDE-Richtlinie R25, G98, G99, VDE-AR-N4105				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				



Ningbo Deye Inverter Technology Co., Ltd.

Address: No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China. | Tel: +86 (0)574 86228841 | E-mail: market@deyc.com.cn

8Kw single phase hybrid inverter (LV):

Single Phase Hybrid Inverter

SUN-3.6/5/6/7/7.6/8K-SG05LP1-EU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 190A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

www.deyeinverter.com

Model	SUN-3.6K -SG05LP1-EU	SUN-5K -SG05LP1-EU	SUN-6K -SG05LP1-EU	SUN-7K -SG05LP1-EU	SUN-7.6K -SG05LP1-EU	SUN-8K -SG05LP1-EU
Battery Input Data						
Battery Type	Lead-acid or Lithium-ion					
Battery Voltage Range (V)	40-60					
Max. Charging Current (A)	90	120	135	175	190	190
Max. Discharging Current (A)	90	120	135	175	190	190
Charging Strategy for Li-ion Battery	Self-adaption to BMS					
Number of Battery Input	1					
PV String Input Data						
Max. PV Access Power (W)	7200	10000	12000	14000	15200	16000
Max. PV Input Power (W)	5760	8000	9600	11200	12160	12800
Max. PV Input Voltage (V)	500					
Start-up Voltage (V)	125					
MPPT Voltage Range (V)	150-425					
Rated PV Input Voltage (V)	370					
Max Operating PV Input Current (A)	13+13				26+26	
Max Input Short-Circuit Current (A)	17+17				34+34	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1				2/2+2	
AC Input/Output Data						
Rated AC Input/Output Active Power (W)	3600	5000	6000	7000	7600	8000
Max. AC Input/Output Apparent Power (VA)	3960	5500	6600	7700	8360	8800
Rated AC Input/Output Current (A)	16.4/15.7	22.7/21.7	27.3/26.1	31.9/30.5	34.5/33	36.4/34.8
Max. AC Input/Output Current (A)	18/17.2	25/23.9	30/28.7	35/33.5	38/36.3	40/38.3
Max. Continuous AC Passthrough (grid to load) (A)	35	40			50	
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					
Efficiency						
Max Efficiency	97.6%					
Euro Efficiency	96.5%					
MPPT Efficiency	>99%					
Equipment Protection						
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level					
Surge Protection Level	TYPE II(DC), TYPE III(AC)					
Interface						
Communication Interface	RS485/RS232/CAN					
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)					
General Data						
Operating Temperature Range (°C)	-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)	330×580×232 (Excluding Connectors and Brackets)					
Weight (kg)	24.9					
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, G98, G99, VDE-AR-N 4105					
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2					



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10Kw, 12Kw single phase hybrid inverters (LV):

Single Phase Hybrid Inverter

SUN-7.6/8K-SG02LP1-EU-AM2

SUN-10/12K-SG02LP1-EU-AM3



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 250A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117SH

Technical Data

www.deyeinverter.com

Model	SUN-7.6K-SG02 LP1-EU-AM2	SUN-8K-SG02 LP1-EU-AM2	SUN-10K-SG02 LP1-EU-AM3	SUN-12K-SG02 LP1-EU-AM3
Battery Input Data				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)		40-60		
Max. Charging Current (A)	190	190	220	250
Max. Discharging Current (A)	190	190	220	250
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
Number of Battery Input	1			
PV String Input Data				
Max. PV Access Power (W)	15200	16000	20000	24000
Max. PV Input Power (W)	12160	12800	16000	19200
Max. PV Input Voltage (V)		500		
Start-up Voltage (V)		125		
MPPT Voltage Range (V)		150-425		
Rated PV Input Voltage (V)		370		
Max. Operating PV Input Current (A)	26+26		26+26+26	
Max. Input Short-Circuit Current (A)	44+44		44+44+44	
No. of MPP Trackers/ No. of Strings MPP Tracker	2/2+2		3/2+2+2	
AC Input/Output Data				
Rated AC Input/Output Active Power (W)	7600	8000	10000	12000
Max. AC Input/Output Apparent Power (VA)	8360	8800	11000	13200
Rated AC Input/Output Current (A)	34.6/33.1	36.4/34.8	45.5/43.5	54.6/52.2
Max. AC Input/Output Current (A)	34.6/33.1	36.4/34.8	45.5/43.5	54.6/52.2
Max. Continuous AC Passthrough (grid to load) (A)	50		60	
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		
Efficiency				
Max. Efficiency		97.6%		
Euro Efficiency		96.5%		
MPPT Efficiency		>99%		
Equipment Protection				
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level			
Surge Protection Level	TYPE II(DC), TYPE II(AC)			
Interface				
Communication Interface	RS485/RS232/CAN			
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)			
General Data				
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating			
Permissible Ambient Humidity	0-100%			
Permissible Altitude	2000m			
Noise (dB)	<45			
Ingress Protection(IP) Rating	IP 65			
Inverter Topology	Non-Isolated			
Over Voltage Category	OVC II(DC), OVC III(AC)			
Cabinet Size (WxHxD mm)	420×670×233 (Excluding Connectors and Brackets)			
Weight (kg)	35.6			
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	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 021, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150			
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			



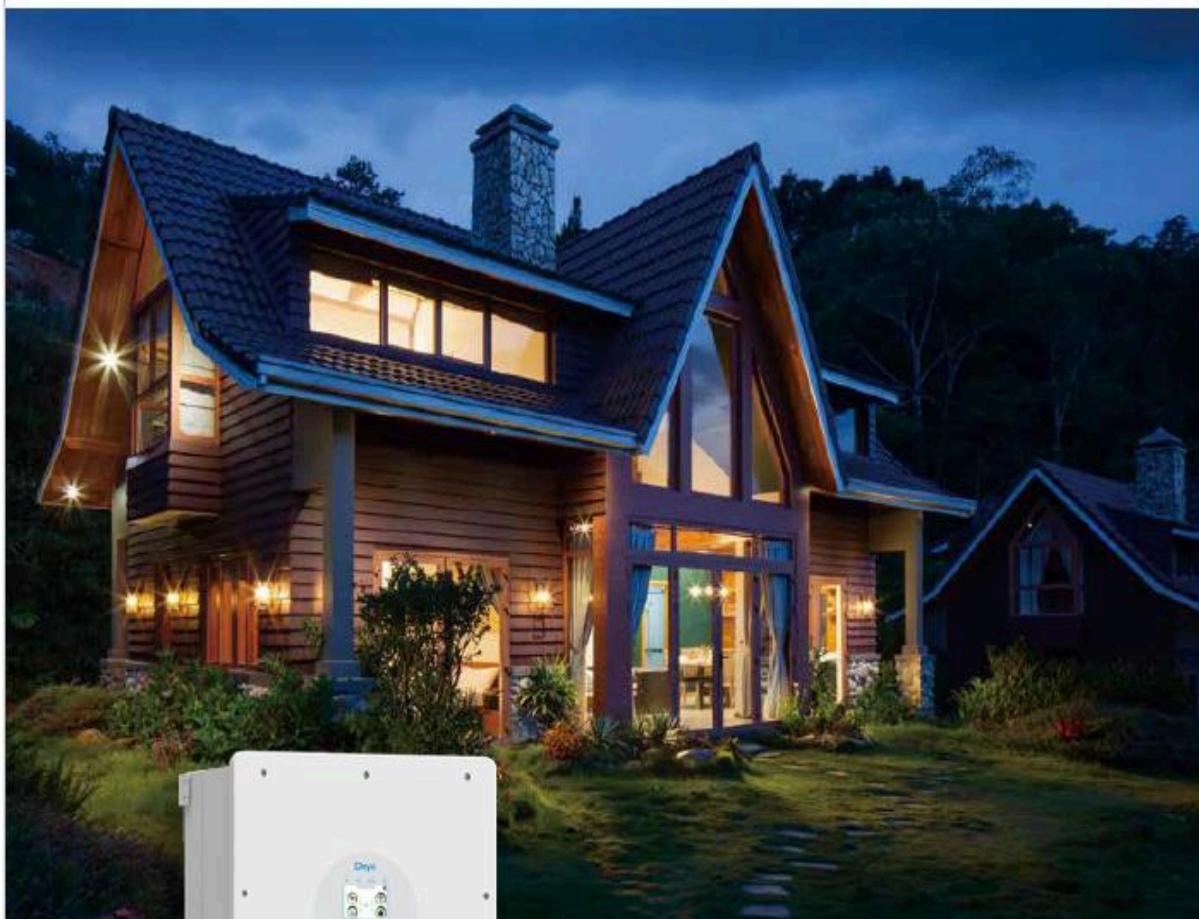
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16Kw single phase hybrid inverter (LV):

Single Phase Hybrid Inverter

SUN-12/14/16K-SG01LP1-EU



Colorful touch LCD, IP65 protection degree



AC couple to retrofit existing solar system



Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel



Max. charging/discharging current of 290A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Deye

Stock Code: 605117SH

Technical Data

www.deyeinverter.com

Model	SUN-12K-SG01LP1-EU	SUN-14K-SG01LP1-EU	SUN-16K-SG01LP1-EU		
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)	40-60				
Max Charging Current (A)	220	250	290		
Max Discharging Current (A)	220	250	290		
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	2				
PV String Input Data					
Max PV Access Power (W)	24000	28000	32000		
Max PV Input Power (W)	19200	22400	25600		
Max PV Input Voltage (V)	500				
Start-up Voltage (V)	125				
MPPT Voltage Range (V)	150-425				
Rated PV Input Voltage (V)	370				
Max Operating PV Input Current (A)	26+26+26				
Max Input Short-Circuit Current (A)	44+44+44				
No. of MPP Trackers/ No. of Strings MPP Tracker	3/2+2+2				
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	12000	14000	16000		
Max AC Input/Output Apparent Power (VA)	13200	15400	17600		
Rated AC Input/Output Current (A)	54.5/52.2	63.6/60.9	72.7/69.6		
Max AC Input/Output Current (A)	60/57.4	70/67	80/76.5		
Max Continuous AC Passthrough (grid to load) (A)	100				
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				
Efficiency					
Max Efficiency	97.6%				
Euro Efficiency	96.5%				
MPPT Efficiency	>99%				
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	2000m				
Noise (dB)	<50				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	464×763×282 (Excluding Connectors and Brackets)				
Weight (kg)	52				
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, AS 4777.2, NRS 097				
Safety / EMC Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2				



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Hybrid Inverters – Three Phase – Low Voltage:

8Kw, 10Kw, 12Kw three phase hybrid inverter (LV):

Three Phase Hybrid Inverter SUN- 8 / 10 / 12 K-SG04LP3



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

Deye

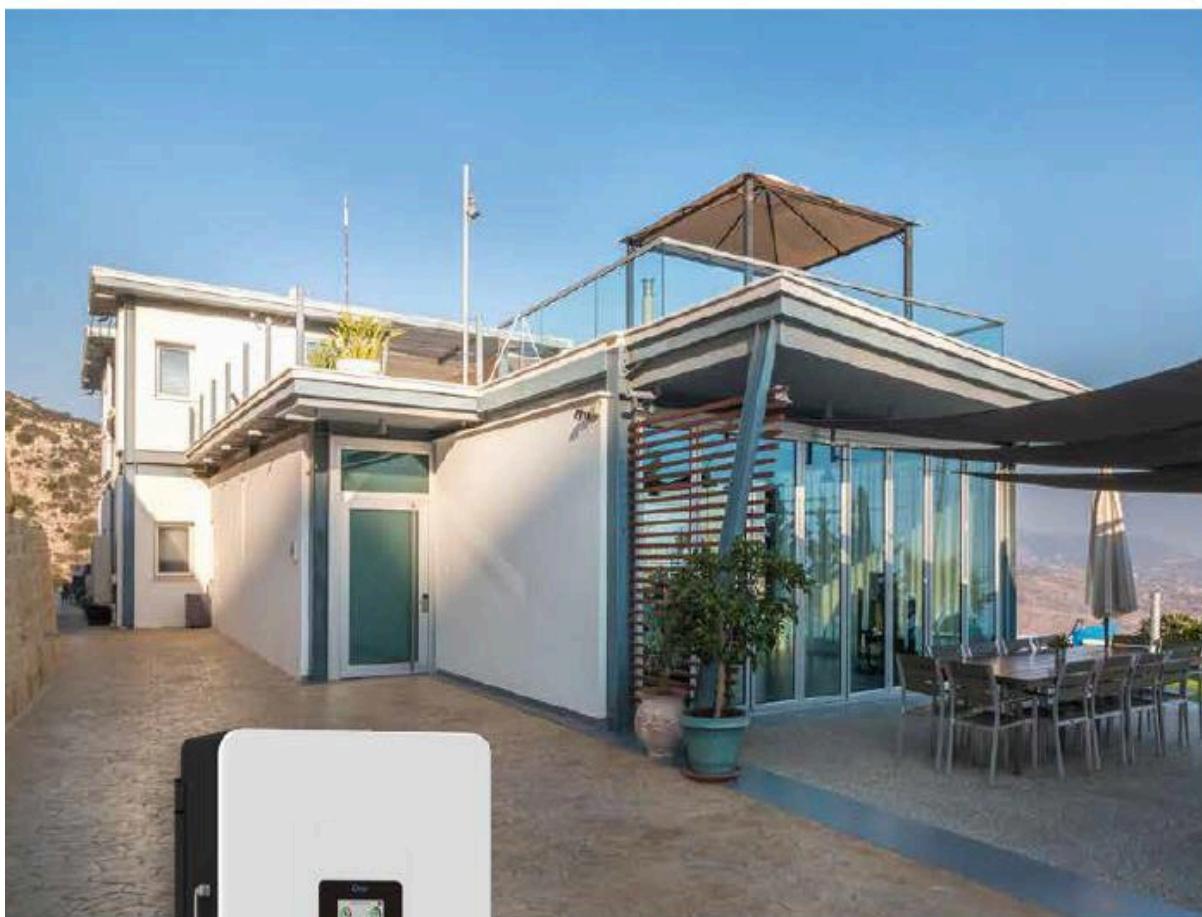
Clean Power For You

Model	SUN-8K-SG04LP3	SUN-10K-SG04LP3	SUN-12K-SG04LP3
Battery Input Data			
Battery Type	Lead-acid or Li-Ion		
Battery Voltage Range (V)	40-60V		
Max. Charging Current (A)	190A	210A	240A
Max. Discharging Current (A)	190A	210A	240A
Charging Curve	3 Stages / Equalization		
External Temperature Sensor	Optional		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
PV String Input Data			
Max. DC Input Power (W)	10400W	13000W	15600W
PV Input Voltage (V)	550V (150V~800V)		
MPPT Range (V)	200V-650V		
Start-up Voltage (V)	160V		
PV Input Current (A)	13A+13A	26A+13A	26A+13A
No.of MPPT Trackers	2		
No.of Strings Per MPPT Tracker	1+1	2+1	2+1
AC Output Data			
Rated AC Output and UPS Power (W)	8000W	10000W	12000W
Max. AC Output Power (W)	8800W	11000W	13200W
Peak Power (off grid)	2 times of rated power, 10S		
AC Output Rated Current (A)	12A	15A	18A
Max. AC Current (A)	18A	23A	27A
Max. Continuous AC Passthrough (A)	50A		
Output Frequency and Voltage	50/60Hz; 230/400Vac (Three phase)		
Grid Type	Three Phase		
Current Harmonic Distortion	THD<3% (Linear load<1.5%)		
Efficiency			
Max. Efficiency	97.60%		
Euro Efficiency	97.00%		
MPPT Efficiency	99.90%		
Protection			
PV Input Lightning Protection	Integrated		
Anti-islanding Protection	Integrated		
PV String Input Reverse Polarity Protection	Integrated		
Insulation Resistor Detection	Integrated		
Residual Current Monitoring Unit	Integrated		
Output Over Current Protection	Integrated		
Output Shorted Protection	Integrated		
Output Over Voltage Protection	Integrated		
Surge protection	DC Type II / AC Type II		
Certifications and Standards			
Grid Regulation	IEC61727, IEC62116, IEC60068, IEC61683, NRS 097-2-1		
Safety EMC / Standard	IEC62109-1/-2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12		
General Data			
Operating Temperature Range (°C)	-25~60°C, >45°C Derating		
Cooling	Smart cooling		
Noise (dB)	<30 dB		
Communication with BMS	RS485; CAN		
Weight (kg)	36.8		
Size (mm)	422Wx658Hx281D		
Protection Degree	IP65		
Installation Style	Wall-mounted		
Warranty	5 years		

16Kw, 20Kw three phase hybrid inverters (LV):

Three Phase Hybrid Inverter

SUN-14/15/16/18/20K-SG05LP3-EU-SM2



- 100 100% unbalanced output, each phase; Max. output up to 50% rated power
- AC AC couple to retrofit existing solar system
- 10 Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 350 Max. charging/discharging current of 350A
- 48 48V low voltage battery, transformer isolation design
- 6 6 time periods for battery charging/discharging
- Diesel Support storing energy from diesel generator

Technical Data

www.deyeinverter.com

Model	SUN-14K-SG05LP3 -EU-SM2	SUN-15K-SG05LP3 -EU-SM2	SUN-16K-SG05LP3 -EU-SM2	SUN-18K-SG05LP3 -EU-SM2	SUN-20K-SG05LP3 -EU-SM2
Battery Input Data					
Battery Type	Lead-acid or Lithium-ion				
Battery Voltage Range (V)			40-60		
Max Charging Current (A)	260	280	300	330	350
Max Discharging Current (A)	260	280	300	330	350
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Number of Battery Input	1				
PV String Input Data					
Max PV Access Power (W)	28000	30000	32000	36000	40000
Max PV Input Power (W)	22400	24000	25600	28800	32000
Max PV Input Voltage (V)			800		
Start-up Voltage (V)			160		
MPPT Voltage Range (V)			160-650		
Rated PV Input Voltage (V)			550		
Max Operating PV Input Current (A)			36+36		
Max Input Short-Circuit Current (A)			54+54		
No of MPP Trackers/ No. of Strings MPP Tracker	2/2+2				
AC Input/Output Data					
Rated AC Input/Output Active Power (W)	14000	15000	16000	18000	20000
Max AC Input/Output Apparent Power (VA)	15400	16500	17600	19800	22000
Rated AC Input/Output Current (A)	21.3/20.3	22.8/21.8	24.3/23.2	27.3/26.1	30.4/29
Max AC Input/Output Current (A)	23.4/22.4	25/24	26.7/25.6	30/28.7	33.4/31.9
Max Continuous AC Passthrough (grid to load) (A)			70		
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)			220/380V, 230/400V 0.85Un-1.1Un		
Rated Input/Output Grid Frequency/Range(Hz)			50/45-55, 60/55-65		
Grid Connection Form			3L+N+PE		
Total Current Harmonic Distortion THDi			<3% (of nominal power)		
DC Injection Current			<0.5% In		
Efficiency					
Max Efficiency			97.6%		
Euro Efficiency			97.0%		
MPPT Efficiency			>99%		
Equipment Protection					
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level				
Surge Protection Level	TYPE II(DC), TYPE II(AC)				
Interface					
Communication Interface	RS485/RS232/CAN				
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)				
General Data					
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating				
Permissible Ambient Humidity	0-100%				
Permissible Altitude	3000m				
Noise (dB)	<60				
Ingress Protection(IP) Rating	IP 65				
Inverter Topology	Non-Isolated				
Over Voltage Category	OVC II(DC), OVC III(AC)				
Cabinet Size (WxHxD mm)	456×750×268.5 (Excluding Connectors and Brackets)				
Weight (kg)	50.6				
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				



Ningbo Deye Inverter Technology Co., Ltd.

Address: No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China. | Tel: +86 (0)574 86228841 | E-mail: market@deye.com.cn

Hybrid Inverters – Three Phase – High Voltage:

10Kw, 12Kw, 15Kw, 20Kw, 25Kw three phase hybrid inverters (HV):

Three Phase Hybrid Inverter

SUN-5/6/8/10/12/15/20/25K-SG01HP3-EU-AM2



Deye

Stock Code: 605117SH

- 100 100% unbalanced output, each phase
- 10 AC couple to retrofit existing solar system
- 10 *Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 50 Max. charging/discharging current of 50A
- H High voltage battery, higher efficiency
- 6 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Technical Data

www.deyeinverter.com

Model	SUN-5K-SG01 HP3-EU-AM2	SUN-6K-SG01 HP3-EU-AM2	SUN-8K-SG01 HP3-EU-AM2	SUN-10K-SG01 HP3-EU-AM2	SUN-12K-SG01 HP3-EU-AM2	SUN-15K-SG01 HP3-EU-AM2	SUN-20K-SG01 HP3-EU-AM2	SUN-25K-SG01 HP3-EU-AM2
Battery Input Data								
Battery Type	Lithium-ion							
Battery Voltage Range (V)				160~700				
Max Charging Current (A)	30			37			50	
Max Discharging Current (A)	30			37			50	
Number of Battery Input				1				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS							
PV String Input Data								
Max DC Input Power (W)	6500	7800	10400	13000	15600	19500	26000	32500
Max DC Input Voltage (V)				1000				
Start-up Voltage (V)				180				
MPPT Range (V)				150~850				
Full Load DC Voltage Range (V)	195-850	195-850	260-850	325-850	340-850	420-850	500-850	625-850
Rated DC Input Voltage (V)				600				
PV Input Current (A)		20+20			26+20		26+26	
Max PV I_{sc} (A)		30+30			39+30		39+39	
No. of MPP Trackers				2				
No. of Strings per MPP Tracker		1+1			2+1		2+2	
AC Output Data								
Rated AC Output and UPS Power (W)	5000	6000	8000	10000	12000	15000	20000	25000
Max. AC Output Power (W)	5500	6600	8800	11000	13200	16500	22000	27500
AC Output Rated Current (A)	7.6/7.3	9.1/8.7	12.2/11.6	15.2/14.5	18.2/17.4	22.8/21.8	30.4/29	37.9/36.3
Max. AC Output Rated Current (A)	8.4/8	10/9.6	13.4/12.8	16.7/16	20/19.2	25/24	33.4/31.9	41.7/39.9
Max. Three-phase Unbalanced Output Current(A)	13	13	18	22	25	30	35	41.7
Max. Continuous AC Passthrough (A)		40				80		
Peak Power (off grid)				1.5 time of rated power, 10 S				
Generator Input/Smart Load /AC Couple Current (A)	7.6/40/7.6	9.1/40/9.1	12.2/40/12.2	15.2/40/15.2	18.2/80/18.2	22.8/80/22.8	30.4/80/30.4	37.9/80/37.9
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				
Total Harmonic Distortion (THD)				<3% (of nominal power)				
DC Current Injection				<0.5% In				
Efficiency								
Max. Efficiency				97.60%				
Euro Efficiency				97.00%				
MPPT Efficiency				99.90%				
Protection								
Integrated	Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection							
Over Voltage Category				DC Type II/AC Type III				
Certifications and Standards								
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				
General Data								
Operating Temperature Range (°C)				-40~60°C, >45°C Derating				
Cooling	Free Cooling			Smart Cooling				
Noise (dB)				≤55 dB				
Communication with BMS				CAN				
Weight (kg)				30.5				
Cabinet Size (WxHxD mm)				408×638×237 (Excluding Connectors and Brackets)				
Protection Degree				IP65				
Installation Style				Wall-mounted				
Warranty				5 Years (10 Years Optional)				

*Note: Parallel operation for 5 inverters is usable. Parallel operation is currently being tested for up to ten inverters. The prerequisite for parallel operation is that only Deye high-voltage inverters with the same power and Deye high-voltage storage battery can be used.



Ningbo Deye Inverter Technology Co., Ltd.

Add: No. 26 South YongJiang Road, Daqian, Beilun, NingBo, Zhejiang, China. | Tel: 0086-0574-86120560 | E-mail: market@deye.com.cn

30Kw, 40Kw, 50Kw three phase hybrid inverters (HV):

Three Phase Hybrid Inverter

SUN- 25 / 30 / 40 / 50 K-SG01HP3-EU-BM2/3/4



- 100 100% unbalanced output, each phase; Max. output up to **50%** rated power
- 10 DC couple and AC couple to retrofit existing solar system
- 10 Max. 10pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100 Max. charging/discharging current of 100A
- H High voltage battery, higher efficiency
- 6 6 time periods for battery charging/discharging
- Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

Technical Data

www.deyeinverter.com

Model	SUN-25K-SG01HP3 -EU-BM2	SUN-30K-SG01HP3 -EU-BM3	SUN-40K-SG01HP3 -EU-BM4	SUN-50K-SG01HP3 -EU-BM4
Battery Input Data				
Battery Type		Li-Ion		
Battery Voltage Range (V)		160~800		
Max. Charging Current (A)		50+50		
Max. Discharging Current (A)		50+50		
Number of battery input		2		
Charging Strategy for Li-Ion Battery				
PV String Input Data				
Max. DC Input Power (W)	32500	39000	52000	65000
Max. DC Input Voltage (V)		1000		
Start-up Voltage (V)		180		
MPPT Range (V)		150-850		
Full Load DC Voltage Range (V)	450-850	360-850	360-850	450-850
Rated DC Input Voltage (V)		600		
PV Input Current (A)	36+36	36+36+36	36+36+36+36	
Max. PV I_{sc} (A)	55+55	55+55+55	55+55+55+55	
No.of MPP Trackers	2	3	4	
No.of Strings per MPP Tracker		2		
AC Output Data				
Rated AC Output and UPS Power (W)	25000	30000	40000	50000
Max. AC Output Power (W)	27500	33000	44000	55000
AC Output Rated Current (A)	37.9/36.3	45.5/43.5	60.7/58	75.8/72.5
Max. AC Current (A)	50	60	70	83.3
Max. Continuous AC Passthrough (A)		150		
Peak Power (off grid)		1.5 time of rated power, 10.5		
Generator input/Smart load /AC couple current (A)	37.9 / 150 / 37.9	45.5 / 150 / 45.5	60.8 / 150 / 60.8	75.8 / 150 / 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%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, Output Shorted Protection, Surge protection			
Output Over Voltage Protection	DC Type II/AC Type III			
Certifications and Standards				
Grid Regulation	EN50549, AS4777.2:2015, VDE0126-1-1, IEC61727, VDEN4105-2018, G99			
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)		-40~60°C, >45°C derating		
Cooling		Smart cooling		
Noise (dB)		<45 dB		
Communication with BMS		RS485; CAN		
Weight (kg)		75		
Size (mm)		527Wx894Hx294D		
Protection Degree		IP65		
Installation Style		Wall-mounted		
Warranty		5 years		



Ningbo Deye Inverter Technology Co., Ltd.

Add: No. 26 South YongJiang Road, Daqi, Beilun, NingBo, Zhejiang, China. | Tel: 0086-0574-86120560 | E-mail: market@deye.com.cn

80Kw three phase hybrid inverter (HV):

Three Phase Hybrid Inverter

SUN-60/75/80K-SG02HP3-EU-EM6



- 100 100% unbalanced output, each phase
- AC AC couple to retrofit existing solar system
- 10 Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 160 Max. charging/discharging current of 160A
- H High voltage battery, higher efficiency
- 6 6 time periods for battery charging/discharging
- diesel Support storing energy from diesel generator

Deye

Stock Code: 605117SH

Technical Data

www.deyeinverter.com

Model	SUN-60K-SG02HP3 -EU-EM6	SUN-75K-SG02HP3 -EU-EM6	SUN-80K-SG02HP3 -EU-EM6
Battery Input Data			
Battery Type		Lithium-ion	
Battery Voltage Range (V)		160-1000	
Max Charging Current (A)		80+80	
Max Discharging Current (A)		80+80	
Charging Strategy for Li-ion Battery		Self-adaption to BMS	
Number of Battery Input		2	
PV String Input Data			
Max PV Access Power (W)	120000	150000	160000
Max PV Input Power (W)	96000	120000	128000
Max PV Input Voltage (V)		1000	
Start-up Voltage (V)		180	
MPPT Voltage Range (V)		150-850	
Rated PV Input Voltage (V)		650	
Max Operating PV Input Current (A)		36+36+36+36+36	
Max Input Short-Circuit Current (A)		54+54+54+54+54	
No. of MPP Trackers/ No. of Strings MPP Tracker		6/2+2+2+2+2	
AC Input/Output Data			
Rated AC Input/Output Active Power (W)	60000	75000	80000
Max AC Input/Output Apparent Power (VA)	66000	82500	88000
Rated AC Input/Output Current (A)	91/87	113.7/108.7	121.3/115.9
Max AC Input/Output Current (A)	100/95.7	125/119.6	133.4/127.6
Max Continuous AC Passthrough(grid to load)(A)		200	
Peak Power (off-grid) (W)		1.5 times of rated power, 10s	
Power Factor Adjustment Range		0.8 leading to 0.8 lagging	
Rated Input/Output Voltage/Range (V)		220/380V, 230/400V 0.85Un-1.1Un	
Rated Input/Output Grid Frequency/Range(Hz)		50/45-55, 60/55-65	
Grid Connection Form		3L+N+PE	
Total Current Harmonic Distortion THDi		<3% (of nominal power)	
DC Injection Current		<0.5% In	
Efficiency			
Max Efficiency		97.60%	
Euro Efficiency		97.0%	
MPPT Efficiency		>99%	
Equipment Protection			
Integrated	DC Polarity Reverse Connection Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Overvoltage Load Drop Protection, Ground Fault Current Monitoring, Arc Fault Circuit Interrupter (optional), Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch, DC Terminal Insulation Impedance Monitoring, Residual Current (RCD) Detection, Surge protection level		
Surge Protection Level	TYPE II(DC), TYPE II(AC)		
Interface			
Communication Interface	RS485/RS232/CAN		
Monitor Mode	GPRS/WIFI/Bluetooth/4G/LAN(optional)		
General Data			
Operating Temperature Range (°C)	-40 to +60°C, >45°C Derating		
Permissible Ambient Humidity	0-100%		
Permissible Altitude	3000m		
Noise (dB)	≤65		
Ingress Protection(IP) Rating	IP 65		
Inverter Topology	Non-Isolated		
Over Voltage Category	OVC II(DC), OVC III(AC)		
Cabinet Size (WxHxD mm)	606×927×314 (Excluding Connectors and Brackets)		
Weight (kg)	97.5		
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		



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ESS - LiFePo4 Batteries – Low Voltage:

5.12KWh, 10.24KWh LiFePo4 battery (LV):

Deye Residential ESS Solution



Deye SE-G5.1

Deye SE-G10.2



- ♦ Safer

Cobalt Free Lithium Iron Phosphate (LFP) Battery:
Safety and long Lifespan, high efficiency and high
power density. Intelligent BMS, providing complete
protection.

- ♦ Reliable

Support high discharge power. IP20, natural cooling,
wide temperature range : -20°C to 55°C.

- ♦ Flexible

Modular design, easy to expand, Max. 64 units in
parallel.
Suited to residential and commercial applications for
increasing the self-consumption ratio.

- ♦ Convenient

Battery module auto networking, easy
maintenance, support remotely monitoring and
upgrade the firmware.

- ♦ Eco-Friendly

Use environmental protection materials, the
whole module non-toxic, pollution-free.

- ♦ Three Mounting Methods

3U height standard design, support rack-mounted,
wall-mounted, and stack-mounted, saving
installation space.

Technical Data



Deye SE-G5.1

Deye SE-G10.2

	Model	
	SE-G5.1	SE-G10.2
Main Parameter	Battery Chemistry	LiFePO ₄
Nominal Capacity ^[1]	100 Ah	200 Ah
Nominal Voltage	51.2 V	
Operating Voltage	44.8 V ~ 57.6 V	
Nominal Energy ^[1]	5.12 kWh	10.24 kWh
Cell Configuration	1P16S	2P16S
Scalability ^[4]	Max. 64 pcs pack (327kWh) in parallel	Max. 64 pcs pack (655kWh) in parallel
Charge Current ^[2]	Max. Continuous Peak	50 A 100 A (10 sec)
Discharge Current ^[2]	Max. Continuous Peak	100 A 200 A(10 sec)
Other Parameter	Recommend Depth of Discharge	80% DoD
Dimension	440 × 540 × 133 (W × D × H, mm)	710 × 540 × 133 (W × D × H, mm)
Weight Approximate	44 kg	85 kg
Master LED Indicator	5LED (SOC : 20% ~ SOC100%), 3LED (working, alarming, protecting)	
Communication Port	CAN2.0, RS485	
IP Rating of Enclosure	IP20	
Operating Temperature	Charge : 0 ~ 55°C, Discharge : -20°C ~ 55°C	
Storage Temperature	0 ~ 35°C	
Relative Humidity	95%	
Altitude	≤2000 m	
Cycle Life	≥6000 (25°C±2°C, 0.2C / 0.2C, 80%DOD, 70%EOL)	
Warranty Period ^[3]	5 years	
Installation	Wall-Mounted, Floor-Mounted (Stacked), Rack-Mounted (cabinet depth ≥600mm)	
Certification	UN38.3,MSDS	

[1] Test conditions : 25°C±2°C, at beginning of life, 0.2C charge & 0.2C discharge,100% DOD.

[2] The current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

[4] Max. 32 pcs without external CAN-Box.

Battery Pack Accessories



Deye SE-G5.1

Deye SE-G10.2

Model	Accessories Parts Description	Remark
3U-Lrfe-B	Battery Rack Fixed Ears and screws (Included)	Used for battery fixing with rack or cabinet.
SE-G5.1-BCable	Battery Parallel Cable (Included)	Battery power and communication parallel connection cable, and ground line.
3U-W-Bracket-B	Battery Wall-Mounted Brackets and screws (Included)	Simple wall hanging support.
SE-G5.1-PCable	Hybrid inverter Cable (Included)	Battery power and communication cable connect with hybrid inverter.
3U-Bracket-B	Battery Stack Brackets and screws (Included)	Simple stacking bracket, 1 unit including 4 pcs brackets, Max. stacking 4 floors.



Model : 3U-Lrfe-B

Details : Pair of rack fixed ears used for battery fixing with rack or cabinet, included 6 pcs M4 screws, 4 sets of M6 screws and buckle nuts.



Model : SE-G5.1B-BCable

Details : Pair of 270mm 7AWG(SE-G5.1) or 4AWG(SE-G10.2) Power cable (Both ends are M6 copper terminals) and 250mm RJ45 communication cable for battery parallel, and 250mm 10AWG yellow-green ground cable. It is a line used to connect batteries in parallel during stack installation.



Model : Battery Wall-Mounted Brackets

Details : Pair of simple wall hanging support, included 4 sets of M6 expansion screws.



Model : SE-G5.1B-PCable

Details : Pair of 7AWG(SE-G5.1) or 4AWG(SE-G10.2) battery power cable (one end is M6 copper terminal and the other end is M10 copper terminal) and RJ45 communication cable connect with hybrid inverter. The cable length can be customized based on customer requirements, default length is 1500mm.



Model : 3U-Bracket-B

Details : Simple stacking bracket, height 180mm, 1 set including 4 pcs brackets and 8 pos M4 screws, Max. stacking 4 floors.



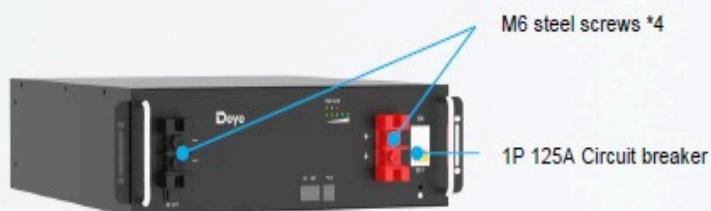
Battery Structure



Deye SE-G5.1

Deye SE-G10.2

-

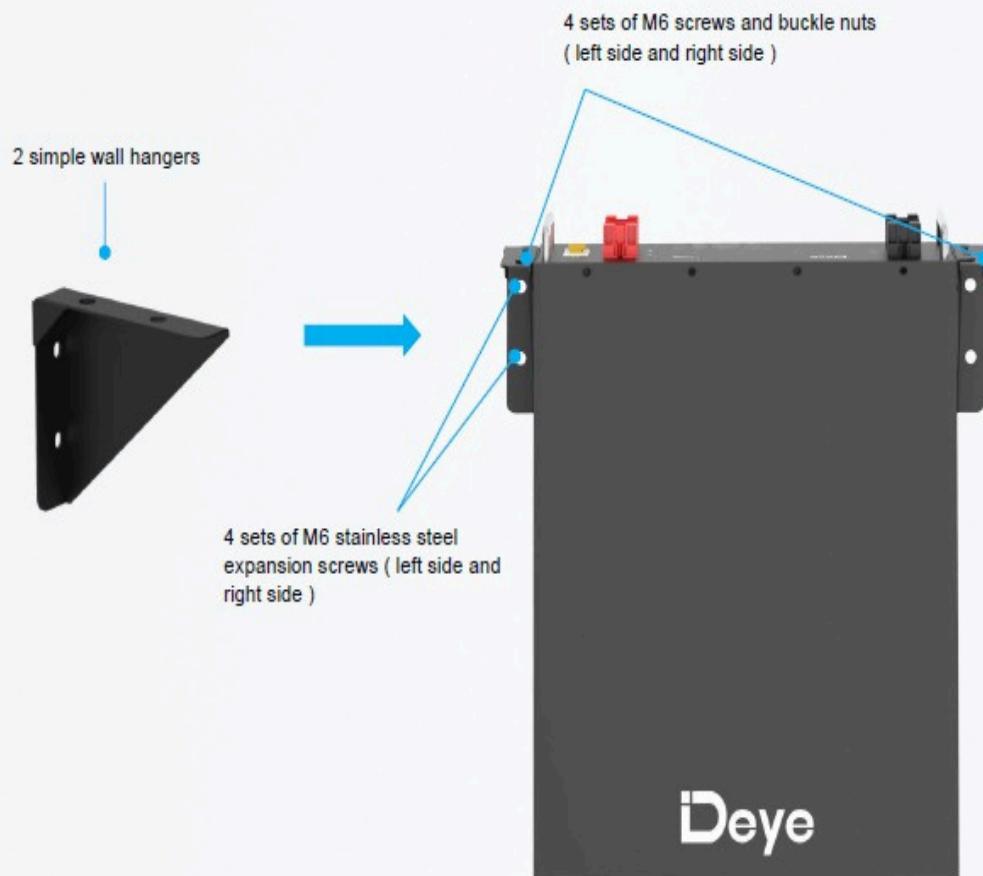


Wall-mounted method

Deye SE-G5.1

Deye SE-G10.2

-



ESS - LiFePo4 Batteries – High Voltage:

5.12KWhLiFePo4 Battery (HV):

BOS-G



- ◆ Convenient

Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance.

- ◆ Safe and reliable

Cathode material is made from LiFePO4 with safety performance and long cycle life. The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge.

- ◆ Intelligent BMS

It has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.

- ◆ Eco-friendly

The whole module is non-toxic, non-polluting and environmentally friendly.

- ◆ Flexible configuration

Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, wifi upgrade(optional), remote up grade(Compatible with Deye inverter).

- ◆ Wide temperature

Working temperature range is from -20°C to 55°C, with excellent discharge performance and cycle life.

Deye



Technical Data

www.deyeess.com

Model	BOS-GX[X=3,4,5,6,7,8,9,10,11,12]													
Main Parameter														
Cell Chemistry	LiFePO4													
Module Energy (kWh)	5.12													
Module Nominal Voltage (V)	51.2													
Module Capacity (Ah)	100													
Battery Module Number	BOS-G15	BOS-G20	BOS-G25	BOS-G30	BOS-G35	BOS-G40	BOS-G45	BOS-G50	BOS-G55	BOS-G60				
Battery Module Qty In Series (Optional)	3	4	5	6	7	8	9	10	11	12				
System Nominal Voltage (V)	153.6	204.8	256	307.2	358.4	409.6	460.8	512	563.2	614.4				
System Operating Voltage (V)	124.8~175.2	166.4~233.6	208~292	249.6~350.4	291.2~408.8	332.8~467.2	374.4~525.6	416~584	457.6~642.4	499.2~700				
System Energy (kWh)	15.36	20.48	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44				
System Usable Energy (kWh) ¹	13.82	18.43	23.04	27.64	32.25	36.86	41.47	46.08	50.68	55.29				
Rated DC Power	15.36	20.48	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44				
Charge/Discharge Current (A) ²	Recommend													
	Nominal													
	Peak Discharge (2 mins, 25°C)													
Working Temperature (°C)	Charge: 0~55/Discharge: -20~55													
Status Indicator	Yellow: Battery High Voltage Power On Red: Battery System Alarm													
Communication Port	CAN2.0/ RS485													
Humidity	5%~85%RH													
Altitude	≤2000m													
IP Rating of Enclosure	IP20													
Dimension (W/D/H,mm)	530*602*1599						530*602*2187							
Weight Approximate (kg)	408						594							
Installation Location	Rack Mounting													
Storage Temperature (°C)	0~35													
Recommend Depth of Discharge	90%													
Cycle Life	25±2°C, 0.5C/0.5C, EOL70%≤6000													
Warranty ³	10 years													
Certification	CE/IEC62619 /VDE2510-50/ UL1973 /UL9540A/UN38.3													

1. DC Usable Energy, test conditions: 90% DOD, 0.2C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.
3. The warranty is due whichever reached first of warranty period or life cycle power.
4. Made in China.



NINGBO DEYE ESS TECHNOLOGY CO., LTD
NO. 18TH ZHENGLONG ROAD LONGHSAN CIXI NINGBO ZHEJIANG 315311 P.R.CHINA
Tel: +86-0574-8622 9263 | E-mail: sales@deye.com.cn

System Components

www.deyeess.com

Model	Description
HVB750V/100A-EU	High Voltage Battery cluster control box conforming to European or British Standards
Operating Voltage	120~750Vdc
Nominal Charge/Discharge Current	100A
Max.Charge/Discharge Current	125A
DC Input Rating	12±2%V/4.15A
Operating Temperature Range	-20~65°C
Ingress Protection	IP20
Dimension (W/D/H)	440*570*150mm
Weight Approximate	15.5kg
HVB750V/100A-US	High Voltage Battery cluster control box conforming to North American Standard
Operating Voltage	120~750Vdc
Nominal Charge/Discharge Current	100A
Max.Charge/Discharge Current	125A
DC Input Rating	12±2%V/4.15A
Operating Temperature Range	-20~65°C
Ingress Protection	IP20
Dimension (W/D/H)	440*570*150mm
Weight Approximate	17kg
High voltage box Standard configuration:	
BOS-GMS.1	5.12 kwh battery module
Battery Type	LiFePO4(LFP)
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Rated Energy	5.12kWh
Nominal Charge/Discharge Current	100A
Peak Discharge Current	125A
Charge Temperature	0~55°C
Discharge Temperature	-20°C~55°C
Storage Temperature	0°C~35°C
Ingress Protection	IP20
Dimension (W/D/H)	440*570*133mm
Weight Approximate	44kg
Battery module Standard configuration:	
EPCable5.0(Optional)	Standard 5-meter power cable connected to the positive pole of the external PCS
1000V/4AWG cable	
ENCable5.0(Optional)	Standard 5-meter power cable connected to the negative pole of the external PCS
1000V/4AWG cable	



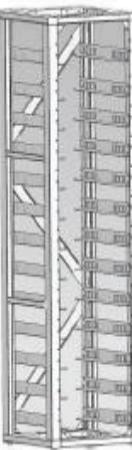
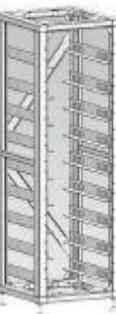
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NO. 18TH ZHENG LONG ROAD LONGHSAN CIXI NINGBO ZHEJIANG 315311 P.R.CHINA

Tel: +86-0574-8622 9263 | E-mail: sales@deye.com.cn

System Components

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Model	Description
EPWR Cable5.0(Optional)	Standard 5-meter cable connected to external 12VDC power supply
	
ECOM Cable5.0(Optional)	Standard 5-meter communication cable connected to the external device
	
3U-HRACK(Optional)	Standard 19inch rack, caninstall 12 pcs batteries and 1 pcs High Voltage Battery cluster control box
Dimension (W/D/H) Weight Approximate	589*590*2240mm 85kg
	
3U-LRACK(Optional)	Standard 19inch rack, caninstall 8 pcs batteries and 1 pcs High Voltage Battery cluster control box
Dimension (W/D/H) Weight Approximate	589*590*1640mm 65kg
	



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7.68KWh LiFePo4 battery (HV):

BOS-A



Product advantages

- Supports larger current output, up to 160A
- A single system has a higher battery capacity and can be compatible with inverters with higher power
- Dual electrode disconnection design for battery system
- The battery system has dual power output plugins, and the single power plugin can support 100A. It can be connected to two battery DC interfaces of the inverter separately
- A concise data display interface to assist in faster initial installation and debugging
- Supports mobile Bluetooth APP access, convenient connection, and allows for viewing more detailed system data

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Technical Data

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Model	BOS-A		
Main Parameter			
Cell Chemistry	LiFePO4		
Module Energy (kWh)	7.68		
Module Nominal Voltage (V)	38.4		
Module Capacity (Ah)	200		
Module Dimension (W/D/H,mm)	601.5*520*135		
Module Weight Approximate (kg)	70		
Battery Module Qty In Series (Optional)	7	13	21
System Nominal Voltage (V)	268.8	499.2	806.4
System Operating Voltage (V)	235.2~306.6	436.8~569.4	705.6~919.8
System Energy (kWh)	53.76	99.84	161.28
System Usable Energy (kWh) ¹	48.38	89.85	145.15
Charge/Discharge ² Current (A)	Recommend	100	
	Max	160	
Working Temperature (°C)	Charge: 0~55/Discharge: -20~55		
Status Indicator	Yellow: Battery High Voltage Power On Red: Battery System Alarm		
Communication Port	CAN2.0		
Humidity	5%~85%RH		
Altitude	≤3000m		
IP Rating of Enclosure	IP20		
Dimension (W/D/H,mm)	1900x610x610	2350x610x610	1900x610x610
Weight Approximate (kg)	558	985	1586
Installation Location	Rack Mounting		
Storage Temperature (°C)	0~35		
Recommend Depth of Discharge	90%		
Cycle Life	25±2°C, 0.5C/0.5C, EOL70%≥6000		
Warranty ³	10 years		
Certification	CE/IEC62619 /IEC62040/UN38.3/VDE-2510		

1. DC Usable Energy, test conditions: 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

2. The current is affected by temperature and SOC.

3. The warranty is due whichever reached first of warranty period or life cycle power.

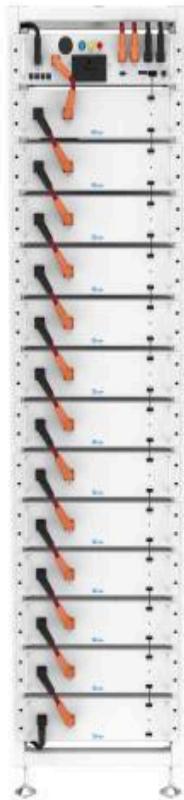


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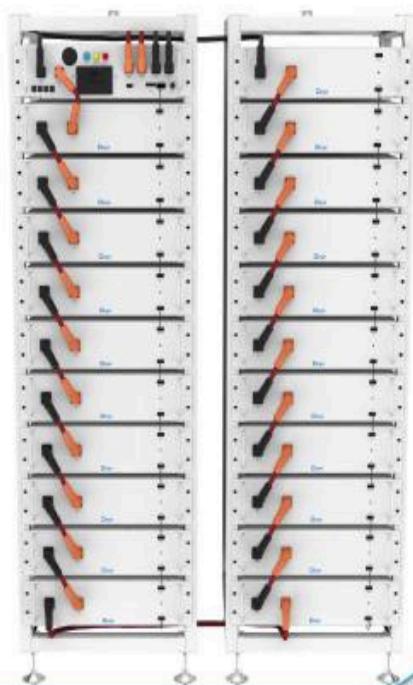
System Backup solution

Backup power duration plan	2 hours		4 hours	
Hybrid inverter power	50KW	80KW	50KW	80KW
Battery model	BOS-A100	BOS-A160	BOS-A100	BOS-A160
Number of batteries	1 pcs	1 pcs	2 pcs	2 pcs

50KW/100KWh

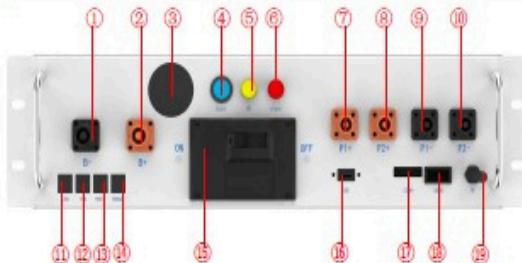


80KW/160KWh



Product introduce

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①B-	Connection position of the common negative pole of the battery
②B+	Connection position of the common positive pole of the battery
③LED panel	Displays SOC and fault codes
④START	A start switch of 12VDC power inside the high-voltage control box
⑤HV light indicator	High-voltage hazard indicator
⑥ALRM light indicator	Battery system fault alarm indicator
⑦PCS1+	Connection position of PCS1 positive pole
⑧PCS2+	Connection position of PCS2 positive pole
⑨PCS1-	Connection position of PCS1 negative pole
⑩PCS2-	Connection position of PCS2 negative pole
⑪LAN	Ethernet communication interface
⑫PCS COM	Communication interface with charging and discharging equipment
⑬IN COM	Connection position with previous GE-F-PDU communication input
⑭OUT COM	Connection position with next GE-F-PDU communication output
⑮Air switch	Used to manually control the connection between the battery rack and external devices
⑯USB	BMS upgrade interface and storage expansion interface
⑰COMM1	12VDC power supply port
⑱COMM2	Communicative connection with the first battery module; and providing 12VDC power for the first battery module.
⑲WiFi/ Bluetooth capture stick	Collect WiFi or Bluetooth information

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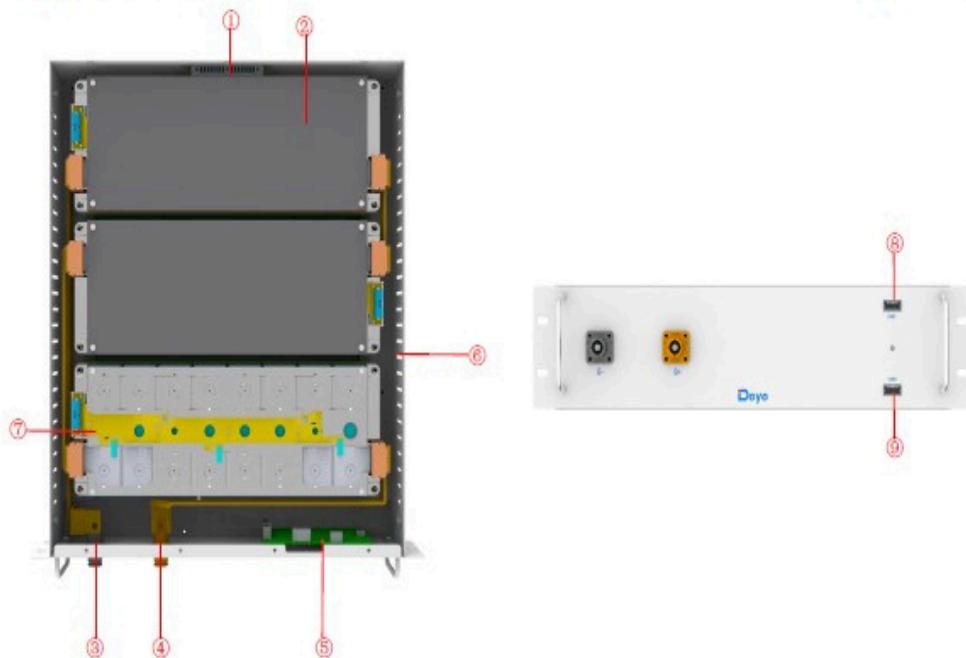
NINGBO DEYE ESS TECHNOLOGY CO., LTD

Add: NO.18TH ZHENLONG ROAD LONGSHAN CIXI NINGBO ZHEJIANG 315311 P.R. CHINA

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Product introduce

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①Fire aerosol	Put out a fire
②Battery module	Provides electrical energy storage and output
③Battery negative-	/
④Battery positive+	/
⑤BMU	Battery monitoring
⑥Air inlet	Cold air inlet
⑦CCS	Cells Contact System
⑧COMM1	12VCD power supply port
⑨COMM2	Communicative connection with the first battery module; and providing 12VDC power for the first battery module.

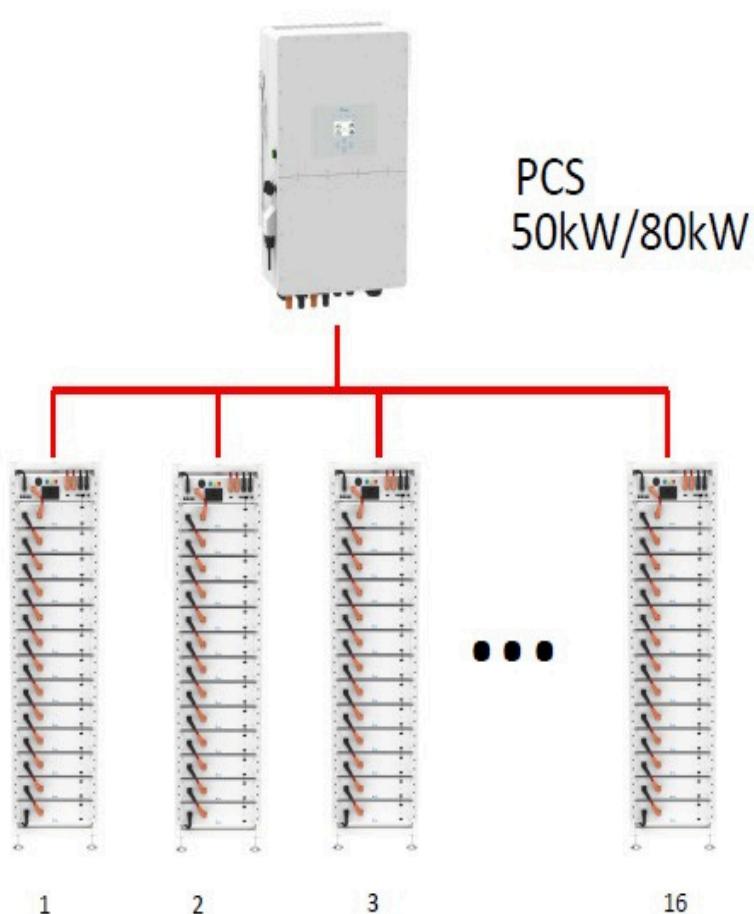
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Typical application cases

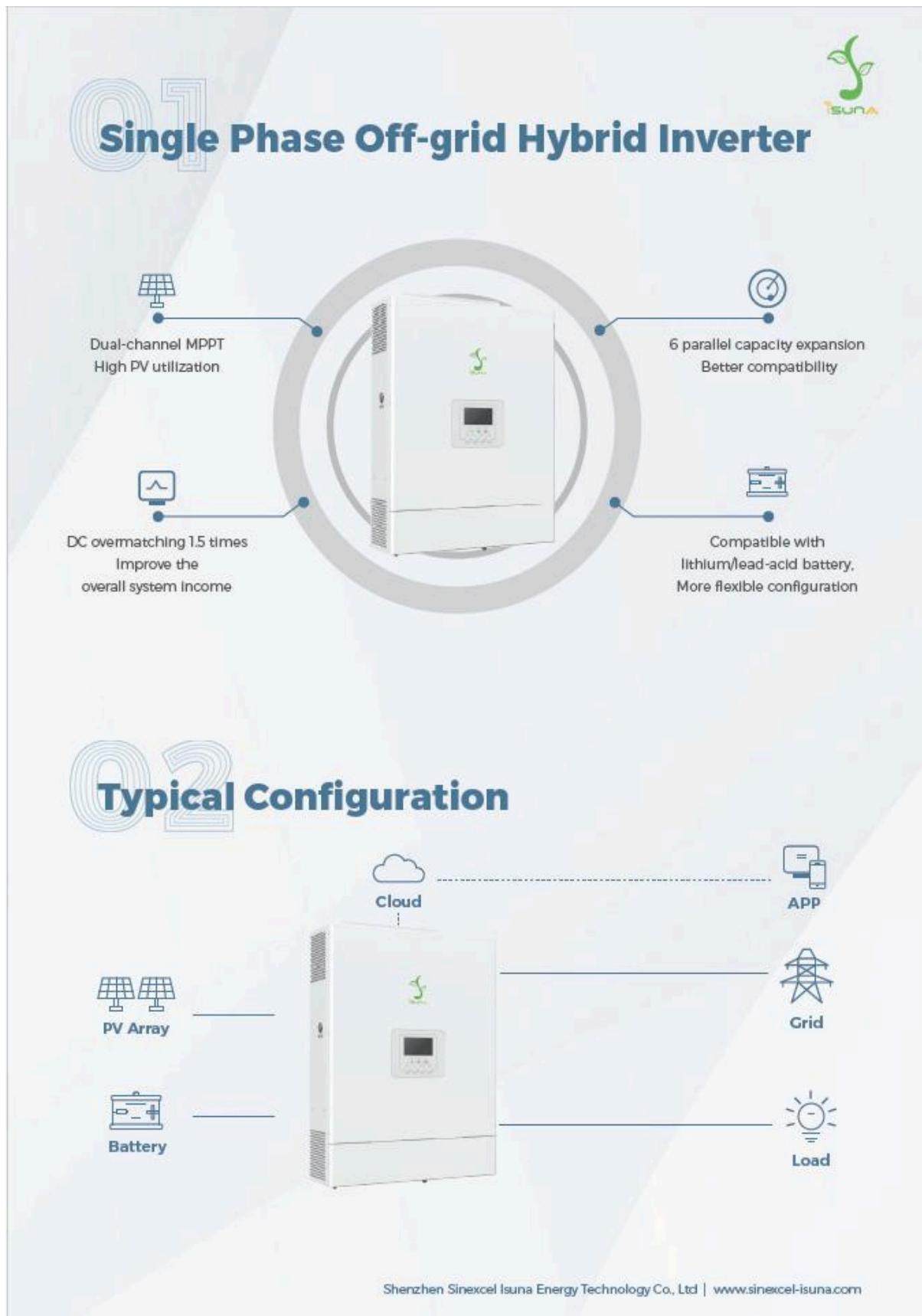


- An 50kW/80kW inverter can carry 1 to 16 high voltage boxes, PDU in parallel.
- A high voltage box can be equipped with 7 battery packs, 13 battery packs or 21 battery packs

SINEXCEL

Off-Grid & Hybrid Inverters – Single Phase – Low Voltage:

5Kw, 6Kw, 10Kw, 12Kw single phase hybrid inverters (LV):



03 Off-grid Datasheet



Model name	Isuna 3000SO	Isuna 4000SO	Isuna 5000SO	Isuna 6000SO	Isuna 8000SO	Isuna 10000SO	Isuna 12000SO
Off-grid Output							
Max. Output Power	3kVA	4kVA	5kVA	6kVA	8kVA	10kVA	12kVA
Nominal Output Voltage				220Vac			
Output Voltage Range				220Vac±10%			
Nominal Output Current	13.6A	18.2A	22.7A	27.2A	36.4A	45.4A	54.4A
Peak Power & Duration	4.5kVA(10s)	6kVA(10s)	8kVA(10s)	8kVA(10s)	12kVA(10s)	16kVA(10s)	16kVA(10s)
Grid Parameter							
Max. AC Input Current		60A			100A		
Nominal AC Voltage				220Vac			
AC Voltage Range				176-264V			
Nominal AC Frequency				50/60Hz			
THDi				<3%			
Battery Parameter							
Battery Type				Lithium-ion/Lead-Acid			
Nominal Battery Voltage				48V/51.2V			
Battery Voltage Range				42-58V			
Max.Charging Voltage				58V			
Charging Curve				3 stages			
Max. Charging Current	60A	80A	100A		200A		
Max. Discharging Current	60A	80A	100A	120A		200A	
PV Input							
Max. DC Input Power	6600W	7000W	8000W	9000W	14000W	16000W	18000W
Starting Voltage				120V			
Input Voltage Range				100-500V			
MPPT Voltage Range				100-500V			
Full Load MPPT Voltage Range		350-450V			320-500V		
Numbers of MPPT		2			4		
Max. Input String Per MPPT			1				
Nominal Input Voltage				360V			
Max. DC Input Current		13A/13A			14A/14A		
Max. Short-circuit Current				18A/18A			
Efficiency							
European Efficiency	97.2%		97.3%		97.2%		97.3%
Max.Efficiency	97.4%		97.5%		97.4%		97.5%
Max. Battery Charging/Discharging Efficiency				94.009%			
General Data							
Size(W*H*D)		360mm*470mm*114mm			480mm*500mm*200mm		
Weight		14kg			28kg		
Noise		< 45dB(A)			< 45dB(A)		
Operating Temperature Range			-25°C~60°C (> 45°C power-down)				
Cooling Method			Air cooling				
Parallel Units	6				1		
Warranty		5 years					
Ingress Protection Grade		IP20					
Monitoring		LCD/LED/APP/WIFI/Bluetooth					
Communication Port		CAN+RS485					
Protection		Reverse Polarity Protection;Over Current/Voltage Protection;AC Short-circuit Protection;PV Ground Fault Monitoring;Over Temperature Protection					
Certification							
CE_LVD		EN 62109-2:2011	EN 62109-1:2010				
CE EMC		EN61000-6-1, EN61000-6-2					

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Thank You!