

Off Grid Solar Solutions

2022



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



140 Max. charging/discharging current of 140A

6 6 time periods for battery charging/discharging

Support storing energy from diesel generator

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	333.272723	300 12 7 20	330 15 7 20	330121723			
Battery Type			Lead-acid or Li-lon				
Battery Voltage Range (V)	20~30	40~60	40~60	40~60	40~60		
Max. Charging Current (A)	140	40~60 70	40~60	120	135		
2 2			90				
Max. Discharging Current (A)	140	70	90 Yes	120	135		
Number of battery input			3 Stages / Equalization				
Charging Curve	_			1			
Charging Strategy for Li-Ion Battery			Self-adaption to BMS				
PV String Input Data	2000	2000	4600	4500	7800		
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				
ull 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/	1/1 2/1+1		2/1+1			
AC Output Data							
Rated AC Output and UPS Power (W)	300	10	3600	5000	6000		
Max. AC Output Power (W)	3300		3690	5500	6600		
AC Output Rated Current (A)	13.6		16.4	22.7	27.3		
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			96.50%				
MPPT Efficiency		>99%					
Protection		_					
Integrated			landing Protection, PV So ual Current Monitoring U Surge protection				
Certifications and Standards							
Grid Regulation	EN50		26,IEC61727,VDEN410: 97,NBR16149/16150,RI		21,		
Safety EMC / Standard	IE	C62109-1/-2, EN6100	00-6-1,EN61000-6-2,EN	61000-6-3,EN61000-6-	4		
General Data							
Operating Temperature Range (°C)		-4	45~60℃,>45°C deratir	ng			
Cooling			Natural cooling				
Noise (dB)			<30 dB				
Communication with BMS			RS485; CAN				
Weight (kg)		11.4		1-	4		
Size (mm)	330W x 559.5H x228D		330W x 43				
Protection Degree	33011 / 339:311 / 2200		IP65				
nstallation Style			Wall-mounted				
Warranty	_		5 years				

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





Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system



Max. 16pcs 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

Model	SUN-3.6K -SG03LP1-EU	SUN-5K -SG03LP1-EU	SUN-8K -SG03LP1-EU				
Battery Input Data							
Battery Type		Lead-acid or Li-lon					
Battery Voltage Range (V)		40~60					
Max. Charging Current (A)	90	120	190				
Max. Discharging Current (A)	90	120	190				
xternal Temperature Sensor		Yes	150				
Tharging Curve		3 Stages / Equalization					
harging Strategy for Li-Ion Battery		Self-adaption to BMS					
V String Input Data							
Aax. DC Input Power (W)	4680	6500	10400				
ated PV Input Voltage (V)		370 (125~500)	10100				
tart-up Voltage (V)		125					
MPPT Voltage Range (V)		150-425					
ull Load DC Voltage Range (V)	3(00-425	200-425				
V Input Current (A)		3+13	26+26				
Aax. PV ISC (A)		7+17	34+34				
lumber of MPPT / Strings per MPPT		/1+1	2/2+2				
AC Output Data		2111	2/272				
ated AC Output and UPS Power (W)	3600	5000	6000				
Max. AC Output Power (W)	3690	5500	6600				
C Output Rated Current (A)	16.4	22.7	36.4				
Max. AC Current (A)	18	25					
Max. Continuous AC Passthrough (A)	18	35	40				
eak Power (off grid)	35 50 2 time of rated power, 10 S						
ower Factor	0.8 leading to 0.8 lagging						
Output Frequency and Voltage	50/60Hz; L/N/PE 220/230Vac (single phase)						
		Single Phase					
Grid Type	Single Phase THD<3% (Linear load<1.5%)						
OC injection current (mA) ifficiency		IMD<3% (Linear load< 1.5%)					
Max. Efficiency		97.60%					
uro Efficiency		96.50%					
MPPT Efficiency		>99%					
Protection		n, Anti-islanding Protection, PV String Inpu on, Residual Current Monitoring Unit, Out Surge protection					
Certifications and Standards							
Grid Regulation		4777.2,VDE0126,IEC61727,VDEN4105,G EIO-21,NRS097,NBR16149/16150,RD16					
Safety EMC / Standard	IEC62109-1/-2	, EN61000-6-1,EN61000-6-2,EN61000-6-	3,EN61000-6-4				
eneral Data							
perating Temperature Range (°C)		-45~60℃,>45℃ derating					
ooling		Natural cooling					
loise (dB)		<30 dB					
ommunication with BMS		RS485; CAN					
Veight (kg)		20.5					
ize (mm)		330W x 580H x232D					
Protection Degree		IP65					
nstallation Style		Wall-mounted					
Warranty		5 years					

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





Max. charging/discharging current of 190A



6 time periods for battery charging/discharging



Support storing energy from diesel generator

Technical Data

Model	SUN-SK -SG01LP1-US	SUN-6K -SG01LP1-US	SUN-7. -SG01LP1-		SUN- -SG01LP1		
Battery Input Data							
Battery Type		Lead-a	cid or Li-lon				
Battery Voltage Range (V)	40~60						
Max. Charging Current (A)	120	135	190 190				
Max. Discharging Current (A)	120	135	5 190 190				
xternal Temperature Sensor			Yes				
harging Curve		3 Stages	/ Equalization				
harging Strategy for Li-Ion Battery		Self-ada	ption to BMS				
V String Input Data							
Nax. DC Input Power (W)	6500	7800	9880 10400			00	
lated PV Input Voltage (V)		370 (370 (125~500)				
itart-up Voltage (V)			125				
APPT Voltage Range (V)		1:	50-425				
ull Load DC Voltage Range (V)	300-425		200-4	25			
V 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)	800	.0	
Max. AC Output Power (W)	5500	6600	8360)	880	.0	
AC Output Rated Current (A)	20.8/24	25/28.8	31.7/36.5	34.5	33.3/38.5	36.4	
Max. AC Current (A)	22.9/26.4	27.5/31.7	34.8/40.2	38	36.7/42.3	40	
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 Pha	se			
DC injection current (mA)		THD<3% (Li	near load<1.5%)				
Efficiency							
Max. Efficiency		9	7.60%				
Euro Efficiency		9	7.00%				
MPPT Efficiency			>99%				
Protection							
Integrated		otection, Anti-islanding Pr Detection, Residual Curren Surge					
Certifications and Standards							
Grid Regulation		E 1547.1-2020,UL 1699E 105,G99,NBT32004,CEI0-				27,	
Safety EMC / Standard	IEC621	09-1/-2, EN61000-6-1,EN	61000-6-2,EN6100	0-6-3,EN61	000-6-4		
General Data							
Operating Temperature Range (°C)		-45~60℃,	>45°C derating				
Cooling		Sma	rt cooling				
Noise (dB)		<	30 dB				
Communication with BMS		RS4	185; CAN				
Veight (kg)			32				
Size (mm)		420W×	670H×233D				
Protection Degree			IP65				
nstallation Style		Wall-	mounted				
Warranty			years				

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



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

240 Max. charging/discharging current of 240A

48V low voltage battery, transformer isolation design

6 time periods for battery charging/discharging

Support storing energy from diesel generator

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-lon			
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	1		
Charging Strategy for Li-Ion Battery			Self-adaption to BMS			
PV String Input Data			our adaption to bino			
Max. DC Input Power (W)	6500	7800	10400	13000	15600	
Rated PV Input Voltage (V)		7000	550 (160~800)	13000	15000	
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	330-030	26-	. 13	
Max, PV ISC (A)		13+13				
				34-		
Number of MPPT / Strings per MPPT		2/1+1		2/2	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	
Vlax. 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)		TH	D<3% (Linear load<1.5	596)		
Efficiency						
Max. Efficiency			97.60%			
Euro Efficiency	97.00%					
MPPT Efficiency	99,90%					
Protection						
Integrated			landing Protection, PV S ual Current Monitoring U Surge protection			
Certifications and Standards						
Grid Regulation			DE0126,IEC61727,VDEI IRS097,NBR16149/161			
Safety EMC / Standard		C62109-1/-2, EN6100	0-6-1,EN61000-6-2,EN	61000-6-3,EN61000-6-	-4	
General Data						
Operating Temperature Range (°C)		-4	45~60°C, >45°C deratii	ng		
Cooling			Smrat cooling			
Noise (dB)			<45 dB			
Communication with BMS			RS485: CAN			
Weight (kg)			33.6			
Size (mm)			422W x 702H x281D			
Protection Degree			1P65			
Installation Style			Wall-mounted			
			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 SO

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

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High voltage battery, higher efficiency

6 time periods for battery charging/discharging

Support storing energy from diesel generator

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-lon						
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)		100100	1000	10000	17000				
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			2/2+1						
Rated AC Output and UPS Power (W)	6000	8000	10000	12000	15000				
Max. AC Output Power (W)	6600	8800	11000	13200	16500				
AC Output Power (W) AC Output Rated Current (A)	9.1	12.1	15.2	18.2	22.7				
Wax, AC Current (A)									
Wax. AC Current (A) Wax. Continuous AC Passthrough (A)	13.6	18.2	22.7	27.3	34.1				
			50	0.5					
Peak Power (off grid)	_	2	time of rated power, 1	0.5					
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 / 22.3				
Power Factor	_		1.8 leading to 0.8 laggir						
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			landing Protection, PV S ual Current Monitoring U Surge protection						
Certifications and Standards									
Grid Regulation	EN50549,		EC61727, VDEN4105, G BR16149/16150, RD16		I, NRS097,				
Safety EMC / Standard	IE	C62109-1/-2, EN61000	0-6-1, EN61000-6-2, EN	61000-6-3, EN61000-6	i-4				
General Data									
Operating Temperature Range (°C)		-4	15~60℃, >45℃ deratii	ng					
Cooling			Smart cooling						
			<45 dB						
Noise (dB)	RS485: CAN								
			RS485; CAN						
Communication with BMS			RS485; CAN 26						
Communication with BMS Weight (kg)									
Communication with BMS Weight (kg) Size (mm)			26						
Noise (dB) Communication with BMS Weight (kg) Size (mm) Protection Degree Installation Style			26 396W×580H×230D						

Three Phase Hybrid Inverter

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



100% unbalanced output, each phase; Max. output up to 50% rated power

DC couple and AC couple to retrofit existing solar system

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

Max. charging/discharging current of 74A

High voltage battery, higher efficiency

6 time periods for battery charging/discharging

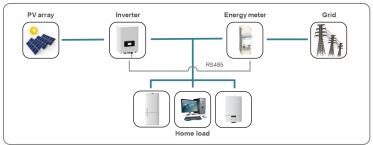
Support storing energy from diesel generator

Model	SUN-20K	SUN-25K	SUN-30K	SUN-40K	SUN-50K			
Model	-SG01HP3-EU	-SG01HP3-EU	-SG01HP3-EU	-SG01HP3-EU	-SG01HP3-EU			
Battery Input Data								
Battery Type			Lead-acid or Li-lon					
Battery Voltage Range (V)			200~700					
Max. Charging Current (A)	37		37+37					
Max. Discharging Current (A)	37	20.000						
Number of battery input	1							
Charging Curve			3 Stages / Equalization	١				
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	0015	0515			
Peak Power (off grid)	_	-	time of rated power, 1	n 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			slanding Protection, PV S lual Current Monitoring U Surge protection					
Certifications and Standards								
Grid Regulation	EN50549,		IEC61727, VDEN4105, G NBR16149/16150, RD16		, NRS097,			
Safety EMC / Standard	IE		00-6-1, EN61000-6-2, EN		-4			
General Data								
Operating Temperature Range (°C)			-45~60℃,>45°C deratio	ng				
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					
			- / - / - / - /					

Energy Meter



Typical Application Diagram



Technical Data

60 / 176~264V	80 176-458V	EASTRON SOM 230 Modbus	EASTRON SDM 630-Modbus V2 100 147-480V	EASTRON SDM 630 MCT 1-9999A (with CT) 50-950V
/	176-458V	100		
/	176-458V	100		
		/	147-480V	50-950V
176~264V	100-265V			
176~264V	100-265V			50-550V
		176~276V	85~480V	20-550V
		Class1		
		Class2		
≤1W / 8VA	≤1.5W / 6VA	≤2W / 10VA	≤2W / 10VA	≤2W / 10VA
176-264V	100-265V	176-276V	85-480V	85-275V / 120-380V
50/6	50Hz	50Hz	50/60Hz ±2%	50/60Hz±2%
36×85×66	100×72×66	36×99×63	72×100×66	72×94.5×65
0.21	0.44	0.21	0.42	0.29
		DIN Rail		
		IP51		
		LCD		
		RS485		
		32		
-25°C~+55°C	-10°C~+45°C		-25℃~+55℃	
-40°C~+70°C	25°C~+75°C		/	
≤7	5%		0~95%, non-Condens	ing
		1.5 years		
	36×85×66 0.21 -25°C~+55°C -40°C~+70°C	176-264V 100-265V 50/60Hz 36×85×666 100×72×66 0.21 0.44	Class2 \$\leq \text{IW/8VA} \leq \leq \text{ISW/6VA} \leq \text{2W/10VA} \text{176-264V} \text{100-265V} \text{176-276V} \text{50Hz} \text{50Hz} \text{50Hz} \text{50Hz} \text{50Hz} \text	Class2 ≤1W / 8VA ≤1.5W / 6VA ≤2W / 10VA ≤2W / 10VA 176-264V 100-265V 176-276V 85-480V 50/60Hz 50/60Hz 50Hz 50/60Hz ±2% 36x85x66 100x72x66 36x99x63 72×100x66 0.21 0.44 0.21 0.42 DIN Rail IP51 LCD RS485 32 -25°C-+55°C -10°C-+45°C -25°C-+55°C / ≤75% 0-95%, non-Condens

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Stick Logger

GPRS / WIFI / 4G / Ethernet Monitor your system anywhere in the world.



End-user can monitor yields at any time with SOLARMAN APP.

Technical Data

LSG-3	LSG-4	LSW-3	LS4G-3	LSE-3			
GPRS	GPRS	WiFi	4G	LAN			
GSM850 / EGSM900 / DCS1800 / PCS 1900MHz	GSM850 / EGSM900 / DCS1800 / PCS 1900MHz	2.142GHz~ 2.484GHz	704MHZ-960MHZ 1710MHZ-2690MHZ	Adaptive Network; 10M / 100M			
/	GPS / Beidou < 15m	/	/	/			
External GPRS Stick Antenna	External GPRS Stick Antenna	External WiFi Stick Antenna	External 4G Stick Antenna	/			
	RS485 / RS232 / TTL						
DC4.7V~DC15V							
3W	3W	1.5W	5W	1W			
Chip Card / MicroSIM	Chip Card / MicroSIM	/	MicroSIM	/			
2M Flash (2M-16M Optional)							
	-40 °C ~+85 °C						
		< 90% (No Condensing	1)				
		One					
	bps (1	200-115200bps Config	urable)				
	Defaul	t 5min (1-15min Config	jurable)				
Bluetooth	APP / Web	AT+InstructionSet Remote Server	Local Serial Port	Web			
		Remote Upgrade					
Real-time Control, Data resuming							
	GPRS GSM850 / EGSM900 / DCS 1800 / PCS 1900MHz / External GPRS Stick Antenna 3W Chip Card / MicroSIM	GPRS GPRS GSM850 / EGSM900 GSM850 / EGSM900 GS 1800 / PCS 1900MHz 7 GPS / Beldou < 15m External GPRS Stick Antenna 3W 3W Chip Card / MicroSIM Chip Card / MicroSIM Chip Card / MicroSIM Defaul Bluetooth APP / Web Bluetooth APP / Web GSM850 / EGSM900 CSM850 / EGSM900 /	GPRS GPRS WiFi	GPRS			

Stick logger supports GPRS, WIFI, 4G, Ethernet and other communication modes. Its bluetooth function enables local debugging configuration to collect operation and power generation data from inverters.

It pairs with solarman professional platform to enable remote PV system monitoring and to realize distributed power station management with lower cost and higher efficiency.

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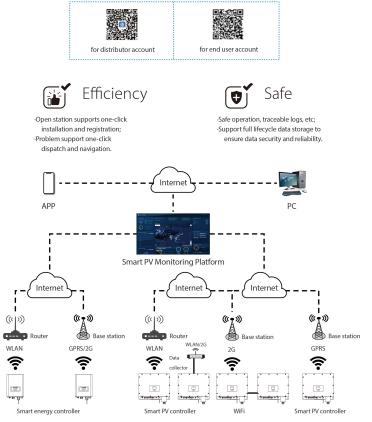
Smart PV Management Platform





Deye residential monitoring solution takes great care to ensure that your PV system is in excellent operation throughout its entire life-cycle. This monitoring solution offer you details information of your power generating plant including Today energy, Monthly energy, yearly energy, total energy etc, through wireless communication with your router to the internet by a smart wifi plug. User can easily access to the monitoring page via PC web or phone APP.

 $Maximum\ your\ energy\ output\ while\ minimizing\ your\ costs.\ Scan\ the\ QR\ code\ to\ build\ your\ power\ station\ !$







PROME SMART SCIENCE Ltd. HK

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