The 1st priority power of the system is always the PV power, then 2nd and 3rd priority power will be the battery bank or grid according to the settings. The last power backup will be the Generator if it is available.

7. Limitation of Liability

In addition to the product warranty described above, the state and local laws and regulations provide financial compensation for the product's power connection (including violation of implied terms and warranties). The company hereby declares that the terms and conditions of the product and the policy cannot and can only legally exclude all liability within a limited scope.

8. Datasheet

Model	***SUN-8K-SG04LP3***	***SUN-10K-SG04LP3***	***SUN-12K-SG04LP3***
Battery Input Date			
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)	150V		
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)	8000	10000	12000
Max. AC Output Power(W)	8800	11000	13200
Peak Power(off grid)	2 times of rated power, 10 S		
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%		

Model	*SUN-8K-SG04LP3 SUN-10K-SG04LP3 SUN-12K-SG04LP3*
Protection	
PV Arc Fault Detection	Integrated
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	DC Type II / AC Type II
Certifications and Standards	
Grid Regulation	VDE 0126, AS4777, NRS2017, G98, G99, IEC61683, IEC62116, IEC61727
Safety Regulation	IEC62109-1, IEC62109-2
EMC	EN61000-6-1, EN61000-6-3, FCC 15 class B
General Data	
Operating Temperature Rande(℃)	-25~60℃, >45℃ Derating
Cooling	Smart cooling
Noise(dB)	<30 dB
Communication with BMS	RS485; CAN
Weight(kg)	36.8
Size(mm)	422W×658H×281D
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 years

9. Appendix I

Approved battery brand from Deye

Brand	Model	48V Storage inverter	RS485 or CAN	INVERTER SETUP	note
PYLON	US2000	●	CAN	0	
		●	RS485	5	
	US2000-PLUS	●	CAN	0	
		●	RS485	5	
DYNESS	B4850	●	CAN	0	Short line 6&7 at inverter side
	POWERBOX F	●	CAN	0	
CCGX	48Vxxxx	●	CAN	0	Need confirm CAN_H CAN_L
SACRED SUN	48Vxxxx	●	RS485	1	Cut line 3,6,8
SOLAX	48Vxxxx	●	CAN	0	

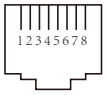
UZ ENERGY	UZ-EB51.2-100-A11	●	CAN	0	
GSL ENERGY	48Vxxxx	●	CAN RS485	0 12	
Herewin techlogy	HY48050	●	CAN	0	
GenixGreen		●	RS485	6	
Sunwoda	H4850M	●	CAN	0	
X-ratong	48Vxxxx	●	RS485	8	
Enershare Technology	BMS48150	●	RS485	9	
PYLON 3.0		●	RS485	12	
Murata		●	RS485	11	
GS10000		●	RS485	3	
BPE		●	CAN	0	
AOBOET		●	CAN	0	
VISION Group		●	CAN	13	
Alpha Ess		●	CAN	0	
GBS	GBS	●	CAN	0	
Wattsonic		●	CAN	14	
jihonghui		●	CAN	0	
KODAK		●	CAN	0	
Anchitech		●	Can/485	0/12	
TOPBAND		●	CAN	0	
oliter		●	CAN	0	
Foxess	LD-48100P	●	RS485	1	
Woo-power		●	RS485	12	
SHUANGDENG		●	CAN	0	

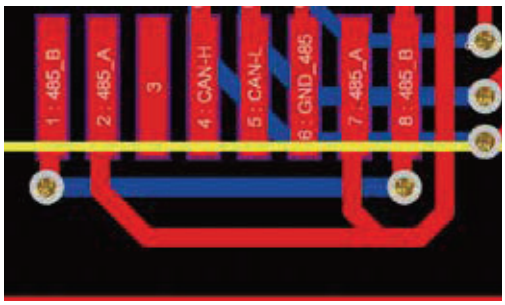
10. Appendix II

Definition of RJ45 Port Pin for BMS

No.	RS485 Pin
1	485_B
2	485_A
3	--
4	CAN-H
5	CAN-L
6	GND_485
7	485_A
8	485_B

BMS Port

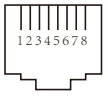


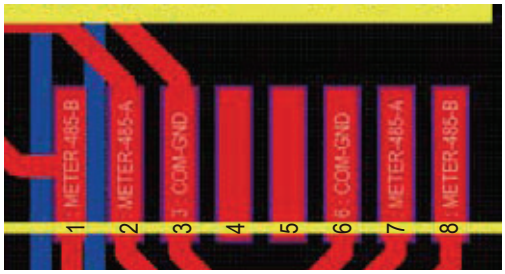


Definition of RJ45 Port Pin for Meter-485

No.	Meter-485 Pin
1	METER-485_B
2	METER-485_A
3	COM-GND
4	--
5	--
6	COM-GND
7	METER-485_A
8	METER-485_B

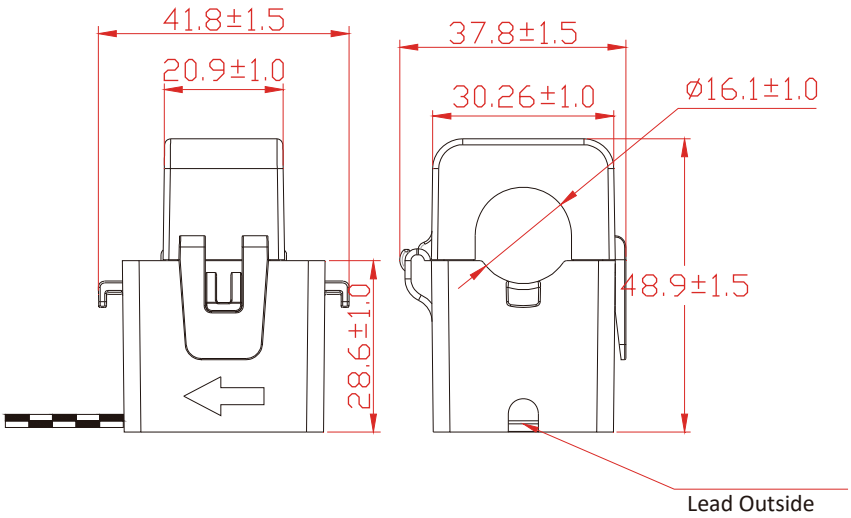
Meter-485 Port





11. Appendix III

1. Split Core Current Transformer (CT) dimension: (mm)
2. Seconddary output cable length is 4m.



NINGBO DEYE INVERTER TECHNOLOGY CO., LTD.
Add: No.26-30, South Yongjiang Road, Beilun, 315806, Ningbo, China
Tel: +86 (0) 574 8622 8957
Fax: +86 (0) 574 8622 8852
E-mail: service@deye.com.cn
Web: www.deyeinverter.com
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