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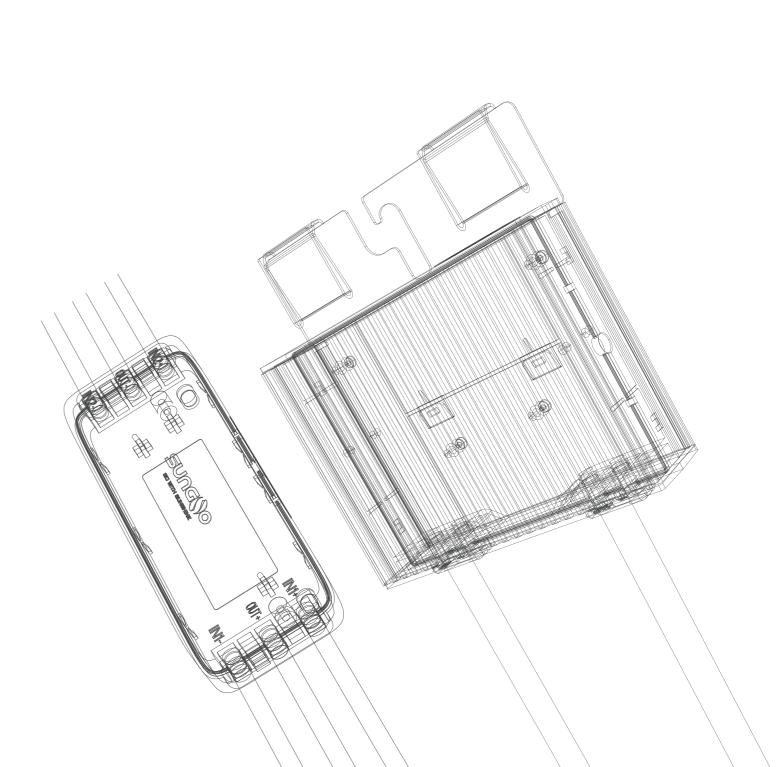
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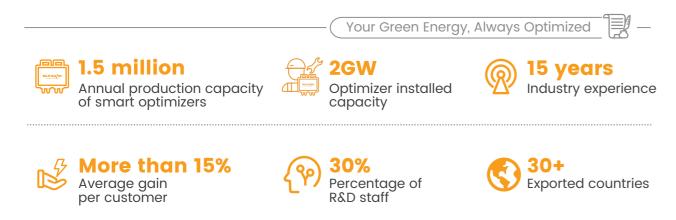






SUNGO Energy

SUNGO Energy Technology specializes in the research and development of solar and energy storage solutions, delivering high-performance, cutting-edge solar-storage products and comprehensive energy solutions for global clients. Our extensive product range includes smart optimizers, rapid shutdown devices, and lithium-ion battery energy storage systems, covering the entire value chain to meet diverse user needs. In the future, we will continue to increase investment in R&D, continuously improve our competitive advantages, and provide global clients with products which are more integrated, easier to install and maintain.



MLPE Application Scenarios









MLPE Product Solutions

SUNGO Energy is dedicated to developing and promoting PV smart optimizers and rapid shutdown devices, ensuring safer and more efficient clean energy production. Our independently developed products integrate optimization, rapid shutdown, and module-level monitoring, enabling PV systems to enhance energy generation, support multiple installations, and ensure precise management.





SUNGO OPT PRO Smart Optimizer



Rapid Shutdown Device



Rapid Shutdown Device

iSungo Smart Energy Management Platform



Residential and C & I Scenario Solutions SUNGO OPT PRO

Optimize Power Generation Fearless of Shading

Features



Module-level MPPT eliminates shading concerns, increasing power generation by up to **30%**



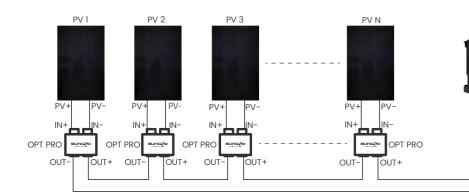
Easy installation and broad compatibility, ideal for both power plant upgrades and new installations

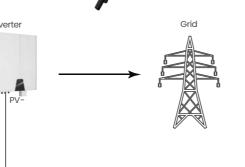


Compatible with all PV modules on the market and over 99% of inverters



25-year product replacement warranty





Technical Parameters

Model

DC Input		
Maximum input power		
Maximum operating voltage		
MPPT voltage range		
Maximumcontinuous input current		
Maximum input short-circuit current		
Night self-consumption		
DC Output		
Rated output voltage		
Maximum continuous output current		
Maximum output power		
Maximum system voltage		
Efficiency		
Peak efficiency		
Power loss @5A		
Power loss @8A		
Power loss @12A		
Power loss @15A		
Power loss @20A		
General Data		
Dimensions (W*D*H)		
Weight		
Input/output cable length	I	N
Input/output cable size		
Terminals		
Protection rating		
Relative humidity		
Operating temperature range		
Cooling		
Overvoltage category		
Maximum altitude		
Certification		
	FI	J
EMC		۲
Packaging		

SUNGO OPT PRO

800W	
70V	
7~60V	
21A	
23A	
0W	
58V	
21A	
780W	
1500V	
99.7%	
0.9W	
1.4W	
2.9W	
4.5W	
7.2W	

103*21.3*105.3mm

0.65Kg

I+ 200 / IN- 1100 / OUT+ 750 / OUT- 750mm

4mm²(12AWG) / 4mm²(12AWG)

MC4(compatible)

IP67/NEMA6

0-100%RH

-40~+60°C

Natural cooling

OVC II

≤4000m

CE

IEC 61000-6-1:2019EN IEC 61000-6-2:2019EN IEC 61000-6-3:2021ENIEC 61000-6-4:2019

20pcs/CTN 900pcs/pallets

Residential Scenario Solutions SUNGO IOPT & SUNGO GT

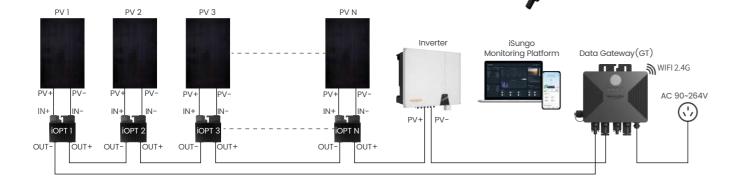
Optimize Power Generation Intelligent Management

Features

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- Module-level MPPT, no more worries of shading, power generation increased up to **30%**
- Module-level rapid shutdown, ensuring fire and maintenance safety ᆱ
- Module-level data intelligent monitoring and accurate management
- ... Fully utilize roof space to achieve system maximization
 - Convenient installation, wide range of adaptability, suitable for operating power plant renovation and new power plant installation
 - 25-year product replacement warranty



ata Gateway (GT)

Optimizer Technical Parameters

Model	
DC Input	
Maximum input power	
Maximum voltage	
MPPT voltage range	
Maximum continuous input current	
Maximum input short-circuits current	
Night self-consumption	
DC Output	
Output voltage	
Maximum continuous output current	
Maximum output power	
Maximum system voltage	
DC Output During Shutdown	
Output voltage (without SUNGO GT)	
Efficiency	
Peak MPPT efficiency	
Communication	
Communication Method	
Communication parameter	PV Voltage, Ou
Advanced Protection	
Input overvoltage protection	
Output overcurrent protection	
Output overload protection	
High temperature protection	
General Data	
Dimensions (W*D*H)	
Weight	
Input/output cable length	
Input/output cable size	
Terminals	
Protection rating	
Relative humidity	
Operating temperature range	
Cooling	
Certification	
Packaaina	

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Main working 70° Main working with working 70° Main working with working 21.60° Main working with working 0.60° Main working with working 0.60° Main working with working 0.60° Main working working 1.60° Or Output building Shutdown 1.60° Communication parameter 29.97% Communication wethod FV volkinge, Culput Volkinge, Culput Power, Temperature, store Advanced Potektoin 3.75° Main working working working 3.75° Output oversame protection 3.22.4 Main working w
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Wight efficiency 0W Output voltage 0-60V Maintum output power 780W Maintum output power 160 N Efficiency 399.7% Communication Method Pic Communication parameter PV voltage, Output Voltage, Output Dewer, Temperature, State Advanced Protection 250W Duput overvoltage protection 250W Maintum output coble size 75V Maintum coble size 400 N Maintum coble size 400 N Maintum coble size 400 N Maintum coble size Maintum coble size Maintum coble size 400 N Maintum coble size Maintum coble size Maintum coble size Maintum coble size Maintum coble size Maintum coble size Maintum coble size
Discrete O-60V Maintum continuous apput current 21A Comput obtoge 1500V Comput obtoge 1500V Comput obtoge 1500V Communication parameter 198.7% Communication parameter PV Voitage, Output Voitage, Output Contract, Comput Option Advanced Protection 322A Output overcore protection 3200W Option evolution protection 322A Output overcore protection 320W Option evolution protection 320W Option evolution protection 320W Option evolution ev
Output violating without solution control without solutions output unrent 21A Maximum ontput power 780W Maximum ontput power 780W DC Output Voting Shutdown 1±0.W DC Output Voting Shutdown 1±0.W Stifficiancy 1±0.W Stifficinc
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Mainum actiput power BC Output buring Shutdown CC Output buring Shutdown CC Output buring Shutdown CC Output buring Shutdown CC Output voltage (Without SLNSO GT) Efficiency Feak MPI? efficiency Efficiency Feak MPI? efficiency Efficiency Feak MPI? efficiency FV Voltage, Output Voltage, Output Power, Temperature, State Advanced Protection PV Voltage, Output Voltage, Output Dewer, Temperature, State Advanced Protection PV Voltage, Output Voltage, Output Power, Temperature, State PV Voltage, Output Voltage, Output Power, Temperature, State Advanced Protection PV Voltage, Output Voltage, Output Power, Temperature, State PV Voltage, Output Power, Temperature, Protection PV Voltage, Output Voltage, Output Power, Temperature, State PV Voltage, Output Power, Temperature, PV Power, Temperature, PV Power, Temperature, PV Power, P
Maximum system voltage bit 2000 bit 200
DC Output Uning Shulkors (ST) 14.0.1V Efficiency 199.7% Communication Method PLC Communication Method PLC Communication parameter PV Voltage, Output Voltage, Output Current, Output Power, Temperature, State Advanced Protection 322A Output overload protection 3800W Bereal Date 110°C Otherakions (WPCH) 0.8518g Output overload protection 3800W Method State 4mm (2AWG) Imput/output cable size 4mm (2AWG) Imput/output cable size 4mm (2AWG) Imput/output cable size 4mm (2AWG) Protecting 6e Operating Emperature range 6e
Output violtage (without SUNGO GT) 11-0.1V Filtelioncy 39.7% Communication parameter PLC Communication parameter PV Voltage, Output Voltage, Output Current Culput Rever, Temperature, State Advanced Protection >75V Duput overvoltage protection >75V Output overvoltage protection >22A Output overvoltage protection >8000W Bigh temperature protection 3800W Dimensions (WrD*H) 116*315*123mm Dimensions (WrD*H) 0.8550g Dimensions (WrD*H) 0.8550g Dimensions (WrD*H) 0.8550g Operating temperature protection -20-459 Operating temperature range -40-459 Operating temperature range -40-459 Operating temperature range -20-459 Colling Coll Colling Coll Colling 22pcs/CTN B40pcs/pailets Colling 22pcs/CTN B40pcs/pailets Colling 0.9-284V
Efficiency 99.7% Communication Method PIC Communication Method PV Voltage, Output Voltage, Output Power, Temperature, State Advanced Protection >75 V Output overvaringe protection >22A Output overvaringe protection >22A Output overvaringe protection >300 V Berner ID toto >300 V Dimensions (WPD+H) 0.865 kg Dimons (MED + MPD+H)
Peak MP*1 efficiency Peak Part of Communication Method PicC Communication Method PicC Communication parameter PV Voltage, Output Voltage, Output Voltage, Output Power, Temperature, State Advanced Protection - 75V Output overcurrent protection - 222A Output voltage of output voltage voltage of output voltage voltage of output voltage of output voltage of output voltage of output voltage voltage voltage of output voltage voltage voltage of output voltage voltage voltage voltage of output voltage voltage voltage of output
Communication Method PV Voltage, Output Voltage, Output Current, Output Power, Temperature, State Advanced Protection Advanced Protection >75V Input overvoltage protection >22A Output voercont protection >22A Output voercont protection >22A Output voercont protection >800W High temperature protection >800W Output cobie interprotection 0.865Kg Dimensions (Wr0H) 108 '31.5*123mm Weight 0.865Kg Input/output cable length Net 200 Protection rating 4mm*(12AWG) / 4mm* (12AWG) Readaw humility 0-100XRH Operating temperature range -40-+65°C Cooling Catle Operating temperature range CE Protection SUNGO FDT 800WA Add Ingut Farameters SUNGO FDT 800WA Add Ingut Farameters SUNGO FDT 800WA Add Ingut Farameters SUNGO SOPT 800WA Ad Ingut Farameters SUNGO SOPT 800WA Ad Ingut Farameters SUNGO SOPT 800WA Ad Ingut Farameters SUNGO SOPT 800WA
Communication Method PCIC Communication Percenters Per Voltage, Output Voltage
Communication parameter PV Voltage, Output Voltage, Output Power, Temperature, State Advanced Protection >75V Input overvoltage protection >22A Output overvoltage protection >3000 Output overvoltage protection >22A Output overvoltage protection >3000 Dimensions (WD*H) INF 315 F123mm Dimensions (WD*H) 0.865kg Dimensions (WD*H) 0.865kg Dimensions (WD*H) 0.865kg Diput/output cable length (N= 100 / OUT - 750 mm Input/output cable length (N= 100 / OUT - 750 mm Input/output cable length (N= 100 / OUT - 750 mm Input/output cable length (N= 100 / OUT - 750 mm Input/output cable length (N= 100 / OUT - 750 mm Input/output cable length (N= 100 / OUT - 750 mm Input formerture range -40 - 458*C Cooling Colonge Cooling SUNCO OPT 800WA Act Input formerture range SUNCO OPT 800WA Act Input formameters SUNCO OPT 800WA Act Input formameters SUNCO OPT 800WA Act Inp
Communication parameter PV Voltage, Output Voltage, Output Power, Temperature, State Advanced Protection >75V Input overvoltage protection >22A Output overvoltage protection >2000 Output overvoltage protection >22A Output overvoltage protection >2000 General Data 0 Dimensions (WD*H) 106'315'123mm Medity humput/output cable length 1N* 200 / N* 750 / OUT - 750mm Input/output cable length 0 Input/output cable length 0 Protection rating MAC (Compatible) Protection rating 0 Rotative humidity 0 Operating temperature range CE Protection SUNGO OPT 800W Actingut Parameters SUNGO OPT 800W Actingut Parameters SUNGO IPT 800W Actingut Parameters SUNGO IPT 800W Acti
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input overlotage protection >75V Output oversine protection >22A Output oversine protection >800W Status >800W Output oversine protection >800W Status >800W Output oversine protection >800W Status >800W Output oversine protection >800W Status 0.865kg Optimesions (WDH) 0.865kg Input/output cable length IN+200 / IN+1000 / OUT+750 / OUT-750mm Input/output cable length IN+200 / IN+1000 / OUT+750 / OUT-750mm Input/output cable length IN+200 / IN+1000 / OUT+750 / OUT-750mm Input/output cable length IN+200 / IN+1000 / OUT+750 / OUT-750mm Status Input output cable length Input/output cable length IN-200 / IN+750 / OUT-750mm Protection rating Input output cable size Output cable length Input output cable size Output cable size Input output cable size Cable cable cable size Input output cable size Cable cable cable size SUNGO GT Catlidut trequency
Output overcoursering protection >22A Output overcoursering protection >800W High temperature protection >800W Binsmailons (WPDH) 116*315*123mm Dimensions (WPDH) 0.865kg Protection rating MC4C(Compatible) Relative humidity 0-100x8H Operating temperature range -40+465rC Cooling CE Packaging 28pcs/CIN<840pcs/pallets
Output overload protection >800W General Data >100 C General Data >100 C Dimensions (WDH) 0.865kg Imput/output cable length 1N + 200 / NE + 750 / OUT + 750 / OUT - 750mm Imput/output cable length 1N + 200 / NE + 750 / OUT - 750mm Imput/output cable length 1N + 200 / NE + 750 / OUT - 750mm Imput/output cable size 4mm* (12AWG) / 4mm* (12AWG) Terminols Mc4(Compatible) Protection rating 1P88 Relative humidity 0-100 XRH Operating temperature range -40+-46%C Cooling CE Coreling SUNGO GT Colling SUNGO GT Colling SUNGO GT Mactal SUNGO GT <t< td=""></t<>
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General bata IBI®15123mm Dimensions (WPDH) IBI®15123mm Weight 0.865kg Input/output cable length IN+ 200 / IN- 1100 / OUT+ 750 / OUT- 750 mm Input/output cable size 4mm*(12AWG) / 4mm* (12AWG) Terminals MC4(Compatible) Protection rating IP88 Relative humidity 0-100XRH Operating temperature range -40-455°C Cooling CC Cooling Natural cooling Catta Cateway Tecchnical Parameters C Cata Cateway Tecchnical Parameters C Ac Input Ferameters 90-254V Ac Input requency 50/60H2 Maximum AC Input power 5W Maximum AC Input requency 5W Maximum AC Input contege 1500V Moso of Input strings 2 Maximum AC Input contege PIC Maximum MC Input contege 90-264V Maximum AC Input requency 50/00-00 Maximum AC Input requency 50/00-00 Maximum AC Input requency 50/00-00 Maxim
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Weight 0.865kg input/output cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input/output cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input/output cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input/output cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input/output cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input fourput cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input fourput cable length IN+ 20 / IN- 100 / OUT- 750 / OUT- 750mm input fourput cable length IN+ 20 / IN- 100 / OUT- 750mm input fourput cable length IN+ 20 / IN- 100 / OUT- 750mm input fourput cable length IN- 20 / IN- 100 / OUT- 750mm input fourput cable length IN- 20 / IN- 100 / OUT- 750mm cable cable handling Output cable length input fourput cable IN- 20 / IN- 100 / OUT- 750mm cable cable handling Output cable length cable cabl
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Terminals Mc42(compatible) Protection roting IP88 Relative humidity 0-1003RH Operating temperature range -40+455°C Cooling CE Packaging 28pcs/CTN 840pcs/pallets Octation CE Packaging 28pcs/CTN 840pcs/pallets Octat Gateway Technical Parameters SUNGO OFT 800W AC Input Parameters SUNGO IOPT 800W AC Input Parameters 90-264V AC input Voltage range 90-264V AC input requency 5W Maximum AC Input current 0.1A@90Vac PV Input Parameters 1500V Terminals MC4(compatible) Maximum AC Input strings 2 Nosi of input strings 2 Maximum number of IOPT 60 Moximum number of IOPT 60 Communication with optimizer Querate Communication with optimizer 2.4GHz WI-FI / R5485 Rapid Shutdown Querate Initial state Operate Shut-down time 3.0 Shut-down time 2. Controller AC power of i.el indicator lig
Protection rating Relative humidity Operating temperature range -40+465°C Cooling Colong Conting temperature range -40+465°C Cooling Control Colong CE Packaging 28bcs/CTN 840pcs/pallets Cotta Context Control CE Packaging Control CE Packagin
Relative humidity 0-010%RH Operating temperature range -40-+65°C Cooling Natural cooling CE Packaging 28pcs/CTN 840pcs/pallets CE Packaging 28pcs/CTN 840pcs/pallets CE Cata Cateway Technical Parameters Cate Cateway Technical Parameters Cate Cateway Technical Parameters CAC input voltage range 90-264V AC input Varameters AC input voltage range 90-264V AC input voltage range 50/60Hz Maximum AC input power Maximum System voltage 1500V Nes of input strings 200 Maximum system voltage 1500V Nes of input strings 21A Maximum current of each string 21A Maximum action with optimizer Communication with optimizer Communication with optimizer Switch-on System String 1. Press the button once until the Running light is on Switch-on time 55 Shut-down time 1. Press the button once until the RSD indicator lights up 2. Controller AC power of the SD indicator lights up 2. Controller AC power of the SD indicator lights up 2. Controller AC power of the RSD indicator lights up 2. Controller AC power of the RSD indicator lights off 55 Shut-down time 515 Shut-down time 515 Shut-down time 515 Shut-down time 52 Shut-down time 52 Shut-down time 52 Shut-down time 52 Shut-down time 52 Shut-down time 52 Shut-down 52 Shut-down time 52 Shut-down 52 Shu
Operating temperature range
Cooling Natural cooling Certification CE Packaging 28pcs/CTN 840pcs/pallets Data Gateway Technical Parameters Match with SUNGO ICPT 800W A Cinput Parameters A Cinput voltage range SUNGO ICPT 800W A Cinput voltage range Mc4(Compatible) Maximum number of IoPT Mc4(Compatible) Maximum number of IoPT Bow Maximum number of IoPT A Communication with optimizer PLC Communication with optimizer A Controller A Cover off, all indicator li
Cooling Natural cooling Certification CE Packaging 28pcs/CTN 840pcs/pallets Data Gateway Technical Parameters Match with SUNGO ICPT 800W A Cinput Parameters A Cinput voltage range SUNGO ICPT 800W A Cinput voltage range Mc4(Compatible) Maximum number of IoPT Mc4(Compatible) Maximum number of IoPT Bow Maximum number of IoPT A Communication with optimizer PLC Communication with optimizer A Controller A Cover off, all indicator li
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Packaging 28pcs/CTN 840pcs/pallets Data Gateway Technical Parameters Model SUNGO IOPT 800W AC input Vidge range 90-264V AC input Vidge 70 AC inp
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Maximum AC input current 0.1A@90Vac PV Input Parameters
PV Input Parameters Terminals MC4(Compatible) Maximum system voltage 1500V Nos of input strings 2 Maximum number of iOPT 60 Maximum current of each string 21A Maximum module Nos per string 30 Communication Wethod PLC Communication with optimizer PLC Communication with upper machine 2.4GHz Wi-Fi / RS485 Rapid Shutdown Initial state Initial state Operate Switch-on Press the button once until the Running light is on Switch-on time <5s
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Maximum module Nos per string30Communication Method9LCCommunication with optimizerPLCCommunication with upper machine2.4GHz Wi-Fi / RS485Rapid Shutdown0Initial stateOperateSwitch-onSwitch-onSwitch-on time<5s
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Communication with upper machine 2.4GHz Wi-Fi / RS485 Rapid Shutdown Initial state Initial state Operate Switch-on Press the button once until the Running light is on Switch-on time <5s
Rapid Shutdown Initial state Operate Switch-on Press the button once until the Running light is on Switch-on time <5s
Initial state Operate Switch-on Press the button once until the Running light is on Switch-on time <5s
Switch-on Press the button once until the Running light is on Switch-on time <5s
Switch-on time <5s
Shut-down 1. Press the button once until the RSD indicator lights up 2. Controller AC power off, all indicator lights off Shut-down time <15s
Shut-down time <15s
2. Controller AC power off, all indicator lights off 2. Controller AC power off, all indicator lights off Standards Electromagnetic compatibility (EMC) IEC61000-6-1, IEC61000-6-2, IEC61000-6-3 Production Compliance RoHs Yes Installation Specification
Standards IEC61000-6-1, IEC61000-6-2, IEC61000-6-3 Electromagnetic compatibility (EMC) IEC61000-6-2, IEC61000-6-3 Production Compliance IEC62109-1 RoHs Yes Installation Specification Yes
Electromagnetic compatibility (EMC) IEC61000-6-1, IEC61000-6-2, IEC61000-6-3 Production Compliance IEC62109-1 RoHs Yes Installation Specification Yes
Production Compliance IEC62109-1 RoHs Yes Installation Specification Yes
RoHs Yes Yes
Installation Specification
Weight 0.88kg
AC input cable length Im
Protection level IP67
Cooling Natural cooling
Form of installation Wall hanging/holding, screw locking Certification CE



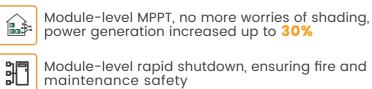
C & I Scenario Solutions SUNGO IOPT & SUNGO GTC

Optimize Power Generation Intelligent Management

Features

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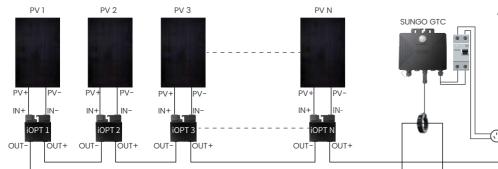


Module-level data intelligent monitoring and accurate management



Convenient installation, wide range of adaptability, suitable for operating power plant renovation and new power plant installation

25-year product replacement warranty





PV+

Optimizer Technical Parameters

Model	SUNGO IOPT 800W
DC Input	
Maximum input power	800W
Maximum voltage	70V
MPPT voltage range	12~60V
Maximum continuous input current	21A
Maximum input short-circuits current	23A
Night self-consumption	OW
DC Output	
Output voltage	0~60V
Maximum continuous output current	21A
Maximum output power	780W
Maximum system voltage	1500V
DC Output During Shutdown	
Output voltage (without SUNGO GT)	1±0.1V
Efficiency	
Peak MPPT efficiency	≥99.7%
Communication	
Communication method	PLC
Communication parameter	PV Voltage, Output Voltage, Output Current, Output Power, Temperature, State
Advanced Protection	
Input overvoltage protection	>75V
Output overcurrent protection	>22A
Output overload protection	>800W
High temperature protection	>110 C
General Data	
Dimensions (W*D*H)	116*31.5*123mm
Weight	0.865kg
Input/output cable length	IN+ 200 / IN- 1100 / OUT+ 750 / OUT- 750mm
Input/output cable size	4mm²(12AWG) / 4mm² (12AWG)
Terminals	MC4(Compatible)
Protection rating	IP68
Relative humidity	0~100%RH
Operating temperature range	-40~+65°C
Cooling	Natural cooling
Certification	CE
Packaging	28pcs/CTN 840pcs/pallet

Data Gateway Technical Parameters

AC Input frequency Maximum AC input power Maximum AC input current PV Input Parameters Terminals	SUNGO iOPT 800W/SUNGO RSDi-2 90-264V 50/60Hz 5W 0.1A@90Vac	
AC input voltage range AC Input frequency Maximum AC input power Maximum AC input current PV Input Parameters Terminals	50/60Hz 5W	
Maximum AC input power Maximum AC input current PV Input Parameters Terminals	50/60Hz 5W	
AC Input frequency Maximum AC input power Maximum AC input current PV Input Parameters Terminals	5W	
Maximum AC input current PV Input Parameters Terminals		
PV Input Parameters Terminals	0.1A@90Vac	
Terminals		
	MC4(Compatible)	
Maximum system voltage	1500V	
Nos of input strings	10	
Maximum number of iOPT	200	
Maximum number of RSDi-2	100	
Communication Method		
Communication with optimizer	PLC	
Communication with upper machine	2.4GHz Wi-Fi / RS485	
Rapid Shutdown		
Initial state	Operate	
Switch-on	Press the button once until the Running indicator lights up	
Switch-on time	<5s	
Shutdown	1. Press the button once until the RSD indicator lights up 2. Controller AC power off, all indicator lights off	
Shutdown time	<15s	
Standards		
Electromagnetic compatibility (EMC)	IEC61000-6-1, IEC61000-6-2, IEC61000-6-3	
Production Compliance	IEC62109-1	
RoHs	Yes	
Installation Specification		
Dimension (W*D*H)	140*33.5*175mm	
Weight	0.88kg	
AC input cable length	lm	
Protection level	IP67	
Working temperature range	-40~+70°C	
Cooling	Natural cooling	
Form of installation	Wall hanging/holding, screw locking	
Certification	CE	
Packaging	8pcs/CTN, 6ctn/layer, total 8 layers, 384pcs/pallet	

2-in-1 RSD & Rapid Shutdown Transmitter SUNGO RSD-2 & SUNGO SD

Features

Host and slave មុ can synchronize signals



Two channels of DC input

of PV outputs

25-year product replacement warranty

AC power failure, rapid shutdown

SUNGO RSD-2 is a 2-in-1 rapid shutdown device, which maintains normal power-on operation by continuously receiving heartbeat frames sent from SUNGO SD, and when the SUNGO SD signal disappears, SUNGO RSD-2 performs a rapid shutdown operation. Users can turn off the power of SUNGO SD to realize the rapid shutdown of the system, complying with NEC 2017&2020 (690.12) specifications.

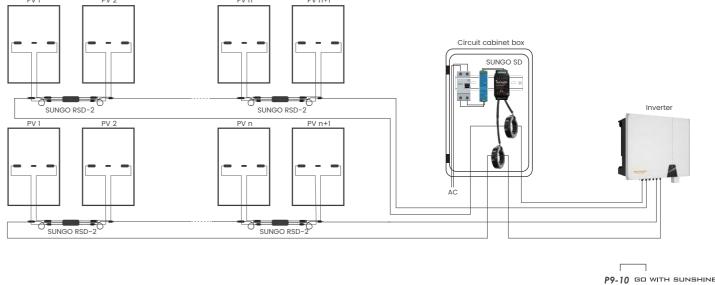
2-in-1 Rapid Shutdown Device Technical Parameters

I	Model	
	DC input	
	Input voltage range	
	Maximum Continuous input current	
	Maximum Input short circuit current	
	DC output	
	Output voltage range	
	Maximum Continuous output current	
	Maximum System voltage	
	Rapid shutdown	
	Shutdown time	
	Shutdown indication voltage*	
	Communication method	
	Complies with safety regulations	
	Production Compliance	
	Specification	
	Operating temperature range	
	Dimensions (Without cables, connectors and mounting clips)	
	Cable length	Input 200mm/O
	Cable specifications	
	DC connectors	
	Shell protection grade	
	Packaging	

*The no-load test is greater than IV, and needs to be tested with a load of 10mA (load of 100 Ω) to be IV

Rapid Shutdown Transmitter Technical Parameters

Model	SUNGO SD			
Input voltage	12VDC			
Input current	0.8A			
Max. Mppt string voltage	1500VDC			
Max. number of series connections	30 modules			
Operating temperature	-40~70°C			
Safety regulation	NEC 2017&2020 (690.12); UL1741; CSA C22.2 No. 330-17			
Magnetic ring inner diameter ID	35.6mm			
Number of strings inserted per ring*	5			
Max. number of strings to be inserted*	10			
String route length	≤300m			
Packaging	10pcs/CTN 1800pcs/pallet			
*Reduce the number of strings according to the length of wiring on site to ensure normal PLC communication.				
PV 1 PV 2 PV n	PV n+1			



SUNGO RSD-2

10-80V (Per channel) 21A (Per channel) 23A (Per channel)

20-160V 21A (Per channel) 1000V/1500V

> <15s 1V

PLC

IEC/EN62109-1

-40~70°C

147*51*19.5mm

Dutput 2200mm(Can be customized according to customer requirements) TUV:4mm²/UL:12AWG

> MC4 NEMA Type 6P / IP68

20pcs/CTN 600pcs/pallet

2-in-1 RSD & Data Gateway SUNGO RSDi-2 & SUNGO GTC

Features



The SUNGO RSDi-2 is a rapid shutdown with data monitoring, matching the data gateway GTC, with a module-level rapid shutdown function that monitors the operating parameters of the PV modules and reports the operating status of the PV modules.

2-in-1 Rapid Shutdown Device Technical Parameters

Model	
Dc Input	
Input voltage range	
Maximum continuous input current	
Maximum input short-circuit current	
Dc Output	
Output voltage range	
Maximum continuous output current	
Maximum system voltage	
Rapid Shutdown	
Shutdown time	
Shutdown indicator voltage*	Only PVI is connected, it is IV
Communication	
Communication method	
Communications parameter	PV Voltage,Outp
Complies With Safety Regulations	
Production Compliance	
Specification	
Operating temperature range	
Dimensions(W*D*H)	
Input/output cable length	Input 200mm/Output
Cable specifications	
DC connectors	
Enclosure protection class	
Packaging	

Data Gateway Technical Parameters

Model	
Match with	SL
AC Input Parameters	
AC input voltage range	
AC Input frequency	
Maximum AC input power	
Maximum AC input current	
PV Input Parameters	
Terminals	
Maximum system voltage	
Nos of input strings	
Maximum number of iOPT	
Maximum number of RSDi-2	
Communication Method	
Communication with optimizer	
Communication with upper machine	
Rapid Shutdown	
Initial state	Due se the level
Switch-on	Press the but
Switch-on time	1 Due en the e
Shutdown	1. Press the k 2. Controller
Shutdown time	2. Controller
Standards	
Electromagnetic compatibility (EMC)	IEC61
Production Compliance	lecon
RoHs	
Installation Specification	
Dimension (W*D*H)	
Weight	
AC input cable length	
Protection level	
Working temperature range	
Cooling	
Form of installation	Wo
Certification	
Packaging	8pcs/CTN

SUNGO RSDI-2

12-80V (Per channel) 21A (Per channel) 23A (Per channel)

20-160V

21A (Per channel) 1000V/1500V

<15s

V; PV1 and PV2 are connected, it is 2V; only PV2 is connected, no voltage

PLC

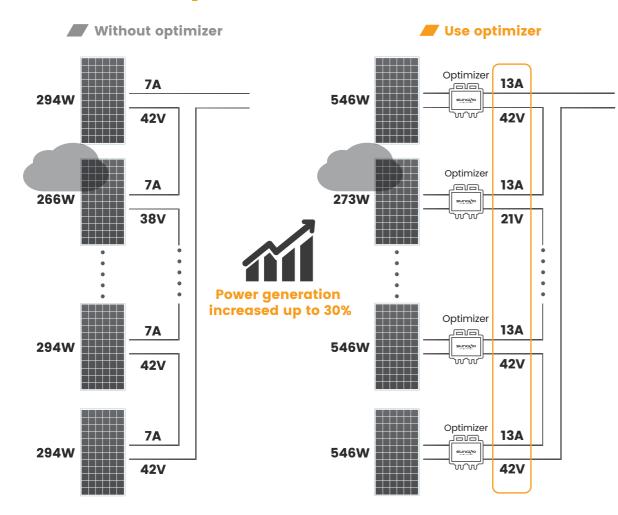
put Voltage,Output Current,Output Power,Temperature,State

IEC/EN62109-1

-40~70°C

147*19.5*51mm t 2200mm(Can be customized according to customer requirements) TUV:4mm²/UL:12AWG MC4 NEMA Type 6P / IP68 20pcs/CTN 600pcs/pallet

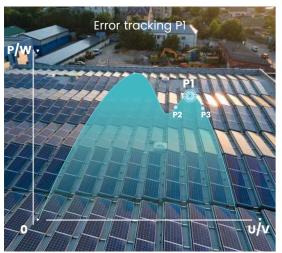
SUNGO GTC
SUNGO IOPT 800W / SUNGO RSDI-2
90~264V
50/60Hz
5W
0.1A@90Vac
MC4(Compatible)
1500V
10
200
100
PLC
2.4GHz Wi-Fi / RS485
Operate
the button once until the Running indicator lights up
ss the button once until the RSD indicator lights up ntroller AC power off, all indicator lights off
<15s
2105
IEC61000-6-1 IEC61000-6-2 IEC61000-6-3
IEC62109-1
Yes
140*33.5*175mm
0.88kg
lm
IP67
-40~+70°C
Natural cooling
Wall hanging/holding, screw locking CF
cs/CTN, 6ctn/layer, total 8 layers, 384pcs/pallet
est e m, eeu nayer, total e layers, so-pest pallet



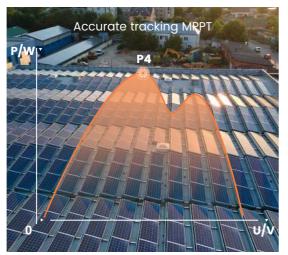
How the Optimizer Works

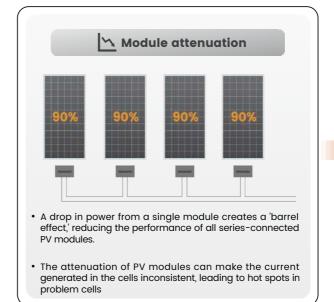
Accurate tracking of the maximum power point, increase the system power generation.

Traditional system



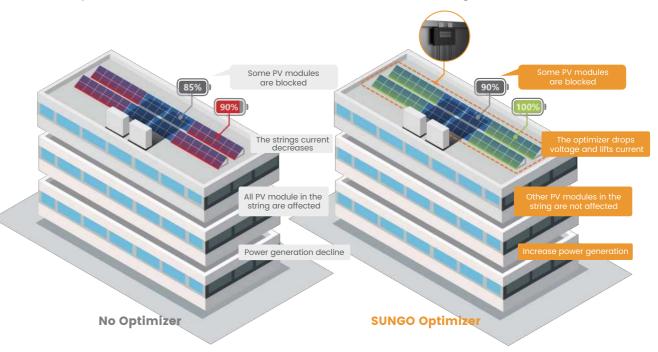
SUNGO Optimizer system

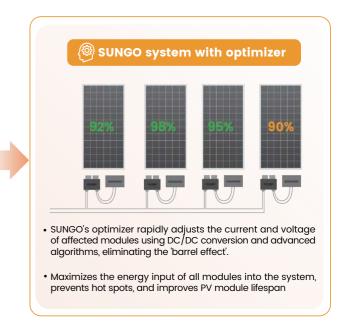




Module-level Optimization

Module-level optimization can increase power generation up to 30%. Independent optimization at the module-level ensures that each module operates at its own optimum and tracks the maximum current of the string.

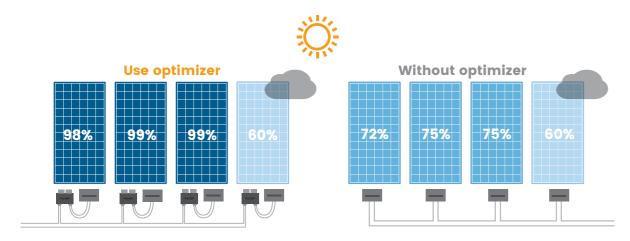






What Problem to Solve

Module-level MPPT tracking to prevent one PV module from affecting the entire string.



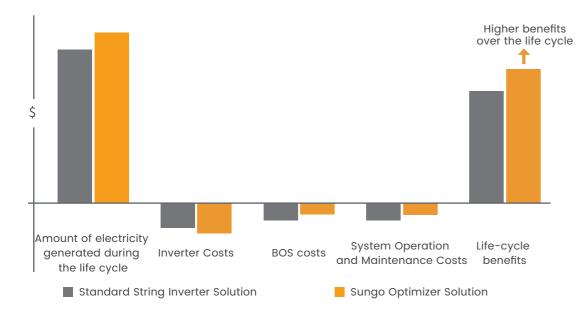
Avoiding Inconsistencies In Module Power Produced By PV Module Factory

The module manufacturer's specification states that the module has a power tolerance of 0 to 3%, which can cause power generation losses to the system. The optimizer can effectively solve this problem.



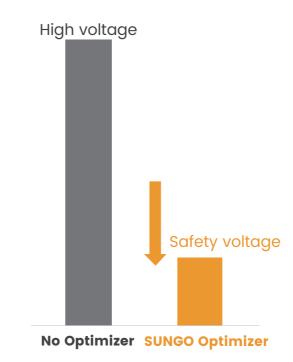
More Cost-effective Optimizer Solutions

Sungo's PV Smart Optimizer allows customers to optimize the cost of power generation over the life cycle of the system by increasing the amount of power generation and reducing the cost. It is able to optimize the power generation of each module, thus increasing the amount of power generation within the life cycle of the PV system. Compared to the traditional inverter system, the initial investment of the Sungo system is slightly higher, but the overall installation cost and the maintenance cost within the life cycle are lower, thus making Sungo's overall solution more attractive economically.



Protection of Modules and Roof Voltage Safety

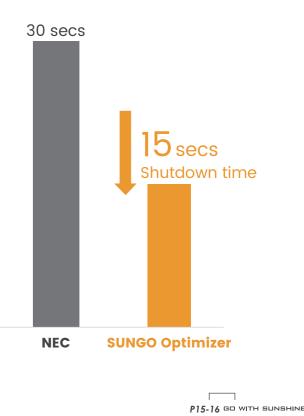
The Sungo Optimizer's module-level rapid shutdown in 15 seconds ensures that the roof DC voltage is in a safe range, shorter than the NEC standard requirements.



LR5-54HPH 405~425M

0.55% YEAR 2-25 POWER DEGRADATION

HALF-CELL Lower operating temperature



Smart Energy Management Platform iSungo

Intelligent Operation and Maintenance **Better Experience**

Features



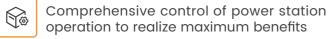
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Intelligent management, data at a glance



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Module-level data management for easier operation and maintenance



Remote fault analysis to reduce O&M costs







Station interface for creating new stations and viewing station information

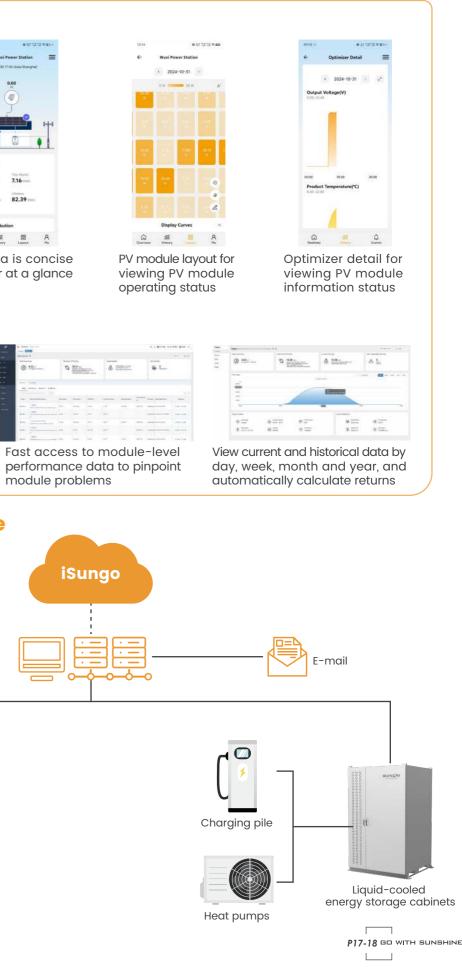
Core data is concise and clear at a glance

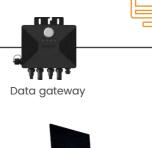
Web



Multi-view display at a glance, easy to manage all your power stations module problems

Network architecture





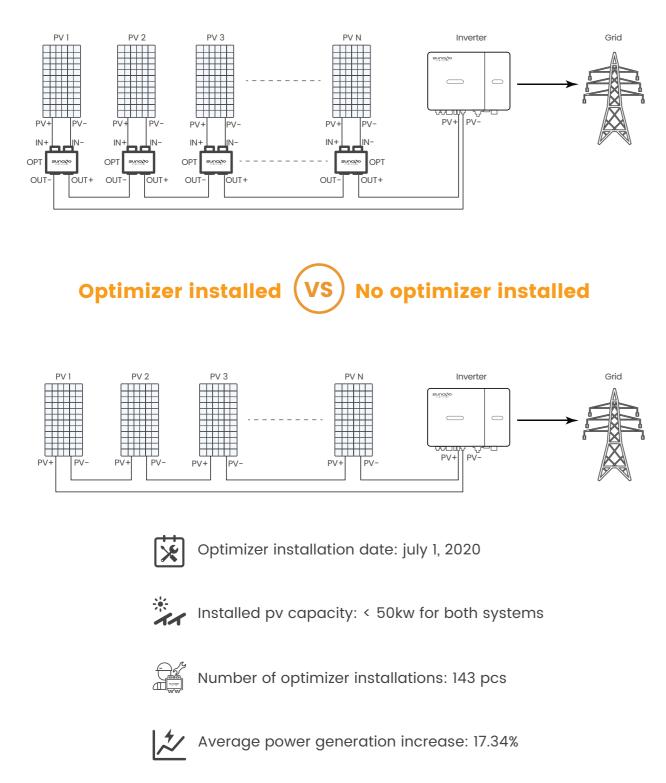
Smart Optimizer ΡV



Typical Project Case Introduction

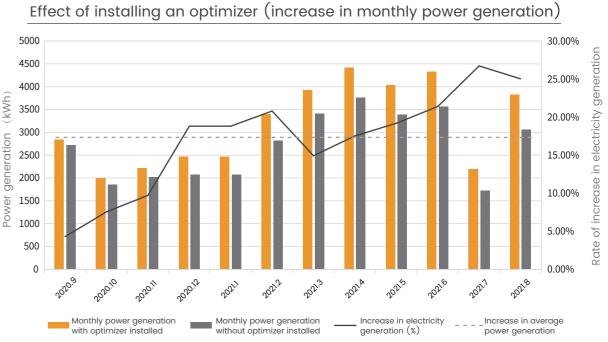
Comparison of two adjacent power stations with and without the optimizer installed.

Average power generation increase: 17.34%



Comparative Data for Two Neighboring Power Stations

Improvement effect within one year (measured value).



Note: This data is collected from actual measurements taken from September 2020 to August 2021 by the customer.

This graph illustrates the improved power output of the Gunma Solar PV project in Japan following the installation of an optimizer. The optimizer significantly increased solar power generation. Specifically, it enhanced the power generation efficiency from a baseline of 4.30% to a peak of 26.74% within the period spanning September 2020 to August 2021. On average, the optimizer improved power generation by 17.34%, highlighting its strong impact on system performance.

Overall, the efficiency of PV power generation tends to improve with optimizers. However, the degree of improvement varies depending on the actual internal and external environment of the project, but the longer the life of the PV panels, the greater the optimization effect. According to a large amount of actual data, the average power generation has increased by more than 15% with Sungo's optimizers.

Project Cases













Professional and Comprehensive Service



Fast Response

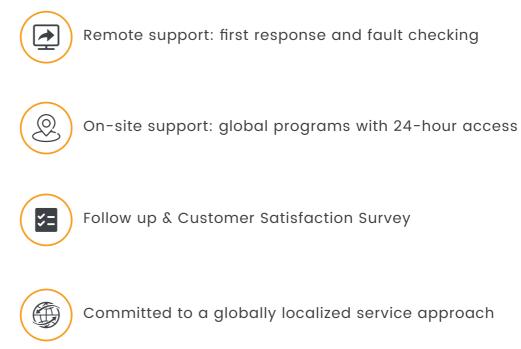
Agreement signed within 12 hours, accurate quotation within 24 hours



Professional R&D Team

Structural, electrical, software, industrial design engineers to satisfy the diverse requirements of clients

After-sales service



P21-22	2 GO	WITH	SUNS	HINE
1	1			