

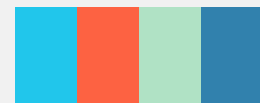
Teragy Product Catalogue



2023

TERAGYSOLAR.COM

Teragy



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SOCIAL MEDIA

 teragy.solar

Building Your Life, Off Grid

The foundation of our success is our ability to curate great solar products from around the world; bringing them to you in a user friendly, easy to understand experience. Whether it is finding the right product features for your off grid demands, or engineering the product from scratch, our products stand the test of real use, and experience. From RV living and camper van building, to powering remote research and off grid cabins, you can trust the knowledge at Teragy Solar.



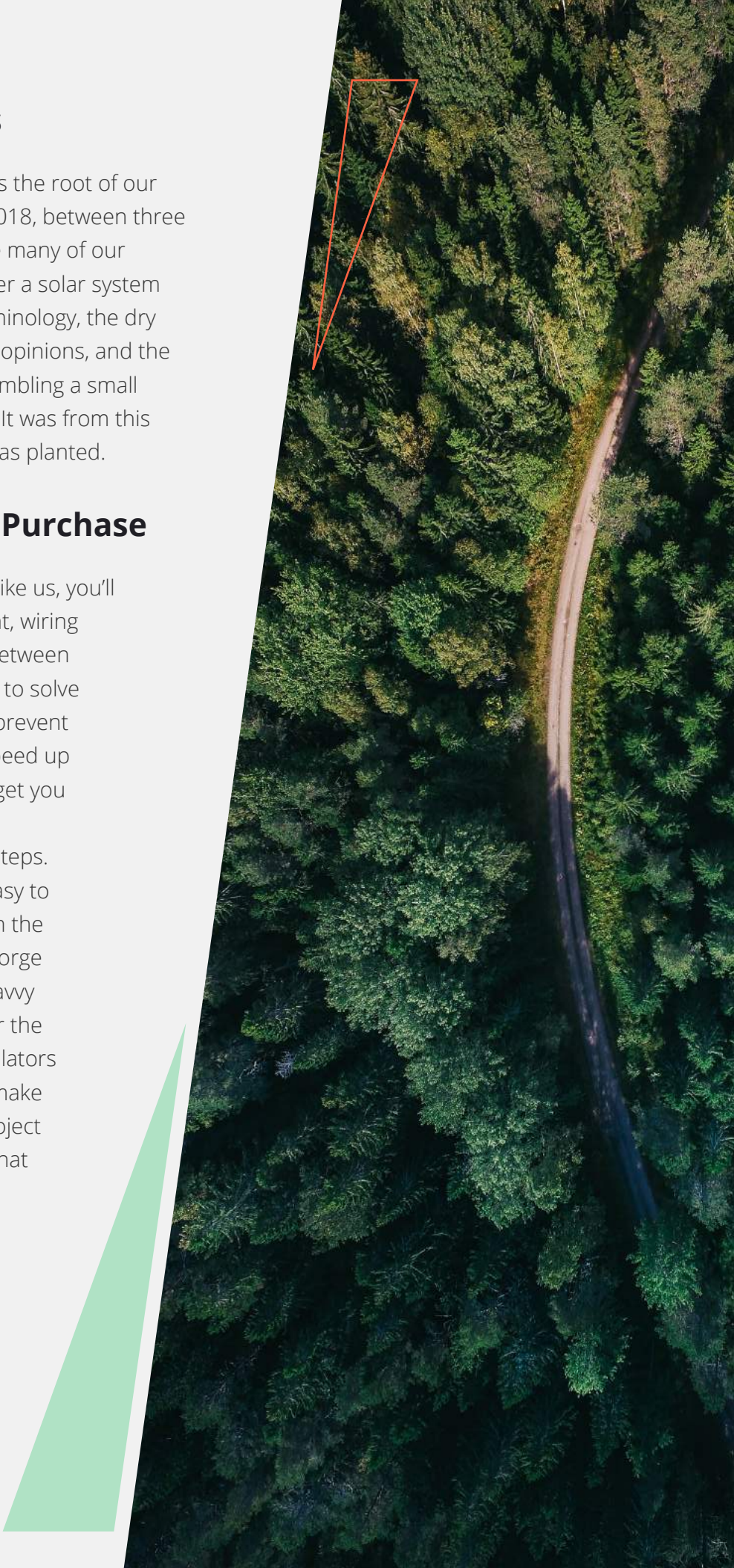
Our Story, Your Success

We take pride in our story because it is the root of our passion. Teragy Solar was started in 2018, between three friends building two camper vans. Like many of our customers, we learned putting together a solar system wasn't fun. Between the technical terminology, the dry documentation, the varying degree of opinions, and the massive ocean of solar products, assembling a small solar system seemed like a mountain. It was from this mountain, the seed for Teragy Solar was planted.

Our Dedication to Your Purchase

You are about to make mistakes. Just like us, you'll have issues with sizing your equipment, wiring safely, understanding the difference between products, and which approach to take to solve your off grid demands. We're here to prevent these issues from coming along. To speed up the monotonous cycle of research to get you untethered and off the grid quicker.

We encourage you to follow our foot steps. Our solar team has put together an easy to understand tutorial to get you through the basics. Use our practice problems to forge your new knowledge, then test your savvy with our automated quizzes. Ready for the real thing? Play with our industry calculators to double check your work, and help make product suggestions. Shorten your project time with a better understanding of what you're looking for – so you can spend more time exploring the things that matter.





Earth-Centric Products for Conservation

Being outdoorsy doesn't stop at hiking, camping, and exploring the wild. Our team at Teragy Solar is dedicated to producing top end equipment to create clean, renewable energy. This means sourcing our product from manufacturers who meet the highest standards in sustainability and conservation efforts. It means exclusively working with manufacturers who build their products to last a life time. Excluding dangerous materials like cobalt and lead from our products. Regardless of whether you are a small start up in Portland Oregon, or a multinational company with thousands of customers, our team believes in the working towards a greener future for generations to come.



Teragy Solar Nova Series 100 AH Lithium 12 Volt Battery

With a 200 amp BMS, or battery management system, the Teragy Solar Nova Series 100 AH Lithium 12 Volt Battery can nearly power anything. You can utilize these batteries to power induction cook tops, water heaters, refrigerators, or any other high-energy appliances. Whether you are occasionally off grid, building a camper van, or need batteries to power your cabin cruiser, this should be your go-to lithium battery. Built for first-rate power output and durability, the Nova series 100 AH lithium batteries also have Bluetooth consolidated parameters and settings for both professional as well as non-professional builders.



SUITABLE FOR

SMALL AND SEASONAL CAMPERS, CAMPER
VANS, MOBILE ADVENTURE APPLICATIONS, LOCAL
TRAVELING MARINE APPLICATIONS



EXPLORE
FURTHER.

Teragy Solar Nova Series 100 AH Lithium 12 Volt Battery

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Nominal Voltage	12.8V
Nominal Capacity	100.00Ah
Energy	1200W
Internal Resistance	4mΩ/Main Discharging Circuit
Cycle Life	>3500 0.5C Charge & Discharge
Cell Balancing (Cell Voltage)	3.405V
Self Discharge	≤3.5% per month at 77°F

CURRENT

Discharge Over Current Protection	800A
Over Current Delay Time	1000mS
Short Circuit Protection	2400A
Short Circuit Protection Delay Time	300uS Avg

TEMPERATURE PROTECTION

Over Temp Protection	167°F Avg
Over Temp Protection Recovery	163.4°F
Low Temp Protection	Set with BMS
Low Temp Protection Recovery	Set with BMS

STRUCTURE

Casing	ABS
Weight Approx.	22.5 lbs
Dimensions (L, W, H) Approx.	12.9" X 6.8" X 8.5"
Terminal	MG

STANDARD CHARGING

Max. Charging Voltage	14.0V~14.6V
Charging Current	50A Avg @ .5C
Max Charging Current	200A
Over Charge Detection	14.6V
Over Charge Release	14.2V

CHARGING MODE

At 32°F~113°F Temperature, Charged To 14.8V At A Constant Current Of 0.5C, And Then, Charged Continuously With Constant Voltage Of 14.8V Until The Current Was Not More Than 0.05C.

STANDARD DISCHARGING

Discharging Current	100A Avg / 200A Max
Max Continuous Current	200A
Max Pulse Current	220A, (≤ 3 Seconds)
Discharging Cut-Off Voltage	10V
Over Discharge Detection	300A
Over Discharge Release	10.2V Avg
Charge Temperature	32°F~131°F

OPERATION CONDITION

Operating Temperature	5°F~167°F
Operating Relative Humidity	0% ≤ 95%
Storage Temperature	32°F~86°F
Storage Relative Humidity	≤75%
Storage Atmospheric Pressure	86kPa ~ 106kPa
Water / Dust Resistance	IP55

Teragy Solar Nova Series 200 AH Lithium 12 Volt Battery

If you are planning a sustainable off grid system, you'll need a work horse of a battery system. Teragy Solar's Nova Series 200 AH lithium battery weighs only one-third of a typical SLA battery. With safety features that prevent overcharge or discharge, you can trust this battery will last over 3,500 cycles - in even the harshest environments. Rated at IP55 water and dust resistance, our batteries will keep you powered as far as your inspiration takes you. These batteries are ideal for professional camper van builds, medium to large travel trailers, full time RV living, tiny homes and off grid homesteads.



SUITABLE FOR

**FULL OFF GRID CAMPER VANS, MOBILE
ADVENTURE APPLICATIONS, RV'S, TRAVEL
TRAILERS, CABIN CRUISERS AND
MARINE APPLICATIONS**



PLAY
HARDER.

Teragy Solar Nova Series 200 AH Lithium 12 Volt Battery

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Nominal Voltage	12.8V
Nominal Capacity	200.00Ah
Energy	2400W
Internal Resistance	4mΩ/Main Discharging Circuit
Cycle Life	>3500 0.5C Charge & Discharge
Cell Balancing (Cell Voltage)	3.405V
Self Discharge	≤3.5% Per Month At 77°F

CURRENT

Discharge Over Current Protection	750A
Over Current Delay Time	1000mS
Short Circuit Protection	2000A
Short Circuit Protection Delay Time	300uS Avg

TEMPERATURE PROTECTION

Over Temp Protection	167°F Avg
Over Temp Protection Recovery	158°F
Low Temp Protection	23°F
Low Temp Protection Recovery	32°F

STRUCTURE

Casing	ABS
Weight Approx.	45 Lb
Dimensions (L, W, H) Approx.	19.4" X 9.25" X 8.75"
Terminal	MG

STANDARD CHARGING

Max. Charging Voltage	14.0V~14.6V
Charging Current	100A Avg @ .5C
Max Charging Current	250A
Over Charge Detection	14.6V
Over Charge Release	14.2V

CHARGING MODE

At 32°F~113°F Temperature, Charged To 14.8V At A Constant Current Of 0.5C, And Then, Charged Continuously With Constant Voltage Of 14.8V Until The Current Was Not More Than 0.05C.

STANDARD DISCHARGING

Discharging Current	100A Avg / 250A Max
Max Continuous Current	250A
Max Pulse Current	300A, (≤ 3 Seconds)
Discharging Cut-Off Voltage	10V
Over Discharge Detection	400A
Over Discharge Release	10.2V Avg
Charge Temperature	32°F~131°F

OPERATION CONDITION

Operating Temperature	5°F~167°F
Operating Relative Humidity	0% ≤ 95%
Storage Temperature	32°F~86°F
Storage Relative Humidity	≤75%
Storage Atmospheric Pressure	86kPa ~ 106kPa
Water / Dust Resistance	IP55

Teragy Solar Nova Series 300 AH Lithium 12 Volt Battery

A fully sustainable off grid setup demands capacity. At 300 AH, our top of the line Nova Series battery fills every expectation your life style will demand. From powering your induction cook top, to heating up your kettle and cooling your fridge, our 250 amp battery management system does it all. Throw in Bluetooth connectivity, and we'll keep you informed of your charging status right on your phone. Regardless of whether you are powering a luxury camper van or RV, or alone in your remote desert homestead, our 3500 life cycle batteries have got you covered.



SUITABLE FOR

PROFESSIONAL CAMPER VAN BUILDS, LARGE
TRAVEL TRAILERS, TINY HOMES, RV'S, FULLY OFF
GRID MARINE APPLICATIONS



EXPLORE
FURTHER.

Teragy Solar Nova Series 300 AH Lithium 12 Volt Battery

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Nominal Voltage	12.8V
Nominal Capacity	300.00Ah
Energy	3600W
Internal Resistance	4mΩ/Main Discharging Circuit
Cycle Life	>3500 0.5C Charge & Discharge
Cell Balancing (Cell Voltage)	3.405V
Self Discharge	≤3.5% Per Month At 77°F

CURRENT

Discharge Over Current Protection	750A
Over Current Delay Time	1000mS
Short Circuit Protection	2000A
Short Circuit Protection Delay Time	300uS Avg

TEMPERATURE PROTECTION

Over Temp Protection	167°F Avg
Over Temp Protection Recovery	158°F
Low Temp Protection	23°F
Low Temp Protection Recovery	32°F

STRUCTURE

Casing	ABS
Weight Approx.	63.8 Lb
Dimensions (L, W, H) Approx.	19.4" X 10.5" X 8.6"
Terminal	MG

STANDARD CHARGING

Max. Charging Voltage	14.0V~14.6V
Charging Current	150A Avg @ .5C
Max Charging Current	250A
Over Charge Detection	14.6V
Over Charge Release	14.2V

CHARGING MODE

At 32°F~113°F Temperature, Charged To 14.8V At A Constant Current Of 0.5C, And Then, Charged Continuously With Constant Voltage Of 14.8V Until The Current Was Not More Than 0.05C.

STANDARD DISCHARGING

Discharging Current	150A Avg / 250A Max
Max Continuous Current	250A
Max Pulse Current	300A, (≤ 3 Seconds)
Discharging Cut-Off Voltage	10V
Over Discharge Detection	400A
Over Discharge Release	10.2V Avg
Charge Temperature	32°F~131°F

OPERATION CONDITION

Operating Temperature	5°F~167°F
Operating Relative Humidity	0% ≤ 95%
Storage Temperature	32°F~86°F
Storage Relative Humidity	≤75%
Storage Atmospheric Pressure	86kPa ~ 106kPa
Water / Dust Resistance	IP55

SOK Series 100 AH Rack Mount 48 Volt Battery

SOK Batteries provide exceptional performance in off grid settings. This 48 volt rack mount battery is easy to manage, and simple to implement in your existing solar system. With protections like a pre-charge circuit, smart BMS, and 5 different temperature sensors, its no wonder this battery is built to last over 4000 cycles. 4800 watts of power means you can energize the most demanding of your electric appliances with ease. Not enough power? Connect these in parallel to store enough power for a small baseball stadium. A user accessible case gives you the ability to replace cells or upgrade your existing technology; saving you thousands down the road. The SOK battery is versatility you can trust — which is why we carry it in our store today.



SUITABLE FOR

TINY HOMES, OFF GRID HOMESTEADS, RESEARCH FACILITIES, LARGE SOLAR POWER GRIDS



GET OFF
THE GRID.

SOK Series 100 AH Rack Mount 48 Volt Battery

SPECIFICATIONS

ELECTRICAL CHARACTERISTICS

Model	SK48v100
Nominal Voltage	51.2 (48v Range)
Nominal Capacity	100Ah
Run Time at 20A Load (~1000w)	300 Minutes
Energy	5120Wh
Self Discharge	< 3% per month
Max Batteries in Series	1
Max Batteries in Parallel (BMS)	15
Max Terminal Feedthrough Current	310 Amps (Cont), 450a (Surge)

TEMPERATURE PERFORMANCE

Discharge Temperature	- 4°F – 140°F
Charge Temperature	32°F – 113°F
Storage Temperature	23°F – 95°F
Low Temperature Charge Protection	Yes
Internal Temperature Sensors	4 Cell Sensors, 1 BMS Sensor, 1 Ambient Air Sensor

PHYSICAL PROPERTIES

Case Material	Powder-Coated Steel
Rack Mountable	Yes, 4U
Dimensions	Width: 17.5in (Without ears – Fits standard 19" rack with ears installed) Height: 7in (4 rack units) Depth: 18in + 1 1/4" for handles / terminals
Unit Weight	99.2Lbs
Weather Rating	IP20
Shipping Classification	UN3480, Class 9, MSDS
Third Party Testing	Pack UL1973 Testing Passed – Certified packs anticipated to ship from Current Connected September 2022 UL9540 Testing in progress

CHARGE PERFORMANCE

Recommended Charge Current	0~63A
Max Charge Current (Cont)	100A
Recommended Charge (Absorption)	57.6
BMS Cell Protection Voltage	3.7v
BMS Pack Protection Voltage	>58.2v

DISCHARGE PERFORMANCE

Max Cont Discharge Current	100A (1C)
Peak Discharge Current	125A (3 Sec)
Short Circuit Protection	300a, 200μs
BMS Low-Voltage Disconnect	46v
BMS Low-Voltage recover	48v



Teragy Solar Nebula Series 1000 Watt 12 Volt Inverter/Charger

Our 1000-watt 12-volt inverter and charger help charge your batteries in a few hours. The digital display keeps you informed of your 35 amp charging status, to insure you're getting the power you need. Pure sine wave charging powers your devices using the most efficient energy possible. Keep all your 120 volt devices running on demand – our remote control allows you to both monitor and control your energy consumption inside your cabin. If you're looking for a compact power house to diversify your camper van, small camper or boat, you've come to the right place.



SUITABLE FOR

**SMALL AND SEASONAL CAMPERS, CAMPER VANS,
MOBILE ADVENTURE APPLICATIONS, LOCAL
TRAVELING MARINE APPLICATIONS**



LIVE ECO
FRIENDLY.

Teragy Solar Nebula Series 1000 Watt 12 Volt Inverter/Charger

SPECIFICATIONS

INPUT

Voltage	100/110/120 VAC
Frequency Range	40-70Hz (50Hz/60Hz)
Selectable Voltage Range	Wide range: 75 VAC- 138 VAC ; 155 VAC-275 VAC (for home appliances) Narrow range: 82 VAC- 138 VAC ; 165 VAC- 275 VAC (for personal computer)

OUTPUT

AC Voltage Regulation	100/110/120 VAC (\pm 5V)
Max Continuous Power	1000 Watts
Surge Power	2000VA
Efficiency(Peak)	88%
Transfer Time	<20ms
Waveform	Pure sine wave

BATTERY

Battery Voltage	12V
Charge Current	35A
Fast Charge Voltage	14.3 VDC
Float Charge Voltage	13.7 VDC
Over Voltage Protect	16.5 VDC
Battery Low Voltage Alarm	10.5 VDC
Battery Low Voltage Shutdown	10 VDC
Protection	Over charging, over temp, over battery voltage, over load, short-circuit
Operating Environment Temperature	55°F
Cooling	Intelligent fan
Display	Color LCD
Specification Setting	By LCD or Position Machine: Charging Current, Battery Type, Input Voltage, Output Frequency, Wide And Narrow Range of AC Input Voltage, Power-Saver Model, AC Priority or Battery Priority

ENVIRONMENT

Humidity	5-95% relative humidity (non-condensing)
Operating Temperature	-10°F To 50°F
Storage Temperature	-15°F To 60°F

PHYSICAL

Dimension,DxWxH(IN)	15.4 X 8.7 X 7
Net Weight (LBS)	25.1

Teragy Solar Nebula Series 3000 Watt 12 Volt Inverter/Charger

Looking for a sturdy 120 VAC inverter / charger to power your off grid electric system? This 3000-watt model provides a 75-amp charging service, giving you enough power even on the cloudiest days — while topping off your batteries in a few short hours. The digital menu hosts a full control board of settings for both beginner and professional installers, allowing for all battery types, custom charging profiles, and just about anything you can think of. Add our remote to your command center, and turn off your 120 grid on low use days. Do you enjoy the noisy hum of a loud inverter fan? Too bad — our fans are whisper quiet.



SUITABLE FOR

**FULLY OFF GRID CAMPER VANS, TRAVEL TRAILERS,
AND MOBILE ADVENTURE APPLICATIONS. TINY
HOMES, AND LARGE OFF GRID MARINE SYSTEMS**



GET OFF
THE GRID.

Teragy Solar Nebula Series 3000 Watt 12 Volt Inverter/Charger

SPECIFICATIONS

INPUT

Voltage	100/110/120 VAC
Frequency Range	40-70Hz (50Hz/60Hz)
Selectable Voltage Range	Wide range: 75 VAC- 138 VAC ; 155 VAC-275 VAC (for home appliances) Narrow range: 82 VAC- 138 VAC ; 165 VAC- 275 VAC (for personal computer)

OUTPUT

AC Voltage Regulation	100/110/120 VAC (\pm 5V)
Max Continuous Power	3000 Watts
Surge Power	9000VA
Efficiency(Peak)	91%
Transfer Time	<10ms
Waveform	Pure sine wave

BATTERY

Battery Voltage	12V
Charge Current	75A
Fast Charge Voltage	14.3 VDC
Float Charge Voltage	13.7 VDC
Over Voltage Protect	16.5 VDC
Battery Low Voltage Alarm	10.5 VDC
Battery Low Voltage Shutdown	10 VDC
Protection	Over charging, over temp, over battery voltage, over load, short-circuit
Operating Environment Temperature	131°F
Cooling	Intelligent fan
Display	Color LCD
Specification Setting	By LCD or Position Machine: Charging Current, Battery Type, Input Voltage, Output Frequency, Wide And Narrow Range of AC Input Voltage, Power-Saver Model, AC Priority or Battery Priority

ENVIRONMENT

Humidity	5-95% Relative Humidity (Non-Condensing)
Operating Temperature	-50°F To 122°F
Storage Temperature	-59°F To 140°F

PHYSICAL

Dimension,DxWxH(IN)	19.68x10.15x7.5
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Teragy Solar Nova Series 20 Amp 12/24 Volt Solar Charger

This MPPT solar charger is compact but packs a punch. Our 20 amp unit can handle up to 520 watts of solar power, allowing you to diversify between 12 or 24 volt solar panels. Enlarged heat sink fins on the back help with dissipating heat, keeping you charging longer. Read the digital display to keep yourself up to date on charging status, or check your phone for real time monitoring via Bluetooth. Whether you are building a seasonal camper, sailing the local waters, or staying true to your project budget, our Nova Series 20 amp charger has got your back. Who said scalability doesn't come in a small package?



SUITABLE FOR

SMALL AND SEASONAL CAMPERS, CAMPER VANS,
MOBILE ADVENTURE APPLICATIONS, LOCAL
TRAVELING MARINE APPLICATIONS



EXPLORE
FURTHER.

Teragy Solar Nova Series

20 Amp 12/24 Volt Solar Charger

SPECIFICATIONS

BATTERY PARAMETERS

System Voltage	12V/24V auto recognition
Max Charging Current	20A
MPPT Charging Voltage	before boost or equal charging stage
Boost Voltage	14.0~14.8V/28.0~29.6V @ 25°C (default:14.5/29V)
Equal Voltage	14.0~15.0V/28.0~30.0V @ 25°C (default:14.8/29.6V) (Liquid, AGM)
Float Voltage	13.0~14.5V/26.0~29.0V @25°C (default:13.7/27.4V)
Low Voltage Disconnect	10.8~11.8V/21.6~23.6V, SOC1~5 (default: 11.2/22.4V)
Reconnect Voltage	11.4~12.8V/22.8~25.6V (default: 12.0/24.0V)
Overcharge Protect	15.8V/31.3V
Charging Target Voltage	10.0~32.0V (Lithium, default: 14.4V)
Charging Recovery Voltage	9.2~31.8V (Lithium, default: 14V)
Low Voltage Disconnect	9.0~30.0V (Lithium, default: 10.6V)
Low Voltage Reconnect	9.6~31.0V (Lithium, default: 12V)
Max Voltage On Battery Terminal	35V
Temperature Compensation	- 4.17mV/K per cell (Boost, Equal), -3.33mV/K per cell (Float)
Battery Type	Liquid, Gel, AGM, Lithium

SYSTEM PARAMETERS

Max Tracking Efficiency	>99.9%
Max Charge Conversion	98%
Dimensions	189*182*64mm
Weight	1300g
Self Consumption	≤8mA (12V); ≤12mA (24V)
Communication	RS485 (RJ11 interface)
Optional	IoT, Cyber-BT
Grounding	Common Negative
Power Terminals	6AWG (16mm ²)
Ambient Temperature	- 20 ~ +55°C
Storage Temperature	- 25 ~ +80°C
Ambient Humidity	0~100%RH
Protection Degree	IP32
Max Altitude	4000m

PANEL PARAMETERS

Max Voltage PV Terminal (-20°C)	100V
Max Voltage PV Terminal (25°C)	90V
Max Input Power	260W/520W
Dusk/Dawn Detect Voltage	8V/16V
MPPT Tracking Range	(Battery Voltage+1V) ~ Voc 0.9

LOAD PARAMETERS

Output Current	20A
Work Mode	Always on, Street lamp, User defined mode

Teragy Solar Nova Series 40 Amp 12/24 Volt Solar Charger

Diversify your solar panel selection with our Nova Series 12/24 Volt 40 Amp Charger. This auto selecting MPPT controller works with both 12 and 24 nominal voltages, with a maximum voltage of 90 volts. This controller will drive up to 1040 watts of power into your off grid system. Enlarged aluminum fins help keep this charging system running cold, and efficient; while topping off your batteries faster. Read the digital display to keep yourself up to date on charging status, or check your phone for real time monitoring via Bluetooth. This unit is perfect for mid-size to large RVs, professional camper van builds, expedition trucks, travel trailers, and a diverse array of marine applications.



SUITABLE FOR

**FULL OFF GRID CAMPER VANS, MOBILE
ADVENTURE APPLICATIONS, RV'S, TRAVEL
TRAILERS, CABIN CRUISERS AND MARINE
APPLICATIONS**



Teragy Solar Nova Series

40 Amp 12/24 Volt Solar Charger

SPECIFICATIONS

BATTERY PARAMETERS

System Voltage	12V/24V auto recognition
Max Charging Current	40A
MPPT Charging Voltage	before boost or equal charging stage
Boost Voltage	14.0~14.8V/28.0~29.6V @ 25°C (default:14.5/29V)
Equal Voltage	14.0~15.0V/28.0~30.0V @ 25°C (default:14.8/29.6V) (Liquid, AGM)
Float Voltage	13.0~14.5V/26.0~29.0V @25°C (default:13.7/27.4V)
Low Voltage Disconnect	10.8~11.8V/21.6~23.6V, SOC1~5 (default: 11.2/22.4V)
Reconnect Voltage	11.4~12.8V/22.8~25.6V (default: 12.0/24.0V)
Overcharge Protect	15.8V/31.3V
Charging Target Voltage	10.0~32.0V (Lithium, default: 14.4V)
Charging Recovery Voltage	9.2~31.8V (Lithium, default: 14V)
Low Voltage Disconnect	9.0~30.0V (Lithium, default: 10.6V)
Low Voltage Reconnect	9.6~31.0V (Lithium, default: 12V)
Max Voltage On Battery Terminal	35V
Temperature Compensation	- 4.17mV/K per cell (Boost, Equal), 3.33mV/K per cell (Float)
Battery Type	Liquid, Gel, AGM, Lithium

SYSTEM PARAMETERS

Max Tracking Efficiency	>99.9%
Max Charge Conversion	98%
Dimensions	189*255*69mm
Weight	2000g
Self Consumption	≤8mA (12V); ≤12mA (24V)
Communication	RS485 (RJ11 interface)
Optional	IoT, Cyber BT
Grounding	Common Negative
Power Terminals	6AWG (16mm ²)
Ambient Temperature	- 20 ~ +55°C
Storage Temperature	- 25 ~ +80°C
Ambient Humidity	0 ~100%RH
Protection Degree	IP32
Max Altitude	4000m

PANEL PARAMETERS

Max Voltage PV Terminal (-20°C)	100V
Max Voltage PV Terminal (25°C)	90V
Max Input Power	520W/1040W
Dusk/Dawn Detect Voltage	8V/16V
MPPT Tracking Range	(Battery Voltage+1V) ~ Voc 0.9

LOAD PARAMETERS

Output Current	30A
Work Mode	Always on, Street lamp, User defined mode

Teragy Solar Nova Series 60 Amp 12/24/48 Volt Solar Charger

This versatile MPPT charger is great for running small to mid-sized solar arrays. Built for the mobile off grid environment, this charger easily handles solar arrays from 12 to 170 volts, with a maximum power rating of 3000 watts. Nominal voltage ranging from 12 to 48 volts. Enlarged aluminum fins help keep this charging system running cold, and efficient; while topping off your batteries faster. Read the digital display to keep yourself up to date on charging status, or check your phone for real time monitoring via Bluetooth. This unit is perfect for Class A and B RV's, professional camper van builds, expedition trucks, travel trailers, and a diverse array of tiny home / residential applications.



SUITABLE FOR

FULL OFF GRID CAMPER VANS, MOBILE ADVENTURE APPLICATIONS, RV'S, TRAVEL TRAILERS, AND SMALL HOMESTEAD APPLICATIONS



EXPLORE FURTHER.

Teragy Solar Nova Series 60 Amp 12/24/48 Volt Solar Charger

SPECIFICATIONS

BATTERY PARAMETERS

System Voltage	12V/24/48V auto recognition
Max Charging Current	60A
MPPT Charging Voltage	before boost or equal charging stage
Boost Voltage @ 25°C	14.0~14.8V/28.0~29.6V/56.0~59.2V (default: 14.5/29.0/58.0V)
Equal Voltage @ 25°C	14.0~15.0V/28.0~30.0V/56.0~60.0V (default: 14.8/29.6/59.2V)
Float Voltage @ 25°	13.0~14.5V/26.0~29.0V /52.0~58.0V (default: 13.7/27.4/54.8V)
Low Voltage Disconnect	10.8~11.8V/21.6~23.6V/43.2~47.2V (default: 11.2/22.4/44.8V)
Reconnect Voltage	11.4~12.8V/22.8~25.6V/45.6~51.2V (default: 12.0/24.0/48.0V)
Overcharge Protect	15.8/31.3/62.3V
Charging Target Voltage	10.0~64.0V (Lithium, default: 29.4V)
Charging Recovery Voltage	9.2~63.8V (Lithium, default: 28.7V)
Low Voltage Disconnect	9.0~60.0V (Lithium, default: 21.0V)
Low Voltage Reconnect	9.6~62.0V (Lithium, default: 22.4V)
Temperature Compensation	- 4.17mV/K per cell (Boost, Equal), 3.33mV/K per cell (Float)
Battery Type	Liquid, GEL, AGM, Lithium
Max Voltage On Battery Terminal	65V

SYSTEM PARAMETERS

Max Tracking Efficiency	>99.9%
Max Charge Conversion	98%
Dimensions	339 X 230 X 109mm
Mounting Dimensions	220 X 215mm
Mounting Hole Size	φ6
Terminals	2AWG (35mm ²)
Recommended Cable	6AWG (16mm ²)
Grounding	Common Positive
Historical Data Preservation	5 years
LCD Temperature	-20 ~ +70°C
Storage Temperature	-25 ~ +80°C
Ambient Humidity	5~95%RH
Protection Degree	IP20
Max Altitude	4000m
Communication	BLE, IoT, RS485 (default: RJ11 interface)

PANEL PARAMETERS

Max Voltage PV Terminal (-20°C)	190V
Max Voltage PV Terminal (25°C)	170V
Max Input Power	750/1500/3000W
MPPT Tracking Range	(Battery Voltage+1V) ~ Voc 0.9

MPP Solar 1000/140/12 Volt All In One Solar Controller

Update or build your adventure rig with the latest off grid tech. This MPP Solar controller is a complete power house in one unit. Built specifically for mobile off grid setups, this all in one controller integrates a 1000 watt 120 volt AC inverter into one unit seamlessly. Directly charging a industry standard 12 volt battery system, switching to this all in one system saves you from updating your current battery system; while dramatically increasing your solar management capabilities. Front end LCD screen keeps you up to date with your charging and usage status, and for more in depth detail, an optional wifi connector can empower you with a host of different settings and readings — all accessible from your home desktop computer. Regardless of whether you are out on the road, boondocking, or managing a mid size homestead circuit, sky is the limit.



SUITABLE FOR

FULL OFF GRID CAMPER VANS, MOBILE ADVENTURE APPLICATIONS, RV'S, TRAVEL TRAILERS, SMALL CABINS, AND MID SIZE MARINE APPLICATIONS



TRUE DOUBLE CONVERSION

AC-DC-AC conversion allows zero transfer time. No more interruption to sensitive load during switching.



POWER FLEXIBILITY

Available in 1KW 12v, 2KW 24V, and 3KW 48v.



BIG CHARGING POWER

Built-in MPPT solar charger max 80A.
Utility charger max 60A.



PARALLEL OPERATION

No more worry about not having enough power. Maximum expansion up to 9 units!



WIDE DC RANGE

10-16V (based on each 12v battery) means greater compatibility to wider range of battery types.



WIFI COMPATIBLE

Uploads inverter data to free Cloud service, accessible via browser on any device. (Sold separately).



FREE MONITORING SOFTWARE

Available on PC, Mac, Linux 32bit / 64bit.



LIVE EASY.
FRIENDLY.

MPP Solar 1000/140/12 Volt All In One Solar Controller

SPECIFICATIONS

ELECTRICAL

Max Continuous Power	1000W
Parallel Capability	No
Input Voltage Range	95-140 VAC
Input/Output Frequency	50Hz/60hz Auto sensing
Output Voltage	120VAC \pm 5%
Output Waveform	Pure Sine Wave
Peak Efficiency (line mode)	90%
Peak Efficiency (ECO mode)	98%
Peak Efficiency (Battery mode)	88%
Nominal Battery Voltage	12V
Max Battery Voltage	16V
Transfer Time (AC Mode to Batt. Mode)	0 ms
Transfer Time (Inverter to Bypass)	4 ms (Typical)
Charging Mode	3-stage
Max AC Charging Current	60A

SOLAR CHARGER

Algorithm	MPPT
Max PV Input / Output	1000W
Max Charging Current	80A
Max PV Input Voc	145V
MPPT Range	15V-115V

ENVIRONMENTAL / MECHANICAL SPECIFICATIONS

Communication Port	RS232, USB
Operating/Storage Temp	0°C ~ 55°C / - 15°C~ 60°C
Operating Humidity	5% to 95% Relative Humidity (Non-condensing)
Dimension	468 mm x 295 mm x 120 mm
Net Weight	10.5Kg

MPP Solar 3000/140/12 Volt All In One Solar Controller

Stay moderately priced using the latest in solar controller tech. This all in one unit effortlessly powers 3000 watts of every day appliances without the wasted space of an extra inverter. Managing up to 80 amps at a maximum of 145 volts of solar panels, the limitations of this controller will be hard to meet. Charging the off grid standard of 48 volt battery arrays, MPP Solar keeps efficiency at the top of its priority list. Built in LCD keeps you updated on your most recent charging status, and if that's not enough, an optional wifi communicator will update you with in depth information via your desktop computer. Use this controller to manage compact solar arrays for off grid homesteads, tiny homes, and commercial settings.



SUITABLE FOR

COMPACT HOMESTEAD SYSTEMS. OFF GRID TINY HOMES, CABINS, COMMERCIAL OR RESIDENTIAL STRUCTURES



TRUE DOUBLE CONVERSION

AC-DC-AC conversion allows zero transfer time. No more interruption to sensitive load during switching.



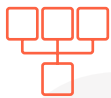
POWER FLEXIBILITY

Available in 1KW 12v, 2KW 24V, and 3KW 48v.



BIG CHARGING POWER

Built-in MPPT solar charger max 80A.
Utility charger max 60A.



PARALLEL OPERATION

No more worry about not having enough power. Maximum expansion up to 9 units!



WIDE DC RANGE

10-16V (based on each 12v battery) means greater compatibility to wider range of battery types.



120/240V SPLIT PHASE

Single unit output is 110/120V and split phase output can be achieved by using 2 units or more in parallel. (Parallel kit required; sold separately).



WIFI COMPATIBLE

Uploads inverter data to free Cloud service, accessible via browser on any device. (Sold separately).



FREE MONITORING SOFTWARE

Available on PC, Mac, Linux 32bit / 64bit



MPP Solar 3000/140/12 Volt All In One Solar Controller

SPECIFICATIONS

ELECTRICAL

Max Continuous Power	3000W
Parallel Capability	Yes, Max up to 9 units
Input Voltage Range	95-140 VAC
Input/Output Frequency	50Hz/60hz Auto sensing
Output Voltage	120VAC \pm 5%
Output Waveform	Pure Sine Wave
Peak Efficiency (line mode)	90%
Peak Efficiency (ECO mode)	98%
Peak Efficiency (Battery mode)	92%
Nominal Battery Voltage	48V
Max Battery Voltage	64V
Transfer Time (AC Mode to Batt. Mode)	0 ms
Transfer Time (Inverter to Bypass)	4 ms (Typical)
Charging Mode	3-stage
Max AC Charging Current	60A

SOLAR CHARGER

Algorithm	MPPT
Max PV Input / Output	4000W
Max Charging Current	80A
Max PV Input Voc	145V
MPPT Range	60~115V

ENVIRONMENTAL / MECHANICAL SPECIFICATIONS

Communication Port	RS232, USB
Operating/Storage Temp	0°C ~ 55°C / - 15°C~ 60°C
Operating Humidity	5% to 95% Relative Humidity (Non-condensing)
Dimension	468 mm x 295 mm x 120 mm
Net Weight	10.5 Kg

MPP Solar 6000/450/48 Volt All In One Solar Controller

For truly large scale off grid demands, this feature rich controller doesn't come to the party empty handed. Generating 6000 watts of split phase voltage, this controller continues to be the standard in large solar array management – enabling you to power the largest of appliances from air conditioning units, to washer and drier sets. Parallel up to 9 units, to run a not so small power utility in the comfort of your own property. Managing 120 amps at a maximum of 450 volts, a singular unit can control over 30,000 watts! Did we mention battery-less operation? Save your bank account. This controller is perfect for your day time only high capacity needs. Built in LCD keeps you updated on your most recent charging status, and if that's not enough, a built in wifi communicator will update you with in depth information via your desktop computer.



SUITABLE FOR

LARGE SCALE SOLAR ARRAY FARMS. FULLY OFF GRID STRUCTURES LIKE HOMESTEADS, TINY HOMES, RESEARCH FACILITIES, LARGE CABINS, RESIDENTIAL AND COMMERCIAL BUILDINGS



BUILT - IN WIFI TRANSMITTER

Broadband Internet connection required.



BMS COMMUNICATION

Pylontech / Soltaro / WECO BMS systems are supported.



BATTERY OPTIONAL

Applicable only to single unit. Parallel setup requires battery at all times.



GRID INTERACTIVE

Check with local certification requirement before use.



PARALLEL CAPABLE

No more worry about not having enough power. Parallel kits required and sold separately.



LIVE OFF GRID FRIENDLY.

MPP Solar 6000/450/48 Volt All In One Solar Controller

SPECIFICATIONS

STANDARD RATING

Continuous Output	6000W
System DC Volt	48VDC
AC Input Voltage	110 VAC (P-N) / 220 VAC (P-P)
Maximum Parallel	Up to 9 units

PV INPUT/SOLAR CHARGING

Max PV Input Power	6000W
Max PV Input Volt	450V (Voc)
MPPT Range	120 - 450 VDC
Number of PV Input	1

OUTPUT MODE

Output Waveform	Pure Sine Wave
AC Output Mode	110 VAC (P-N) / 220 VAC (P-P)
Frequency	50 / 60Hz, auto-sensing
Max Bypass Current	40A
Max Efficiency	>93%
Max Utility Charging	120A
Max Solar Charging	120A
Max Utility Charging + Solar Charging	120A
Max Bulk / Float Charge	64V

ENVIRONMENTAL / MECHANICAL SPECIFICATIONS

Communication Port	USB / RS232 / DRY CONTACT / WIFI / BMS
Operating Temp	32 - 122°F
Operating Humidity	0 - 90% RH (No Condensing)
Dimension	23.35 X 14.37 X 5.43 in
Net Weight	57.32 lbs



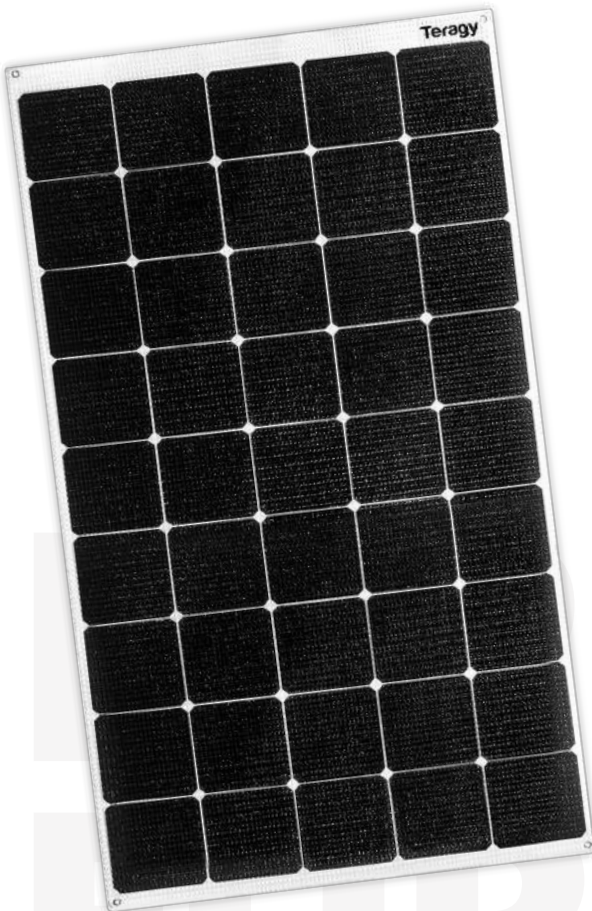
Teragy Solar Nova Series 12 Volt 160 Watt Walkable Solar Panel

Build a solar roof deck at a third of the price of a custom budget. Our van-specific, walkable solar panels are made from the highest quality SunPower cells; promising top end power generation for years ahead. This ETFE coated solar panel sets itself apart from traditional semi flexible cells — construct a metal support of your choice, and this solar panel is fully walkable. Because our cells are fully coated, our panels are built to withstand the toughest usage conditions. Connect these panels in series to quickly gather 640 watts for your camper van install. Who said you'd need professional van builders for a solar deck?



SUITABLE FOR

VAN BUILDING EXCLUSIVELY; SPRINTER VANS, TRANSITS, PROMASTERS, AND ECONOLINE CARGO VANS



SPECIFICATIONS

Cell Type	SunPower Cell
Cell Efficiency	24.2%
Peak Power (Pmax)	160Wp
Power Tolerance Range (%)	- 5% To +5%
Max Power Voltage Vmp (V)	13.5
Max Power Current Imp (A)	11.86
Open Circuit Voltage Voc (V)	15.93
Short Circuit Current Isc (A)	12.80
Maximum System Voltage (VDC)	200
Dimension (IN)	47.3 X 26 X .2
Operation Temperature (F)	- 40 / +185°F
NOCT (F)	113 ± 36°F

LORE

FURTHER.

Teragy Solar Nova Series 12 Volt 225 Watt Walkable Solar Panel

Double your roof top space using our Nova Series 225 Watt Walkable Solar Panel. At a third of the price of our custom competitors, our solar panels can be used as chill out space or storage space when not collecting power. High quality SunPower cells build this walkable solar panel, while the ETFE coating promises a lifetime of great power generation and durability. Build a metal support structure underneath our panels, and these walkable solar panels will endure the toughest usage conditions. Using a 48 watt solar charger? Wire this solar panel in series and generate over 1000 watts of power. This is your solution to building a fully sustainable off grid system, in a small compact space.



SUITABLE FOR

VAN BUILDING EXCLUSIVELY; SPRINTER VANS, TRANSITS, PROMASTERS, AND ECONOLINE CARGO VANS



SPECIFICATIONS

Cell Type	SunPower Cell
Cell Efficiency	24.2%
Peak Power (Pmax)	225Wp
Power Tolerance Range (%)	- 5% To +5%
Max Power Voltage Vmp (V)	18.90
Max Power Current Imp (A)	11.86
Open Circuit Voltage Voc (V)	22.30
Short Circuit Current Isc (A)	12.86
Maximum System Voltage (VDC)	200
Dimension (IN)	47.4 X 36.4 X .2
Operation Temperature (F)	- 40 / +185°F
NOCT (F)	113 ± 36°F

ECO
FRIENDLY.

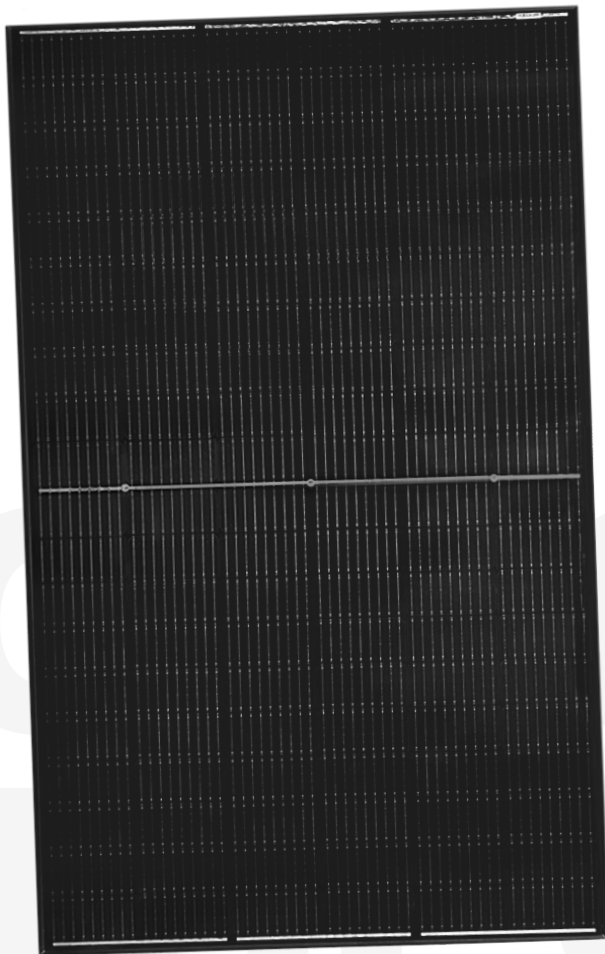
BlueSun 24 Volt 370 Watt Solar Panel

Everything you need in a high-performance solar panel. Sized perfectly to fit a majority of roofing and solar array configurations, this half cut mono perc solar panel consistently delivers up to 11% more energy than any of its competitors. A sleek shingled presentation brings elegance to any residential or commercial roof install. Wire these panels in series — to effortlessly collect the highest energy and project demands existing technology; saving you thousands down the road. The SOK battery is versatility you can trust – which is why we carry it in our store today.

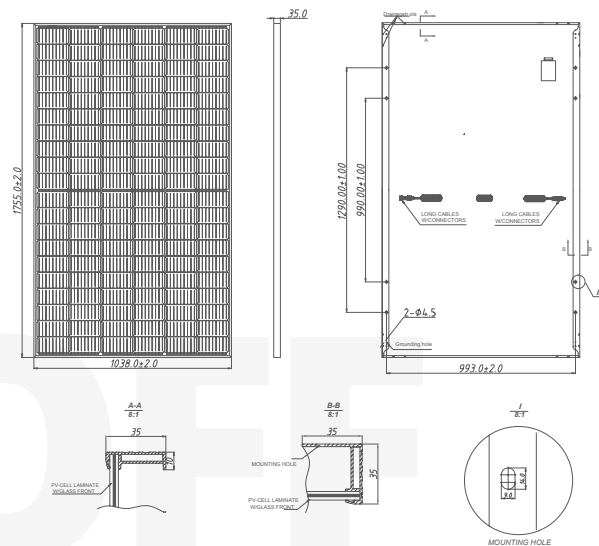


SUITABLE FOR

LARGE OFF GRID SOLAR PROJECTS. RESIDENTIAL, HOMESTEAD, AND COMMERCIAL USE. GREAT FOR SINGULAR CAMPER VAN AND EXPEDITION TRUCK USE



TECHNICAL DRAWING



SOK Series 100 AH Rack Mount 48 Volt Battery

SPECIFICATIONS

ELECTRICAL PARAMETERS

Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	370
Operating Voltage (Vmpp/V)	34.9
Operating Current (Impp/A)	10.61
Open-Circuit Voltage (Voc/V)	41.1
Short-Circuit Current (Isc/A)	11.26
Module Efficiency	20.3

Performance at NMOT

Maximum Power (Pmax/W)	274
Operating Voltage (Vmpp/V)	32.1
Operating Current (Impp/A)	8.55
Open-Circuit Voltage (Voc/V)	38.2
Short-Circuit Current (Isc/A)	9.09

STC: Irradiance 1000W/m², Cell Temperature 77°F, Air Mass AM1.5

NMOT: Irradiance at 800W/m², Ambient Temperature 32°F, Air Mass AM1.5, Wind Speed 1m/s

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions (IN)	6.56 X 6.56
Cell Arrangement	120 (6*20)
Weight	46.3 lbs
Module Dimensions (IN)	69.09 X 40.87 X 1.38
Cable Length	Portrait 300mm Landscape 1200mm Customized
Cable Cross Section Size	TUV: 4mm ² 0.006 in ² /UL: 12AWG
Front Glass	0.13 in. AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration (1)	31pcs/carton, 806pcs/40hq
Packing Configuration (for USA)	31pcs/carton, 806pcs/40hq
Frame Anodized	Anodized Aluminium Alloy
Junction Box	IP68

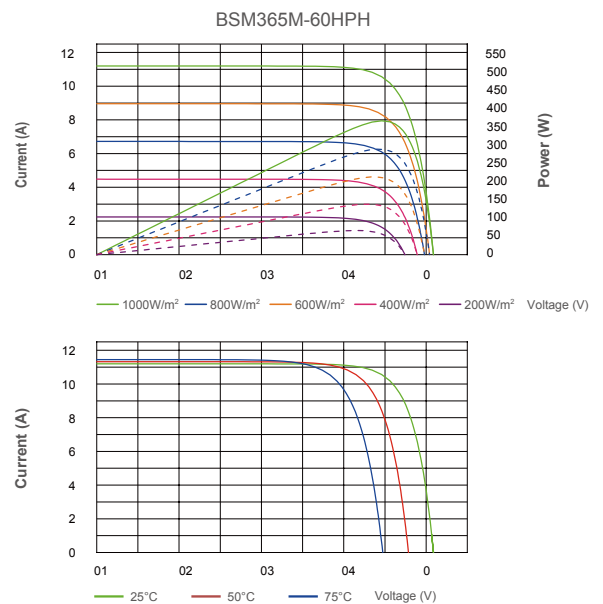
OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	- 40°F ~ +185°F
Maximum Series Fuse	20A
Static Loading	Snow Loading: 5400Pa Wind Loading: 2400Pa
Conductivity at Ground	≤1 Ω
Safety Class	II
Resistance	≥100M Ω
Connector	T01/LJQ-3-CSY/MC4/MC4-EVO2

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	- 0.36%/°F
Temperature Coefficient Voc	- 0.26%/°F
Temperature Coefficient Isc	+ 0.043%/°F
NMOT	43±2°F

I-V CURVE







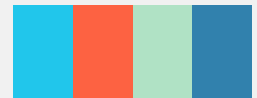
We're Here To Help

We built our legacy in helping each other learn solar, one system at a time. And with that understanding, we untethered ourselves from the demands of everyday life. To us, off grid solar is not just a product – it is a revolution. It's a revolution we want to bring to everyone's door step. Today, it is that same passion that drives us to open our doors every day. Let's help you thrive. Regardless of whether you are a newbie or a seasoned solar technician, we built this company to help you. Call us, if you have any concerns, questions, comments, or amazing stories. We'd love to hear from you.



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Teragy



Teragy



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