phocos

Any Off-Grid Solutions 2020 / 2021

www.phocos.com

Your Off-Grid & Any-Grid Partner

Industry Experts

Two decades of experience as a leading provider of reliable, innovative energy solutions has earned Phocos continuous respect from the solar industry. We have proudly grown from being '**Your Off-Grid Partner**' to '**Your Any-Grid Partner**' as we expand our product offering to meet more energy access challenges in the global market today.

Global Leader, Local Partner

With our headquarters in Ulm, Germany, we operate four sales, support and R&D subsidiaries and have a network of dependable distributors worldwide. Our commitment to local service and support anywhere in the world makes Phocos much more than a supplier of components and solutions for off-grid systems. It makes us "Your Off-Grid and Any-Grid Partner."

Rely on Phocos

Innovative

Leading in advanced technologies for clean, reliable and affordable energy.

Cost-Effective

Optimizing features-to-cost ratio to minimize the total cost of ownership.

Reliable

Setting industry standards in first-class quality and superior reliability.

Flexible

Providing power products with the flexibility to build optimal Off-Grid, On-Grid or Any-Grid installations.

Any-Grid™ Applications

Our innovative technologies are used in homes, businesses and industry. Phocos offers a variety of products to support a broad range of Off-Grid, On-Grid and Any-Grid™ solar power applications.

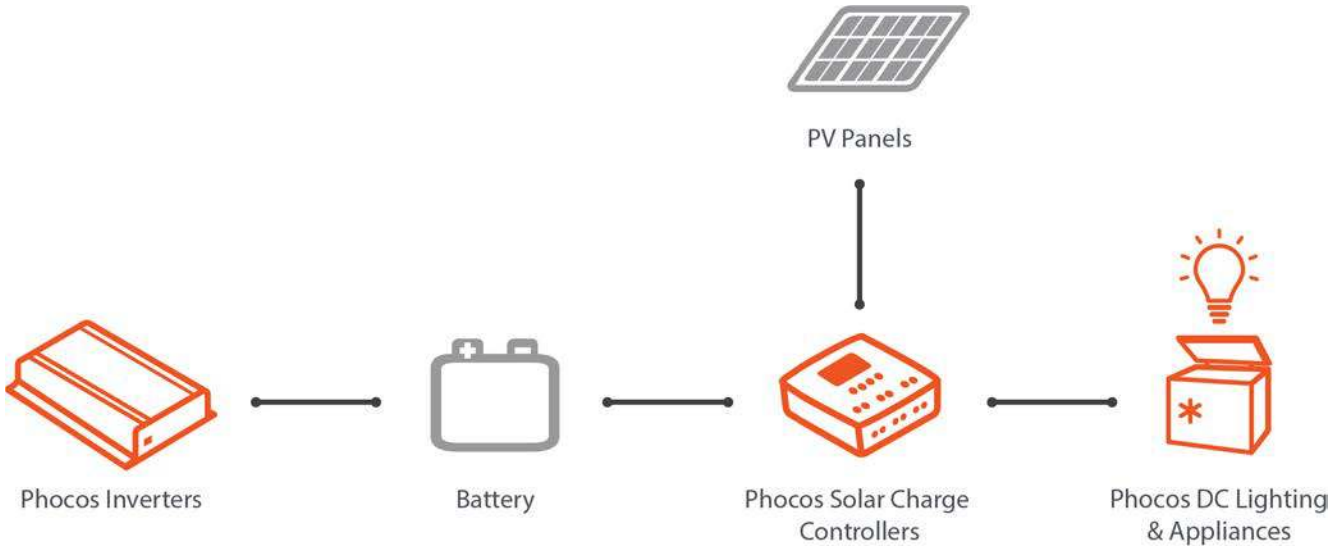
Residential & Rural Electrification

High-quality energy solutions for locations and populations without access to reliable grid power

Your Off-Grid & Any-Grid Partner

Phocos Celebrates 20 Years!

Phocos in an Off-Grid System



Recreation

Supporting clean, sustainable living on the road, on the water or off the beaten path

Solar Lighting

Rugged, efficient and dependable solutions with advanced lighting controls

Industry

Reliable industrial power for remote monitoring, oil & gas, traffic signals, security and telecom towers

Any-Grid™ Hybrid Inverter Chargers

Any-Grid™ PSW-H Hybrid Inverter Chargers

NEW

The Phocos Any-Grid™ PSW-H Inverter Charger Series (Pure Sine Wave Hybrid) represents Phocos' most versatile line of inverters/chargers. Flexibility and reliability are key characteristics of this product line, with a strong potential for cost saving opportunities in real world conditions. The Any-Grid PSW-H combines the functionality of an MPPT solar charge controller, inverter, uninterruptible power supply (UPS) and AC battery charger into a single, easy-to-use and simple to install unit. It acts as a power hub to manage multiple energy sources. Models available in 230 and 120 Vac.

Any-Grid PSW-H

PhocosLink App

GET IT ON Google Play

Download on the App Store

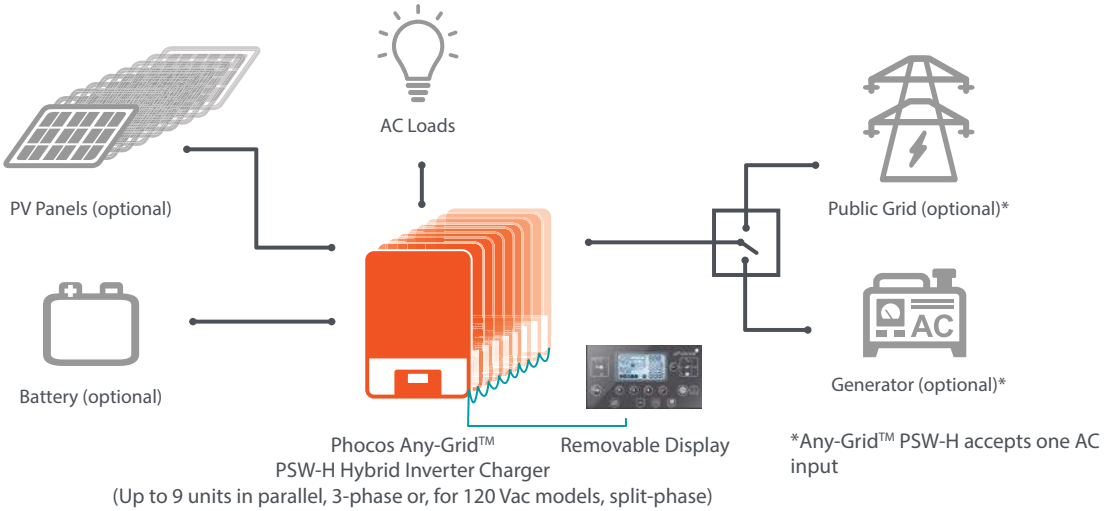
Product Features

- 3 kW or 5 kW output power per model, with integrated AC battery charger
- Integrated high-voltage 80 A MPPT charge controller
- Charge controller can function even if inverter is turned off to keep batteries fully charged
- Compatible with Lithium batteries
- Uninterruptible power supply functionality due to 10 ms switching time (typical, UPS mode) in case of grid blackout
- Detachable display / communication unit with 6 LEDs and an intuitive LCD screen
- High level of connectivity: BLE, USB-OTG (on-the-go), CAN Bus, RS-485, RS-232, relay for generator start
- Up to 9 inverters can be connected in parallel, split-phase or 3-phase for up to 45 kW of synchronized AC power
- Datalogger with up to 60 days of data storage
- Compatible with optional Any-Bridge™ accessory for remote access from any internet-enabled device

Phocos in an Any-Grid™ System

What is Any-Grid™?

Traditionally, the energy industry defines power systems relative to their access to the grid as Off-Grid or On-Grid. At Phocos, we believe energy access should be available under 'Any-Grid' conditions whether you have full or partial access to renewable energy and/or grid power, and if energy sources are unreliable. The Phocos Any-Grid Inverter Series provides flexible energy access solutions that optimize the use of locally available energy resources that can adapt as access to resources changes over time.



Charge Controllers

Optimizing Energy from PV Arrays

Our MPPT (Maximum Power Point Tracking) and PWM (Pulse Width Modulation) solar charge controllers are designed with an optimal feature-to-cost ratio to minimize total cost of ownership of the off-grid system. For homes, cabins and RVs, our controllers are easy to use, reliable and include mobile device charging. Our controllers for industrial applications are designed to withstand the harshest conditions while offering industry-leading features like data monitoring to maximize reliability and prevent outage. For solar lighting systems, our controllers include an array of advanced control options including automatic seasonal adjustments as well as time, voltage and motion controlled dimming.

Our models offer these advantages:

- **CML**: Designed for rural electrification and mobile device charging
- **ECO**: Compact size and economical choice for low-power industrial applications
- **CXN**: Advanced features and intelligence for industry and lighting applications
- **CIS**: Built for the harshest environments with advanced lighting control features
- **Multi-purpose**: Engineered for reliability in low- to high-power applications

MPPT Solar Charge Controllers

ECO-N-MPPT

CIS-N-MPPT

CIS-N-MPPT-LED

Max Solar Ratings				Battery Voltage				Features						
Model	Current	Voltage	Power	12V	24V	36V	48V	Potted	Data Logging	Low Voltage Disconnect	Ground-ing	Lighting Control	Dimming	LED Driver
ECO: Compact size and economical choice for low-power industrial applications														
ECO-N-MPPT 85/15	15A	85 Voc	250W/500W	•	•			•	•	•	NEG			
CIS: Built for the harshest environments with advanced lighting control features														
CIS-N-MPPT 85/15	15A	85 Voc	225W/450W	•	•			•	•	•	NEG	•	•	
CIS-N-MPPT 100/30	30A	95 Voc	450W/900W	•	•			•	•	•	NEG	•	•	
CIS-N-MPPT-LED	15A	85 Voc	225W/450W	•	•			•	•	•	NEG	•	•	•

PWM Solar Charge Controllers

ECO-N-T

CXNup

CIS-N-LED

Max Solar Ratings				Battery Voltage				Features								
Model	Current	Voltage	Power	12V	24V	36V	48V	Potted	LCD	USB Charger	Data Logging	Low Voltage Disconnect	Grounding	Lighting Control	Dimming	LED Driver
CML: Designed for rural electrification and mobile device charging																
CM04	4A	30V	70W	•									POS			
CM10	10A	30V	175W	•									POS			
CML-USB-05	5A	30V/50V	87W/175W	•	•					•		•	POS			
CML-USB-10	10A	30V/50V	175W/350W	•	•					•		•	POS			
CML-USB-20	20A	30V/50V	350W/700W	•	•					•		•	POS			
ECO-N: Compact size and economical choice for low-power industrial applications																
ECO-N-10	10A	30V/50V	175W/350W	•	•			•				•	NEG			
ECO-N-10-T	10A	30V/50V	175W/350W	•	•			•				•	NEG			
ECO-N-20-T	20A	30V/50V	350W/700W	•	•			•				•	NEG			
CXN: Advanced features and intelligence for industry and lighting applications																
CXNup-10	10A	30V/50V	175W/350W	•	•				•	•	•	•	NEG	•		
CXNup-20	20A	30V/50V	350W/700W	•	•				•	•	•	•	NEG	•		
CXNup-20-2B	20/20A	30V/50V	350W/700W	•	•				•	•	•	•	NEG			
CXNup-40	40A	30V/50V	700W/ 1050W	•	•				•	•	•	•	NEG	•		
CIS: Built for the harshest environments with advanced lighting control features																
CIS-N-10	10A	30V/50V	175W/350W	•	•			•				•	NEG	•	•	
CIS-N-20	20A	30V/50V	350W/700W	•	•			•				•	NEG	•	•	
CIS-N-LED-1050	20A	30V/50V	350W/700W	•	•			•				•	NEG	•	•	•
CIS-N-LED-1400	20A	30V/50V	350W/700W	•	•			•				•	NEG	•	•	•
CIS-N-LED-2800	20A	30V/50V	350W/700W	•	•			•				•	NEG	•	•	•
Telecom Tower Applications																
SPS12D100B	100A	30V	1.75kW	•					•		•	•	By Request			
SPS24D100B	100A	50V	3.5kW		•				•		•	•	By Request			
SPS48D100B	100A	100V	7.0kW				•		•		•	•	By Request			
SPS12D200B	200A	30V	3.5kW	•					•		•	•	By Request			
SPS24D200B	200A	50V	7.0kW		•				•		•	•	By Request			
SPS48D200B	200A	100V	14kW				•		•		•	•	By Request			
SPS12D300B	300A	30V	5.25kW	•					•		•	•	By Request			
SPS24D300B	300A	50V	10.5kW		•				•		•	•	By Request			
SPS24D300B	300A	100V	21kW				•		•		•	•	By Request			

Featured Product

FR-B Series DC Chest Refrigerator/Freezer with BOOST Feature

The Phocos FR-B Series DC chest refrigerator/freezer with BOOST feature offers the most flexible solution for off-grid and edge-of-grid refrigeration in the market today. The unique BOOST feature provides the ability to choose between best cooling performance and highest efficiency to serve a variety of uses. In the field, all models can be used with 12 V or 24 V batteries, and can operate as a refrigerator or freezer by simply adjusting the thermostat.

Product Features

- New Feature: BOOST switch for faster cooling
- Works as a refrigerator or freezer with adjustable thermostat
- Does not require an inverter
- Intuitive setup including simple 2-wire DC connection
- High-efficiency cooling
- Environmentally-friendly R600a refrigerant
- Hanging basket(s) included for better space utilization
- Lockable lid

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Model	Operating Voltage	Boost Switch	Content (Capacity)	Temperature Range	Door Type	Weight	Cabinet Dimensions (WxHxD)	Inner Dimensions (WxHxD)
FR100-B	12/24 VDC	Standard on all models - accelerates cooling when activated	104 L / 3.6 cu. ft	-18 to +8 °C / -0.4 to +46.4 °F	Top-Opening with handle and lock	29 kg / 64 lbs	685 x 850 x 590 mm / 27 x 33.5 x 23.2 in	505 x 640 x 375 mm / 19.9 x 25.2 x 14.8 in
FR230-B	12/24 VDC		238 L / 8.4 cu. ft			80 kg / 160 lbs	1035 x 850 x 750 mm / 40.75 x 33.46 x 29.53 in	628 x 856 x 496 mm/ 24.7 x 33.7 x 19.5 in
FR350-B	12/24 VDC		358 L / 12.6 cu. ft			110 kg / 242 lbs	1475 x 875 x 750 mm / 58.07 x 34.45 x 29.53 in	619 x 1290 x 498 mm / 24.4 x 50.8 x 19.6 in

More Products & Resources

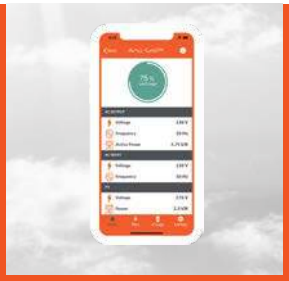
Off-Grid Inverters

Pure Sine Wave Inverters

Accessories

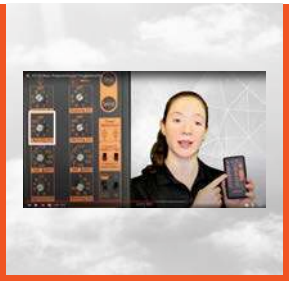
Accessories for Phocos products

Mobile App



PhocosLink Mobile free app

Videos/Blog



Educational solar content for product and industry insights

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