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Product Selection Guide

www.phocos.com

Solar Solutions Designed and Delivered

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We design and deliver innovative solutions for solar power conversion, energy production, and storage.

Phocos is a leading Original Equipment Manufacturer (OEM) with 25 years of experience designing and delivering innovative solutions for solar power conversion, energy production, and storage. We focus on precision engineering, integrating advanced technology with purpose-driven design. No matter the size or complexity of the project, we deliver with the speed, accuracy, quality, and flexibility that define our personalized approach. Partnering with Phocos means more than just getting a product manufactured. It means gaining a long-term ally dedicated to your success in the market.

Types of Projects We Support

Catalog-Based Project

Select a product from our catalog that best suits your needs and our team will customize it to your specifications

Fully Custom Project

Our team will develop a tailored solution that best suits your needs and specifications

For more information, contact us at info.na@phocos.com

Applications

From solar lighting to recration and more, we offer flexible solutions for a broad range of solar power applications

Transportation & Traffic Lights

High-quality & robust energy solutions for low-power applications that require maximum charging efficiency

From Design to Delivery and After Sales

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We have the knowledge, experience, and resources to take your project from design to delivery efficiently, helping you save time, conserve resources, and reduce investment risks

What We Offer

INDUSTRIAL CERTIFICATIONS

GERMAN ENGINEERING

CUSTOM DESIGNS

PRODUCT RELIABILITY

SUPPLY CHAIN MANAGEMENT

Recreation

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

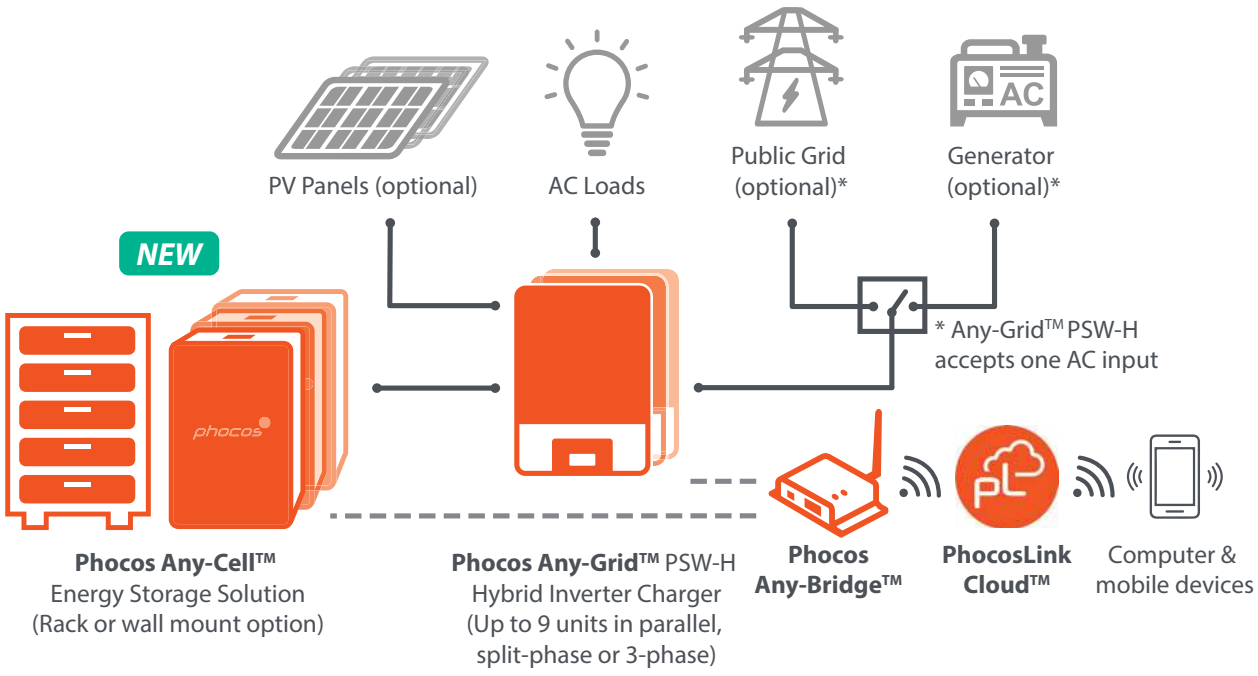
Solar Lighting

Rugged, efficient and dependable solutions with advanced lighting controls

Industrial

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

Phocos in an Any-Grid™ System



Any-Grid™ Hybrid Inverter Chargers

Any-Grid™ PSW-H Hybrid Inverter Chargers

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

Product Features

- 3 kW, 5 kW, 6.5 kW or 8 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
- 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 units connectable in parallel, split-phase or 3-phase for 85.5 kW of synchronized AC power
- Datalogger with up to 60 days of data storage
- Uninterruptible power supply functionality due to 10 ms switching time (typical, UPS mode) in case of grid blackout

Any-Grid™ Battery Inverter Chargers

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Any-Grid™ PSW-B Battery Inverter Charger

- 0.5 kW, 1 kW, 1.6 kW or 3 kW output power per model
- Flexible, advanced features with options to solve many common challenges in the field
- Integrated MPPT charge controller and AC battery charger
- Charge controller functions even if inverter is turned off to keep batteries fully charged
- Compatible with Lithium batteries
- Display unit with 3 LEDs, 3/4 buttons, and an intuitive LCD screen
- RS-232 and USB connectivity
- Common negative and galvanically isolated inverter

Any-Grid PSW-B

Any-Grid PSW-B Series is the most cost-effective entry point to all-in-one inverter chargers

Power Connections:

- Solar/PV
- Battery
- AC Source
- AC Output

Any-Grid Inverter Portfolio

Max. Power Ratings			Battery Voltage			Features							
Model	Rated Power	Surge Power (for 5 secs.)	12 V	24 V	48 V	AC Output Voltage	AC Charge Current	MPPT Charge Current	Max. PV Voltage	MPPT Qty.	No Load Power Draw	Battery-Free Mode	Common Terminal (for grounding)
PSW-H: Hybrid Inverter Charger													
PSW-H-3KW-230/24V	3,000 W	6,000 W		•		220~240 Vac	80 A	80 A	450 Vdc	1	<40 W	•	Isolated
PSW-H-5KW-230/48V	5,000 W	10,000 W			•	220~240 Vac	80 A	80 A	450 Vdc	1	<40 W	•	Isolated
PSW-H-8KW-230/48V	8,000 W	16,000 W			•	220~240 Vac	120 A	120 A	500 Vdc	2	< 75 W	•	Isolated
PSW-H-3KW-120/24V	3,000 W	6,000 W		•		110~127 Vac	80 A	80 A	250 Vdc	1	<40 W	•	Isolated
PSW-H-6.5KW-120/48V	6,500 W	13,000 W			•	110~127 Vac	120 A	120 A	250 Vdc	2	<58 W	•	Isolated
PSW-B: Battery Inverter Charger													
PSW-B-0.5KW-120/12V	500 W	1,000 W	•			110~127 Vac	20 A	40 A	100 Vdc	1	<15 W		Isolated
PSW-B-1.6KW-120/24V	1,600 W	3,200 W		•		110~127 Vac	60 A	60 A	145 Vdc	1	<37 W		Isolated
PSW-B-1KW-230/12V	1,000 W	2,000 W	•			110~240 Vac	20 A	40 A	100 Vdc	1	<15 W		Isolated
PSW-B-3KW-230/24V	3,000 W	6,000 W		•		110~240 Vac	60 A	60 A	145 Vdc	1	<37W		Isolated

Remote System Monitoring Available

using the Any-Grid PSW-H and Phocos Any-Bridge AB-PLC-CAN

Any-Cell™ LFP-Energy Storage System

What is Any-Cell™?

The Phocos Any-Cell™ is a compact and modular Lithium energy storage system that complements the Any-Grid™ hybrid inverter series to allow energy to be stored on site regardless of charging resources available. Combining Phocos Any-Cell energy storage with Any-Grid hybrid inverters and Any-Bridge remote monitoring provide seamless integration between power conversion and energy storage while optimizing the use of locally available energy resources.

ESS-L-5kWh-48V

Product Features

- Compatible with select third-party inverters*
- Seamless integration with Phocos Any-Grid portfolio
- Safe, maintenance-free, LiFePO4 / LFP Chemistry
- Advanced Battery Management System
- Compact, high efficiency form factor
- Modular, scalable up to 8 batteries in parallel
- Wall or Rack mount
- High efficiency and low resistance
- High charge / discharge rate

*Only available from stock in Tucson, AZ and Bubesheim, Germany. Contact our sales team for more information.

Now With Third-Party Inverter Compatibility

Any-Cell ESS-L

Technical Data

Type	ESS-L-5kWh-48V
Chemistry	LiFePO4 / LFP
System Voltage	48 Vdc
Capacity (kWh)	5.12 kWh
Capacity (Ah)	100 Ah
Cycle Life (@ 25 °C)	> 6,000 Cycles @ 90% DoD
Mounting	Wall or rack mount (wall mount hardware included)
Certifications	UL 1642, UL1973, IEC 62619, UN38.3, CE, RoHS
Weight	56 kg / 123.5 lbs
Dimensions (WxHxD)	440 x 595 x 172 +/-2 mm / 17.3 x 23.4 x 6.8 in (without bracket)
Warranty	10 years

Any-Cell provides seamless integration between Phocos power conversion products and energy storage

Charge Controller Portfolio

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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.

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

MPPT Solar Charge Controllers

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

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-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-40	40A	30V/50V	700W/ 1400W	•	•				•	•	•	•	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	•	•	•

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