

# HELIOS ESS

## + Solis Hybrid Inverters Integration

### The Smart, Scalable Backup Solution

Take control of your home's energy with the proven combination of Discover Energy Systems' HELIOS ESS and Solis S6 Split-Phase Hybrid Inverters (9.6–16 kW). Built for performance, resilience, and scalability, this pairing delivers whole-home backup with seamless switchover, intelligent energy management, and simplified installation.

Whether preparing for outages, reducing dependence on the grid, or seeking long-term cost savings, HELIOS + Solis offers a turnkey path to energy independence.






#### Discover HELIOS + Solis Hybrid Inverters:

- **Seamless Backup Power.** Sub-4 ms switchover time keeps critical loads powered without interruption.
- **Certified Performance.** HELIOS batteries are UL9540 certified and Solis S6 inverters carry UL 1741/SB certification for grid compliance.
- **Expandable Capacity.** Each HELIOS delivers 16.1 kWh; scale easily from a single unit to over 579 kWh.
- **Installer Ready.** Conduit box options, plug-and-play terminals, and integrated LYNK II mount simplify wiring and commissioning.
- **Smart Energy Management.** Supports TOU shifting, integrates with generators and EV chargers, and is compatible with virtual power plant programs.





## Ready-to-Deploy Energy Storage Solution

Feature	Solis 9.6K	Solis 11.4K	Solis 12K	Solis 14K	Solis 16K
AC power (continuous)	9.6 kW	11.4 kW	12 kW	14 kW	16 kW
Surge / Peak Power	3x rated power (≈1 s)				
Best Fit Use Cases	Essentials backup (lights, fridge, small appliances)	Whole-home backup for medium loads and appliances	Whole-home backup; larger appliances and EV charging	Demanding homes: HVAC, pumps, EV, higher PV input	Heavy loads, large homes, off-grid or VPP-ready
Backup Transfer Time	< 4 ms				
Rated Output Current	40 A	47.5 A	50 A	58.3 A	66.7 A
Max Battery Charge / Discharge Current	200 A	237.5 A	250 A	290 A	290 A
Solar Input Capacity	Up to 12 kW PV	Up to 16 kW PV	Up to 19.5 kW PV	Up to 25 kW PV	Up to 32 kW PV
MPPTs / Strings per MPPT	3 / 2 string per MPPT				
Enclosure / Operating Temp.	Type 4X / -25°C to 60°C				
Efficiency	~96% CEC				
Recommended HELIOS					
Why this counts	Inverter battery charger is 200 A. One HELIOS delivers 200 A, so a single unit meets full charge/discharge capability.	Inverter battery charger is 237.5 A. Two HELIOS provide 400 A combined, ensuring full performance with additional surge headroom.	Inverter battery charger is 250 A. Two HELIOS provide 400 A combined, covering full performance and surge demands.	Inverter battery charger is 290 A. Two HELIOS provide 400 A combined, sufficient for performance, with three recommended for heavy off-grid use or large motor starts.	Inverter battery charger is 290 A. Two HELIOS provide 400 A combined for full performance, with three recommended for surge margin, high PV input, or off-grid applications.
Usable Energy at Recommended Configuration	16 kWh	32 kWh	32 kWh	32 kWh	48 kWh
Per-battery Capability	16 kWh, 51.2 V, 314 Ah, 200 A charge and discharge, IP65 outdoor rated.				

### For Installers

- Outdoor rated. Wall mounted.
- Conduit box ensures secure, code-compliant wiring.
- Native closed-loop communications for fast commissioning.
- LYNK II Gateway for remote monitoring with LYNK Cloud.

### For Home/Business Owners - Site Operators

- Reliable backup during outages, protecting large appliances, HVAC, and sensitive electronics.
- Add more HELIOS units to grow from 16.1 kWh to 579kWh.
- Compatible with EV chargers, generators, and VPP programs.



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## Simple & Flexible Installation Options

HELIOS ESS is built to simplify wiring with Solis inverters while maintaining safety and compliance. Installers can choose the method that best fits the jobsite:

- **Discover Generic Wireway.** Provides a dedicated pathway to route both power and communication cables, keeping installations neat and accessible.
- **Custom / Installer-Supplied Wireway.** For projects with unique layouts, contractors can design their own protective channeling to match site conditions.

With lockable covers, clearly marked conduit entry points, and integrated landing areas for cabling, HELIOS ensures every installation is professional in appearance, secure in operation, and straightforward to commission.



## WHY CHOOSE THIS SOLUTION

The **HELIOS + Solis integrated package** brings together speed, simplicity, and reliability in one complete package. **Native CAN communication between the inverter and battery allows seamless commissioning.** HELIOS can expand from a single unit to large multi-battery systems, supported by flexible wireway solutions and parallel cable kits that adapt to different layouts. With **outdoor-rated, self-heating, and UL-certified construction**, HELIOS ensures safety and reliability in all conditions. Combined with responsive support and advanced remote monitoring from both Discover and Solis, this solution reduces complexity during setup and delivers long-term confidence once it's running.