

# HELIOS ESS

## + Sol-Ark Hybrid Inverters Integration

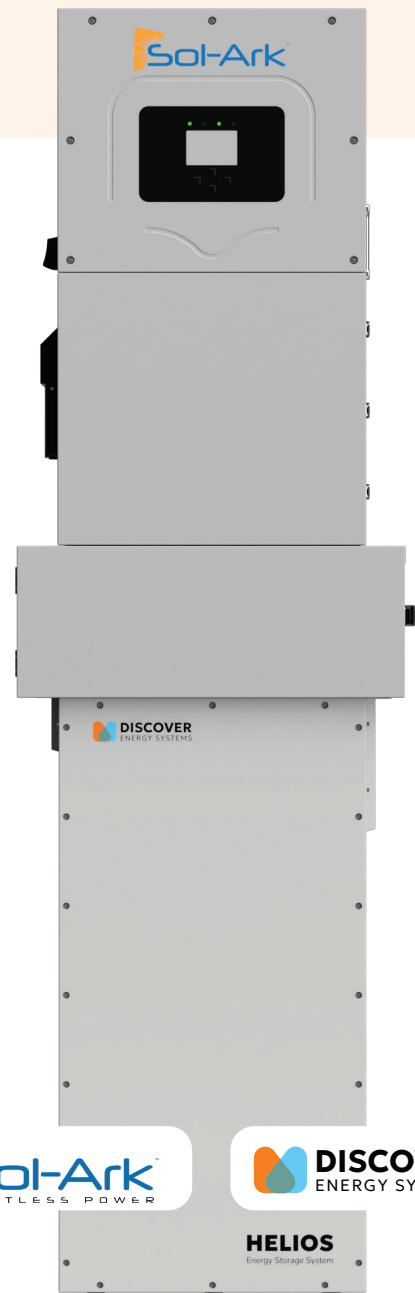
### The Smart, Scalable Backup Solution

Take control of your home's energy with the proven combination of Discover Energy Systems' HELIOS ESS and Sol-Ark Hybrid Inverters (12K | 15K | 18K). This pairing is built for performance, resilience, and scalability, delivering whole-home backup with seamless switch-over, advanced monitoring, and simplified installation.

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

#### Discover HELIOS + Sol-Ark Hybrid Inverters:



- **True Whole-Home Backup.** <5ms transfer speed ensures uninterrupted power.
- **Proven Reliability.** UL-certified battery, UPS-grade inverter, certified Sol-Ark partner.
- **Scalable Storage.** 16.1 kWh usable per battery, expandable up to 580kWh.
- **Fast, Clean Install.** Dedicated conduit box, quick-connect terminals, integrated LYNK II mount.
- **Energy Savings.** Time-of-Use (TOU) shifting, generator support, EV readiness.



**HELIOS**  
Energy Storage System



## Ready-to-Deploy Energy Storage Solution

Feature	12K-2P Essentials	15K-2P Whole-Home	18K-2P Premium
AC Power (Continuous)	9 kW AC backup output	15 kW AC grid output	18 kW AC continuous output
Surge / Peak Power	Designed for essentials, modest surge support	Higher surge to handle inductive loads and appliances	36 kVA surge (≈10 s) for motors/HVAC/heavy loads
Best Fit Use Cases	Partial backup: essentials (lights, fridge, small appliances)	Whole-home backup; electrical appliances, EV charging	Demanding applications: HVAC, pumps, EV, high PV generation, off-grid
Backup Transfer Time	~5 ms		
Grid Pass-Through	50 A grid pass-through; designed for “essentials” backup	200 A grid pass-through; supports larger homes	200 A grid pass-through; built for whole-home and heavy loads
Battery Charging Capability	185 A battery charge/discharge	275 A charge/discharge	350 A charge/discharge
Solar Input Capacity	Up to 12 kW PV (AC/DC coupled)	Up to 19.5 kW PV	Up to 32.4 kW PV
MPPT Trackers	2 MPPTs	3 MPPTs	3 MPPTs (higher current handling)
Enclosure / Conditions	IP65 outdoor-rated; -25°C to +55°C		
Efficiency	~97.5% max; ~96.5% CEC		
Recommended HELIOS			
Why this count	Inverter battery charger is 185 A, one HELIOS delivers 200 A so you meet full charge/discharge capability.	Inverter battery charger is 275 A, two HELIOS provide 400 A combined for full performance and surge headroom.	Inverter battery charger is 350 A, two HELIOS provide 400 A combined for full performance, three recommended for heavy off-grid or large motor starts.
Usable energy at recommended configuration	16 kWh	32 kWh	32 to 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 code-compliant, secure wiring.
- Native closed-loop communications for fast commissioning.
- LYNK II Gateway for remote monitoring with LYNK Cloud.
- Listed in Sol-Ark’s Certified Battery Integration Guide.

### For Homeowners

- Reliable backup during outages, protecting large appliances, HVAC, and sensitive electronics.
- Add more HELIOS units to grow from 16.1 kWh to over 48 kWh.
- Compatible with EV chargers, generators, and VPP programs.



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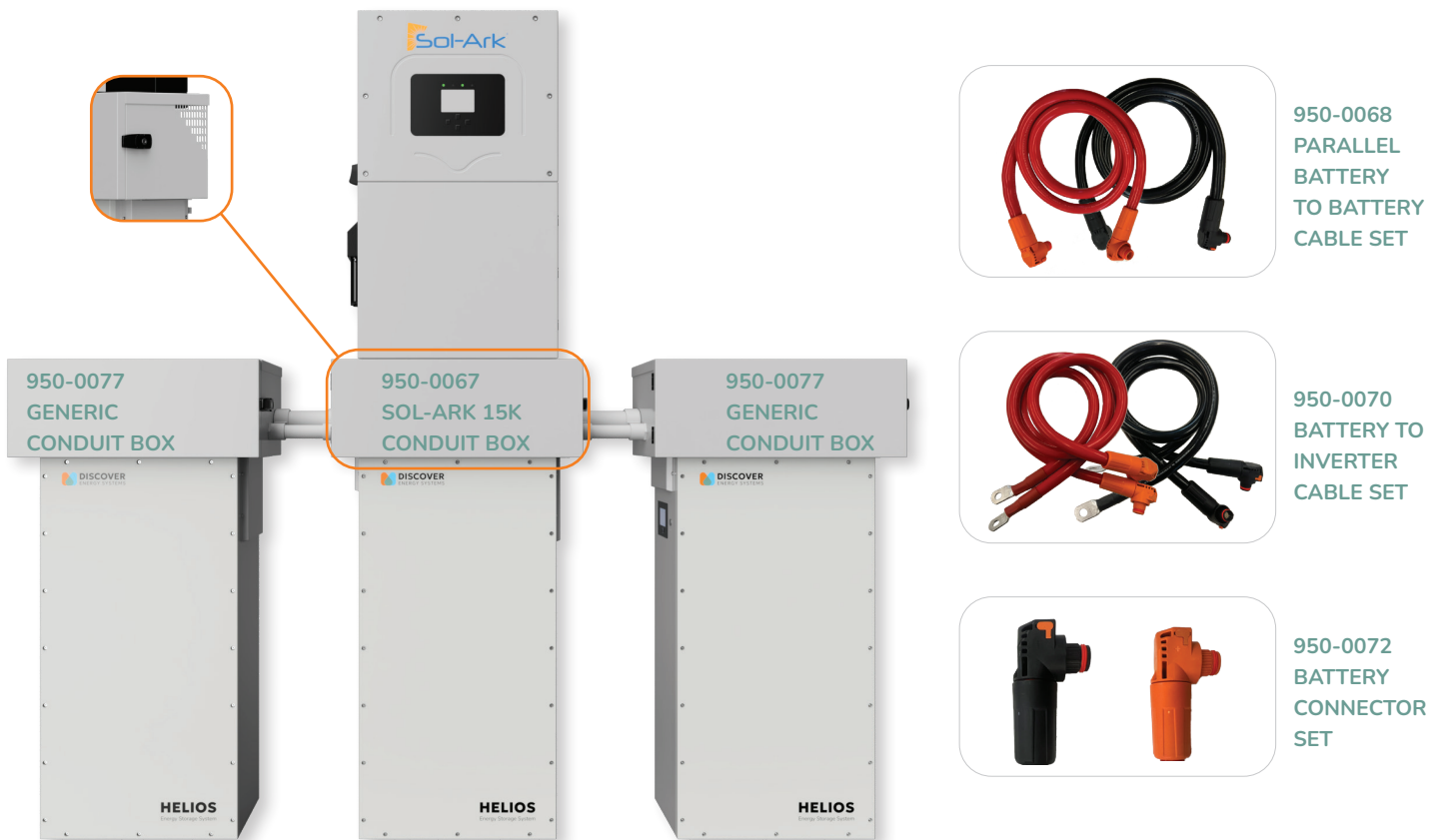
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## Simple & Flexible Installation Options

HELIOS ESS is designed for a clean, code-compliant install with Sol-Ark inverters. Installers can choose the wiring pathway that best suits the project:

- **Sol-Ark Conduit Box.** Purpose-built for Sol-Ark 15K, with knock outs and quick-connect points that align directly with the inverter for the fastest, neatest integration.
- **Discover Generic Wireway.** A flexible option from Discover that allows installers to run battery cables and communication lines cleanly between HELIOS batteries and Sol-Ark other inverters or equipment while maintaining service access and code compliance.
- **Custom / Installer-Supplied Wireway.** For projects with unique layouts, installers can supply their own wireway mounted over the battery to route and protect cabling, ensuring a tidy finish that matches site conditions.

HELIOS offers straightforward conduit entry, lockable covers, and integrated cable landings that make the installation professional, safe, and easy to commission.



## WHY CHOOSE THIS SOLUTION

The pairing of Discover HELIOS batteries with Sol-Ark hybrid inverters delivers unmatched performance for homeowners seeking whole-home backup and long-term energy independence. Where other solutions may compromise on value, scalability, or support, Discover + Sol-Ark stands apart. HELIOS batteries provide 16.1 kWh of safe, UL-certified lithium storage, expandable as your needs grow, while Sol-Ark inverters deliver industry-leading AC output and intuitive TOU savings. Together they create a turnkey, installer-friendly system that is cost-effective, resilient, and scalable. **Discover HELIOS batteries with Sol-Ark hybrid inverters are the smart choice for homeowners who want proven technology, trusted brands, and peace of mind for years to come.**