

HELIOS ESS

+ Growatt SPH Hybrid Inverter Integration

Smarter Power, Simplified Integration

Empower every home with dependable, high-efficiency energy storage. The combination of Discover Energy Systems' HELIOS ESS and Growatt SPM Hybrid Inverters (8-10 kW) delivers intelligent backup power and solar self-consumption in one unified system.



Engineered for long-term reliability and straightforward installation, this pairing brings together advanced battery control, fast UPS-grade switching, and versatile system design that adapts to residential and light-commercial projects.

Discover HELIOS + Growatt Hybrid Inverters:

- **Instant Backup.** UPS-class transfer speed (< 10 ms) keeps power steady when the grid drops.
- **Engineered for Everyday Use.** Certified lithium battery and inverter platform built for real-world reliability.
- **Expandable Capacity.** 16 kWh usable per HELIOS ESS; parallel up to ≈ 580 kWh.
- **Clean Installation.** Compact form factor, dedicated conduit options, and built-in LYNK II mount simplify wiring.
- **Versatile Operation.** DC- or AC-coupled configurations with generator-charging support and three-phase capability.



Ready-to-Deploy Energy Storage Solution

Feature	Growatt SPH 8000TL-HU-US (B)*	Growatt SPH 10000TL-HU-US / (B)*
AC power (continuous)	8.0 kW	10.0 kW
Surge / Peak Power	1.5× rated load (5 s)	
Best Fit Use Cases	Essential circuits and small homes	Whole-home backup, large residential and light C&I systems
Backup Transfer Time	< 10 ms (UPS function)	
Rated Output Current	33.3 A @ 240 V	41.7 A @ 240 V
Max Battery Charge / Discharge Current	200 A	
Solar Input Capacity	Up to 12 kW PV (1.5 DC/AC ratio)	Up to 15 kW PV (1.5 DC/AC ratio)
MPPTs / Strings per MPPT	3 / 2 strings per MPPT	
Enclosure / Operating Temp.	IP65 / -25 °C to +60 °C (derating > 45 °C)	
Nominal AC Voltage	120/208 V or 120/240 V split phase	
Efficiency	98.1 % peak / 97 % CEC	
Recommended HELIOS		
Why this counts	Inverter charger rated 200 A. One HELIOS meets full charge/discharge capability.	Inverter charger rated 200 A. Two HELIOS deliver 400 A combined for full performance and surge margin.
Usable Energy at Recommended Configuration	16 kWh	32 kWh
Per-battery Capability	16 kWh, 51.2 V, 314 Ah, 200 A charge and discharge, IP65 outdoor rated.	

* (B) Built-in breaker: BAT side: 80V/250A, Grid side: 400V/100A, GEN side: 400V/63A, LOAD side: 400V/100A.

For Installers

- Outdoor-rated IP65 design for reliable field installs.
- Direct 48 V DC integration with 200 A capacity.
- Closed-loop CAN communication with auto-detect setup via LYNK II.
- Clean, code-compliant wiring using Discover conduit options.
- Scalable parallel configuration for future expansion.

For Home/Business Owners - Site Operators

- Seamless backup power with grid or generator support.
- Expandable storage capacity up to 580 kWh.
- Time-of-use and self-consumption ready.
- Compact footprint with quiet operation (< 60 dB A).
- 10-year warranty backed by Discover and Growatt service networks.



Simple & Flexible Installation Options

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

- **Discover Generic Wireway.** Pre-engineered for HELIOS systems, it provides a clean, organized pathway for routing both power and communication cables while maintaining easy service access..
- **Custom / Installer-Supplied Wireway.** For non-standard layouts, installers can fabricate their own protective cable channel to suit site conditions and mounting configurations.

HELIOS ensures every installation is professional in appearance, secure in operation, and straightforward to commission.



WHY CHOOSE THIS SOLUTION

The **Discover HELIOS + Growatt SPH** pairing unites high-efficiency inverter control with advanced lithium storage to provide a resilient, grid-interactive backup system. Growatt's 98 %-efficient hybrid platform and HELIOS's 4th-generation BMS maintain closed-loop communication for accurate power management, simplified setup, and long-term reliability. Native 48 V integration, 10 ms UPS-grade transfer, and modular scalability make this combination the clear choice for modern homes and installers seeking performance, flexibility, and compliance across North America.