Your gateway to a more resilient supply of clean energy.

Adding an Evolve energy storage system to your new or existing solar PV system has never been easier with the Evolve Hub Max. Loaded with an energy management controller & gateway, an automatic bypass switch, and an 8-channel programmable power meter, multi-mode solar plus storage configurations are more flexible than ever. The AC coupled architecture ensures compatibility with your preferred solar PV inverter brand.

Powerful monitoring tools for the fleet manager and system owner.

Online monitoring, diagnostic, and service alarm tools ensure installers can deliver proactive customer service with confidence. System owner tools include real-time and historical energy consumption and performance data from solar, battery, and utility power. Emergency power reserve controls allow users to maximize backup reserve capacity in advance of an extreme weather event or planned outage.

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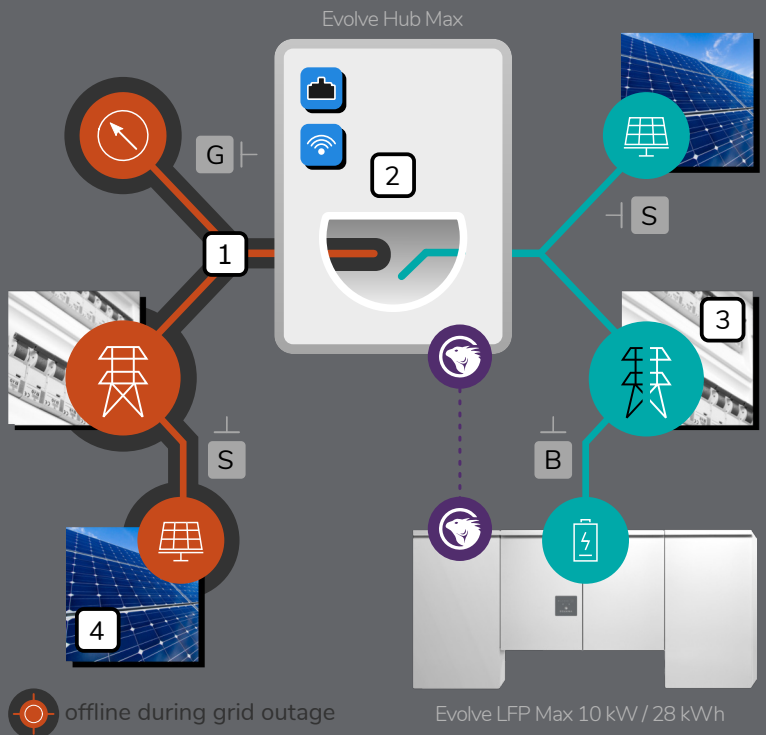
Flexible local and fleet controls unleash maximum value from your PV solar system.

Evolve's energy management controller algorithms include solar self-consumption mode with or without time-of-use scheduling. For high priority energy resiliency, the Evolve ESS can also be run purely as a backup battery. Certified as an Open ADR 2.0b VEN client[-1] and Sunspec IEEE 2030.5/CSIP compliant, it is fleet ready for demand response and other grid service applications.

Model
Evolve Hub Max
* For use with the Evolve LFP Max

AC Coupling **Solar + Storage** with **Evolve LFP Max**



PV inverters rated up to 15.4 kW AC with power limiting[-2] to 10 kW AC during backup operation may be connected to the Evolve Hub Max.

G B S

Energy savings algorithms are performed via CT measurement of the grid, battery, and solar PV. The on-board 8-channel power meter provides flexibility for any solar plus storage configuration.

Internet connected via wi-fi or ethernet.

1. The Evolve Hub Max is line side tapped to a single 100 Amp circuit[-3] at the main electrical panel.
2. An automatic transfer switch creates a solar plus storage microgrid during a grid outage.
3. A dedicated backup panel[-4] powers the home's emergency loads through a grid outage.
4. Additional PV can be wired to the main panel to offset higher home energy demand.

Gateway communication and microgrid control.

AC RATINGS		
Rated voltage, frequency	[V], [Hz]	240/120 split-phase, 60
Maximum continuous operating current	[A]	100.0
Maximum continuous operating power	[kVA]	19.2
Voltage operating range (power supply)	[V]	100 - 264
Frequency operating range (power supply)	[Hz]	47 - 63
Maximum output over-current rating	[A]	100.0
Protective class (I, II, or III)		Class I
Over-voltage category (OVC I, II, III, or IV)		OVC III
Pollution degree		3
Lightning protection		IEEE 62.41.2, location category B, low exposure
GENERAL RATINGS		
Mounting method		Wall-mount
Ambient operating temperature range	[°C]	-20 to +50
Maximum relative air humidity, altitude	[%], [m]	95 (non-condensing), 2000
Protection degree		Type 3R (NEMA), Indoor / Outdoor
Cooling method		Natural convection
Energy consumption	[W]	20
Dimensions, W x H x D	[in] / [mm]	19.5 x 17.5 x 9 / 495 x 445 x 229
Weight	[lb] / [kg]	35 / 15.9
ENERGY MANAGEMENT - MONITORING & CONTROL		
Device management interface		Cloud-based fleet management and consumer interface
Web browsers supported		Chrome, Firefox, Safari
Local operating modes		PV self consumption, TOU scheduling, backup power
Fleet aggregation control		Open ADR 2.0 VEN client
Monitoring - network		Ethernet, Wi-Fi (802.11 a/b/g/n 2.4/5.0 GHz) Security: WEP, WPA / WPA2
Energy storage system communication		Modbus TCP-IP
Current transformer type and rating		Split-core, 333 mV, 200 A (x2), 50 A (x3)
Power meter		8 channel, 4 quadrant: V, A, kVA, kVAR, kWh
Backup battery - controller / gateway		AGM sealed lead-acid, 12 V, 9 Ah
CERTIFICATIONS & WARRANTY		
EMC		FCC Part 15 Class B
Safety		UL 1741, CSA 22.2 No 107.1
Warranty		10 years
Utility		Rule 21 CSIP, IEEE 2030.5

The Evolve Hub Max is a peripheral of the Evolve Max home energy storage system. This product is defined under the category of Interconnection System Equipment (ISE) for use in utility interactive and/or stand alone power systems under the scope of the UL 1741 standard, and is intended to be operated in parallel with an electric power system (EPS) to supply power to common loads.

1- Demand response requires integration with a third party energy service provider. Consult Eguana Technologies for more information.
2- The maximum PV breaker rating input to the backup panel is 80-Amp. PV inverters rated higher than 10 kW AC connected to the backup panel must be equipped with an active power limiting feature (hardware or software) that does not exceed the Evolve ESS charge rating of 10 kW during backup operation. PV inverters without active power limiting must not exceed the 10 kW AC nameplate rating.
3- The Evolve LFP Max is controlled by the Evolve Hub's energy management controller to limit the combined output of the ESS and the backup-connected PV to 80% of the circuit protection rating (125% rule). A back-feed rated breaker is required. Consult the elecrical code regarding breaker placement based on the electrical service and busbar ratings of the electrical panel.
4- Customer supplied. The sum of all load circuits must not exceed the ESS backup continuous output rating of 10 kW AC.

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