

## Take charge of your energy future.

Introducing the Evolve LFP - a versatile, residential powerhouse for homes both large and small. Evolve is fully loaded to deliver your preferred energy savings program when installed in parallel with a solar PV system. Automated backup power capability ensures your essential home loads keep running even when the power goes out.



### Industry leading lithium-ion batteries

Pylontech's lithium iron phosphate battery modules offer safe, high performance deep-discharge use in daily cycle applications, and are backed by a 10 year warranty and performance guarantee. The rackmount format 3.5 kWh modules are thoughtfully designed with quick and easy on-site installation in mind.

## Features

---

Base model: 5 kW power / 14 kWh storage.

Expandable storage: from 14 kWh to 28 kWh.

Outdoor rated.

Lithium iron phosphate batteries with 10 year warranty with a performance guarantee, and 15 year, 6000+ cycle design life at 90% depth of discharge.

Automated backup power with solar charging, black-start, and emergency reserve controls.

SGIP approved in California.

---



# EGUANA

### Simple, modular installation with new or existing solar PV systems.

The Evolve is easily coupled to new or existing solar installations using your preferred solar inverter brand. The modular wall-mount format for both indoor or outdoor use maximizes installation flexibility without consuming valuable space.

### When it comes to energy resiliency, one size does not fit all.

Evolve's expandable battery capacity means essential home loads can be powered through multi-day grid outages. Black-start capability ensures the battery can be recharged directly from the solar PV system.



Model  
**EVOLVE LFP**  
5 kW / 14 kWh

**PCS: AC RATINGS**

Rated power	[kVA]	5.0
Rated voltage	[V]	240/120 split-phase
Rated frequency	[Hz]	60
Rated current	[A]	20.8
Maximum overcurrent protection <sup>1</sup>	[A]	60.0
Power factor range		0.8 lead to 0.8 lag
DC ground fault monitoring		Included

**BATTERY MODULE RATINGS**

Manufacturer/Model/Chemistry	Pylontech / US3000, US3000C / LiFePO <sub>4</sub>	
Voltage range	[Vdc]	44.5 to 53.5
Maximum charge & discharge current (recommended)	[A <sub>dc</sub> ]	74.0 (37.0)
DC capacity / (usable)	[kWh]	3.55 / (3.2)
Cycle life		>6000 @ 25°C

**DC ENERGY STORAGE RATINGS**

Maximum battery modules per cabinet		4
DC capacity (usable), per cabinet	[kWh]	14.2 (12.8)
Total maximum continuous PCS charge / discharge current	[A <sub>dc</sub> ]	100 / 125
Total maximum capacity (1C) <sup>-2</sup>	[Ah]	1184
Total maximum energy (1C) <sup>-2</sup>	[kWh]	56.83

**PCS: BACKUP POWER RATINGS**

Rated output power	[kVA]	5.0
Surge rating (6+ battery modules required)	[%]	120 (30 min), 170 (5 sec)
Transfer power interrupt time: to backup / to grid	[s]	4.0 / 0.0

**GENERAL RATINGS**

Mounting method		Wall-mount
Ambient operating temperature range (recommended)	[°C]	0 to 50 (15 to 30)
Relative air humidity, maximum	[%]	95 (non-condensing)
ESS roundtrip efficiency <sup>-3</sup>	[%]	> 85.7
PCS (inverter) CEC weighted efficiency	[%]	94.5
Protection degree		Type 3R (NEMA), Indoor / Outdoor
Galvanic Isolation		Transformer
Cooling - PCS / Battery		Fan (thermostat) / convection
Energy consumption, standby (operating)	[W]	8 (30)
Display / EMS communication		LED: battery SOC level, system status / Modbus RS-485

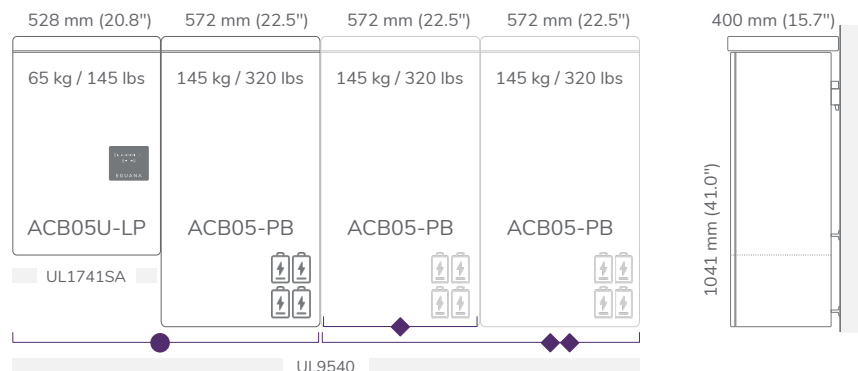
**CERTIFICATIONS & WARRANTY**

EMC	FCC Part 15 Class B
Safety	UL 9540, UL 1741SA, UL 1973, CSA 22.2 No 107.1, IEEE 1547
Utility interface	CSIP Rule 21, HI Rule 14H
Warranty / battery performance guarantee	10 year / 60% capacity, pro-rated

1- The installed circuit breaker rating is dependent upon the interconnected Evolve Hub model rating.

2- The max. specified DC capacity & energy ratings are constrained by the max number of battery modules in a single BMS CANbus network; US3000 limit is eight modules, US3000C limit is sixteen modules.

3- Combined minimum roundtrip efficiency (RTE) of the base PCS model with two battery modules at <0.5C charge & discharge rating. The RTE increases with each additional battery module.

**Ordering Information**

Catalog No.	Parts
<b>Base system</b>	
● Evolve LFP	1 ea ACB05U-LP + 4 🔋
	1 ea ACB05-PB
<b>Expansion</b>	
◆ Evolve EXP-14	1 ea ACB05-PB + 4 🔋
◆◆ Evolve EXP-28	2 ea ACB05-PB + 8 🔋
14 ● 28 ●◆ 42 ●◆◆	Capacity Selector, kWh