



EGUANA



EVOLVE LFP MAX

5 kW / 14 kWh

EVOLVE LFP MAX expands upon the same great features as the EVOLVE LFP with the ability to pair ESS units⁻¹ for whole home backup power applications.

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

The Evolve LFP Max 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.

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

Combine two ESS units to create a 10 kW/28 kWh whole home energy storage solution⁻¹.

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.

DATASHEET

Technical Specifications

Model: EVOLVE LFP MAX

PCS: AC RATINGS

Rated power	[kVA]	5.0
Rated voltage	[V]	120
Rated frequency	[Hz]	60
Rated current	[A]	41.6
Maximum overcurrent protection ²	[A]	100.0
Power factor range		0.8 lead to 0.8 lag
DC ground fault monitoring		Included

PCS: BACKUP POWER RATINGS

Rated power	[kVA]	5.0
Surge rating, 30 minute	[%]	120
Surge rating, 5 seconds	[%]	170
Transfer interrupt time: to backup	[s]	4.0
Transfer interrupt time: to grid	[s]	0.0

BATTERY MODULE RATINGS

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

DC ENERGY STORAGE RATINGS

Maximum battery modules per cabinet		4
DC capacity (AC usable), per cabinet	[kWh]	14.2 (12.8)
Total maximum continuous PCS charge / discharge current	[A _{dc}]	200 / 250
Total maximum capacity (1C) ⁻³	[Ah]	1184
Total maximum energy (1C) ⁻³	[kWh]	56.8

GENERAL RATINGS

Mounting method	Wall-mount	Configuration options	Pilot / Co-Pilot
Ambient operating temp range (recommended)	[°C] 0 to 50 (15 to 30)	Energy consumption standby (operating)	[W] 16 (60)
Relative air humidity, maximum	[%] 95 (non-condensing)	Galvanic Isolation	Transformer
ESS roundtrip efficiency ⁴	[%] > 85.7	Cooling - PCS / Battery	Fan (thermostat) / convection
PCS CEC weighted efficiency	[%] 94.5	EMS communication	Modbus TCP-IP
Display	LED: battery SOC level, system status	Protection degree	Type 3R (NEMA), Indoor / Outdoor

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- 10 kW / 28 kWh is achieved by pairing two ESS units; one of each configured in pilot and co-pilot mode. Consult Eguana Technologies for more details.

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

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

4- 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.

