

C&I Outdoor All-in-One ESS

Applications

- Suitable for industrial parks and commercial complexes.

Cabinet Design

- Modular design for flexible expansion, easy installation and maintenance.
- Intelligent liquid cooling system.
- IP55 protection rating (optional C5), suitable for outdoor installation.
- Integrates EMS functions and supports various EMS energy strategies.

Safety Features

- Explosion - proof with aerosol for module and cabinet level, supported fire protection system.
- Integrated emergency power - off (EPO).
- Leakage current detection protection.

Market Impact

- Enables participation in power market transactions.
- Meets demand management needs of industrial parks and promotes industrial and commercial energy storage development.



Modular design, scalable and maintenance-friendly



Supports remote upgrades via multiple communication methods



Ultra-high energy density, compact size, easy to install and transport



Handles 100% unbalanced load and 110% long-term overload supported



Adjustable output power configurable charge and discharge power, strong grid adaptability

Battery input parameters

Product code	Y52R05-314-AC
Cell type	LFP(LiFePO ₄)
Battery module rated energy (kWh).	52.25
Battery module configuration	1P52S
Number of battery modules	5
System available energy (kWh).	261.248
Rated voltage (V).	832
Operating voltage range (V).	676-936
Maximum charge/discharge current (A)	198.5
Depth of Discharge	90%-100% (90% Recommend)

Grid-connected output parameters

Rated output power (kW).	125
Maximum grid-connected output(kVA).	137.5
Maximum apparent power (kVA).	137.5
Rated output voltage (V).	400, 3L/N/PE
Output voltage range (V).	340-440
Grid frequency (Hz).	50/60
Maximum grid-tied output current(A).	198.5
Maximum input current(A).	198.5
Power Factor	-1~1
Totalcurrent waveform distortion	<3%

Efficiency

Maximum PCS efficiency	98.6%
System efficiency	88.0%

Protection

Reverse battery protection	integration
Anti-islanding protection	integration
AC overcurrent protection	integration
AC short-circuit protection	integration
AC surge protection	Type II

Basic parameters

Operating temperature range(°C)	-25~55
relative humidity	10%-95%
Maximum operating altitude(m)	4000(>2000 derating)
Cooling method	Module: Liquid Cooling/ PCS: Smart Fan Cooling
Interactive	LED, WLAN+APP
Methods of Communication	WiFi/4G/LAN/Bluetooth
Communication protocols	Modbus RTU ,ModbusTCP
Weight (kg)	2580
Dimensions (W×H×D mm)	1050×2250×1400
Topology	Non-isolated
Ingress protection	IP55 (battery compartment)
Fire protection system	Aerosol, Water
Noise Emission(dB)	≤75
Charge/Discharge Switching Time(ms)	<50

Certification

PCS	IEC 62477,AS/NZS 4777.2
System	IEC 62477, IEC62040, IEC 62619, IEC 60730, UV EMC , EN 303645 ,EN 18031, PSTI, AS/NZS 4777.2
EMC	IEC 61000-6-1, IEC 61000-6-2, IEC 61000-6-3, IEC 61000-6-4
Other	UL9540A