



EV Charging Solution Provider

GridLink
Up to **300** kW



Product Overview

GridLink incorporates an Energy Storage System (ESS) that utilizes Li-ion batteries as energy storage devices. Equipped with both a local and remote Energy Management System (EMS), GridLink enables operators to take advantage of the benefits of peak shaving, and greater flexibility in ancillary grid services through its bidirectionality. The integration of the ESS allows for high power charging output with significantly less input requirements. GridLink features a sleek, thin-walled design suitable for various applications including parking lots, commercial centers, EV experience centers, fleet depots, charging hubs, and more. GridLink is built with serviceability and flexibility, offering easy access for servicing and maintenance.

Awards



Data Comparison

GridLink	Air - cooled	Liquid - cooled
Compact Design	Thin-walled design Modular design to fit unique install requirements.	
Battery-to-Grid Functionality	Two 22kW bidirectional AC/DC power modules.	Two 60kW bidirectional AC/DC power modules.
	The battery can intelligently provide power to the grid, building, or other ancillary installations on the same circuit.	
Off-grid Functionality	GridLink can provide energy to any local AC load such as a building or other critical equipment during a blackout period.	
High Power Output with Less Input	Charging power can be modularly increased up to a total of 194kW output.	Charging power can be modularly increased up to a total of 300kW output.
Photovoltaics Functionality	PV direct integration up to 30kW	PV direct integration up to 60kW
	External DC/DC power module with MPPT function	
Advanced Battery Management System (BMS):	With the adoption of next-generation NXP BMS chips, battery cell voltage monitoring resolution has been enhanced from 5 mV to 2 mV, enabling significantly more precise and reliable battery management.	



Innovative In-house Battery Solution

With a decade of innovation in renewable energy and a deep commitment to customer feedback, we have developed a clear understanding of what today's energy landscape demands.

Our battery solutions are built around three core pillars: High Performance, Unparalleled Safety, and Easy Deployment. These principles shape every design decision—from maximizing charging speed and energy density to ensuring reliable safety systems and effortless installation.

Battery Highlights



High-Speed Active Balancing at Cell Level

Equipped with a 10A active balancer, the system optimizes energy flow between cells—enhancing efficiency and lifespan, especially at end-of-life—far beyond 0.1A passive solutions.



Multi-Sensor Early Warning System

Each pack is equipped with 4 dedicated safety sensors—monitoring hydrogen (H₂), carbon monoxide (CO), air pressure, and light—to enable real-time detection and early warning before potential thermal events occur.



Triple Liquid-Cooled Plates for Superior Thermal Management

Each pack is equipped with three liquid cooled plates, offering a heat dissipation surface 2.38× larger than conventional designs. This keeps battery temperatures below 37°C, significantly enhancing performance and extending lifespan.



XCharge Exclusive 5-Layer Fan System

A proprietary 5-layer fan array operates continuously to ensure stable airflow, efficient heat dissipation, and enhanced system reliability under all conditions.



The world's first built in water tank

Self-contained water system eliminates the need for separate water access.



Level 2 fire protection with Built-in UPS Support

Level 1: Load disconnection and active cooling request

Level 2: Full system power shutdown with UPS-supported fire protection

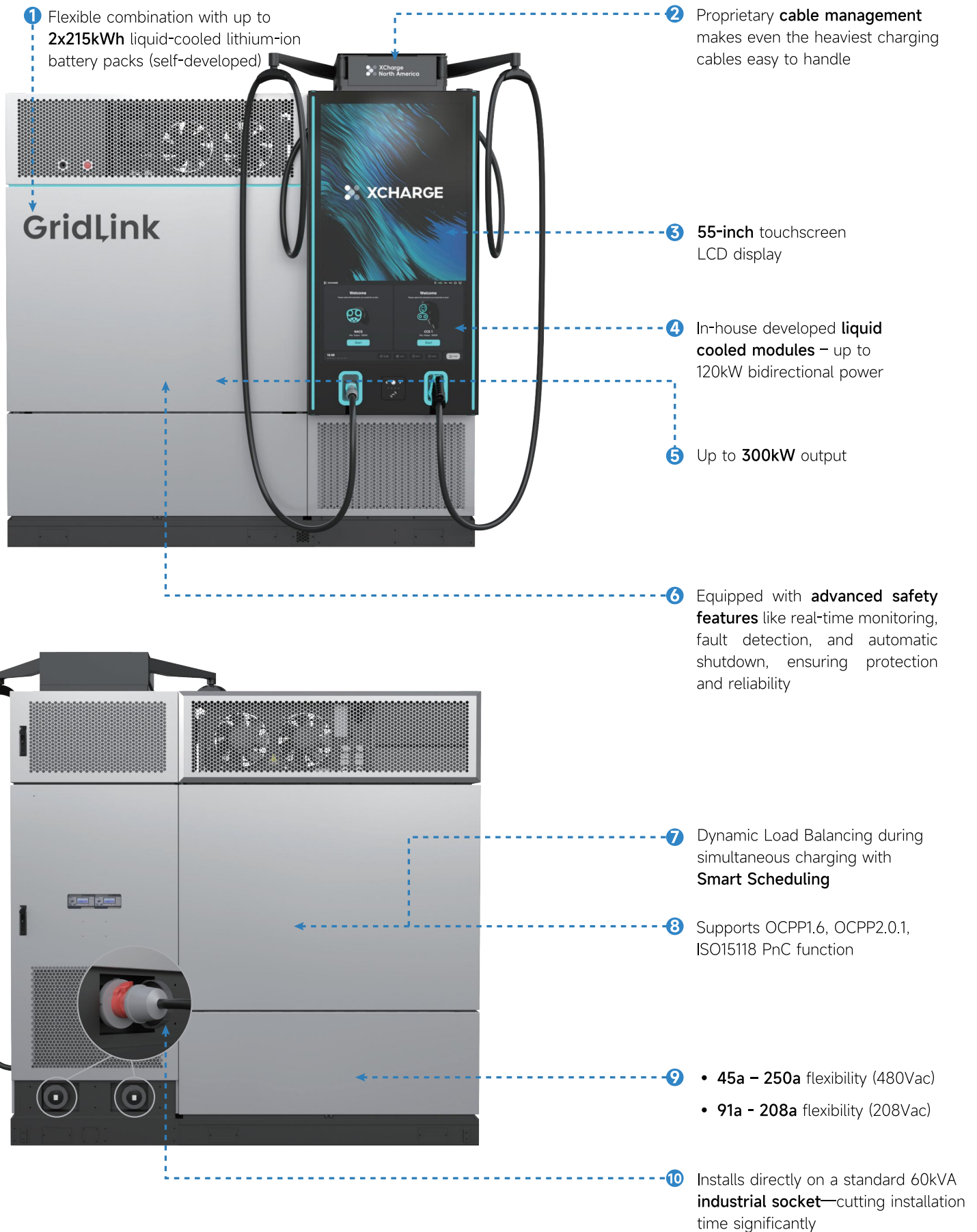
Instant response with UPS support—outperforming traditional delayed systems.



Explosive Gas Venting & UL 9540A Compliance

Actively vents flammable gases to prevent accumulation—ensuring levels remain below 25% of enclosed volume, as required by UL 9540A.

System Overview



Technical Specifications

GridLink			Air-Cooled		Liquid-Cooled		
Basic Parameter	Product Specification	Energy-storage-system integrated compact charging station	194 kW + 215 kWh (ESS extendable)		300 kW + 215 kWh (ESS extendable)		
		Type	DC charging station				
		Dimension(w*d*h)	GridLink	7.34*3.24*7.72 ft			
		Cable management and metal base is included	GridLink XL	12.05*3.24*7.72 ft			
		Installation	Floor type				
		Material	Industrial grade alloy				
		Color	Silver				
	Energy-Storage- System	Weight	7,936 lbs				
		Cell Type	LFP L280K				
		Rated Energy	215 kWh / 2*215 kWh				
		Max. recharge Power	22 kW / 44 kW		60 kW / 120 kW		
		Battery Charging Rate	≤0.6C				
		Battery Discharge Rate	≤1C				
		Battery Efficiency	≥94.5% under nominal situation				
	Charging System	Connectors	2				
		Charging Power	DC Max. 194 kW		DC Max. 300 kW		
		Power Distribution	2 connectors intelligent distribution				
		Charging Voltage	150V~1000V, 300V~1000V(Continously max output)				
		Efficiency	≥96.5%				
	Meter	AC Side	AC meter				
		DC Side	2-access DC meter				
	Cooling System	Battery Cooling	Liquid-cooled				
		Power Modules	Air-cooled		Liquid-cooled		
		Cable Cooling	Air-cooled				
	Fire Suppression System		Water				
	Payment System		RFID, credit card				
	Connectivity		GSM & LTE & LAN				
	Communication		OCPP 1.6J / OCPP 2.0.1				
Environment Parameter	Applicable Site		Outdoors				
	Ambient Temperature		-22°F ~ 131°F				
	Humidity		≤95%, no condensation				
	Altitude		≤6562 ft				
	EMC Emission		Class A				
	Medium		No explosive hazardous; No toxic & harmful gases.				
	Interference		No strong vibration and shock, no strong electromagnetic interference				
	AC Side Voltage		3-phase 480V _{AC} ±10%		3-phase 208V _{AC} / 480V _{AC} ±10%		

Technical Specifications

GridLink		Air-Cooled	Liquid-Cooled
Input & Output	Input Frequency (AC)	60Hz	
	DC Voltage Range	200VDC-1000VDC	
	DC Constant-power Voltage Range	300VDC-1000VDC	
	Nominal Power Output (Rectifying Mode)	194 kW	300 kW
	Nominal Power Output (Off-Grid Mode)	150 kW	180 kW
	Nominal Power Output (TO-Grid Mode)	44 kW (including Auxiliary power consumption)	120 kW (including Auxiliary power consumption)
	DC Current Output	Max. 350A CCS1 / NACS continuously	Max. 400A CCS1 / NACS continuously
	Photovoltaics	Input voltage range: 300-740 VDC Max Power input: 30 kW	Input voltage range: 300-900 VDC Max Power input: 60 kW
Additional Function	Off-grid Function	Able to charge EV during blackouts. Able to provide energy to an AC load during blackouts	
	IP Ranking	IP54	
Safety	Safety Protection	Input protection, Overcurrent protection, Lightning protection, Over-temperature protection, output over-voltage protection, fan protection, short circuit protection, Emergency button, Flood protection, Ground protection, Dumping protection, Smoke protection, on-board fire suppression	
	Battery	UL1973, UL 9540A, NFPA855, NFPA69	
Standard	System	UL9540, UL2202, UL2231-1, UL1973, FCC part15B and ICES-003	
	B2G	UL1741SB	UL 1741, IEEE 1547, IEEE1547.1 , UL 1741SB , SRD2.0

Detection Method		Residual Current Monitoring	
Ground Fault Protection	Ground Fault Trip Threshold	30mA (AC)/ 6mA (DC)	
	Response Time	100ms	
	Protection Action	Charger output shut-down and fault indication	
	Compliance	UL 2231/ IEC 61851-1	

Adaptive Power Capability Table

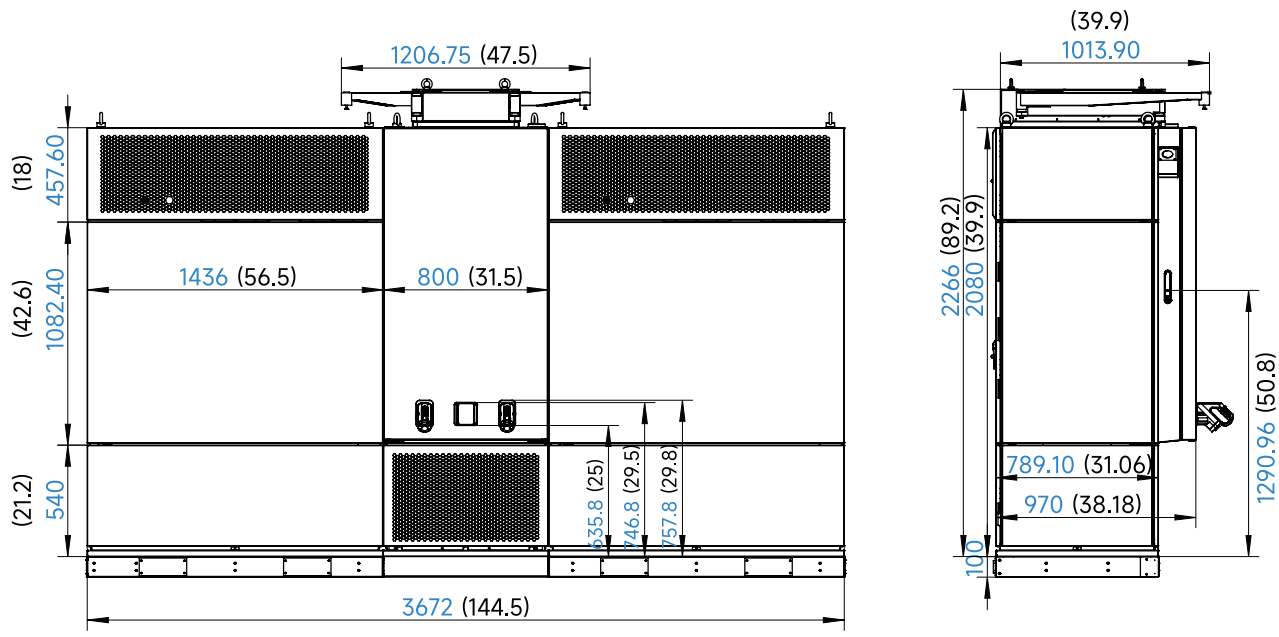
GridLink includes an adjustable power output function, allowing it to adapt to a site’s power availability without requiring any hardware changes. This flexibility supports safe and reliable operation even in lower power environments and can be reconfigured as a site’s power capacity evolves over time. The power output can be adjusted via the XCharge backend or a firmware tool during commissioning or servicing.

GridLink Air-Cooled								
Input Power (kVA)	15	20	25	31	36	41	47	51
ACDC Output Power (kW)	10	15	20	25	30	35	40	44
Input Current @ 480V (A)	33	39	46	52	58	65	71	76
Recommended Breaker Size @ 480V (A)	45	50	60	70	80	90	90	100
Battery Augmentation (kW)	150	150	150	150	150	150	150	150
Max Charging Capacity (kW)	160	165	170	175	180	185	190	194
Battery Recharge Time	21h 30m	14h 20m	10h 45m	8h 36m	7h 10m	6h 9m	5h 22m	4h 53m

GridLink Liquid-Cooled							
Input Power (kVA)	18	28	39	60	87	113	135
ACDC Output Power (kW)	10	20	30	50	75	100	120
Input Current @ 208V (A)	105	134	164	223	/	/	/
Input Current @ 480V (A)	48	61	73	99	131	163	188
Recommended Breaker Size @ 208V (A)	125	150	200	250	/	/	/
Recommended Breaker Size @ 480V (A)	60	80	100	125	175	225	250
Battery Augmentation (kW)	180	180	180	180	180	180	180
Max Charging Capacity (kW)	190	200	210	230	255	280	300
Battery Recharge Time	21h 30m	10h 45m	7h 9m	4h 15m	2h 45m	2h 9m	1h 45m

Mechanical Dimensions

Unit: mm / inch



GridLink XL

MORE INFORMATION:

sales@xcharge.us
XCHARGE Energy USA Inc
19121 Marketplace Avenue, Ste 2-145, Kyle, Texas, 78640