



EV Charging Solutions Provider

# GridLink

## Up to 194 kW



## Product Overview

GridLink is a DC charger with an integrated Energy Storage System (ESS) that utilizes lithium-ion batteries. Equipped with both local and remote Energy Management Systems (EMS), it enables operators to benefit from peak shaving and offers enhanced flexibility for ancillary grid services through its bidirectional capability. The ESS integration supports high-power charging with substantially lower input requirements. GridLink's slim, modern design fits a wide range of applications, including parking lots, commercial centers, EV experience zones, fleet depots, charging hubs, and more. Designed for flexibility and serviceability, it allows easy access for maintenance and support.

## Key Highlights



### High Power Efficiency with Minimal Grid Input

Leverage a powerful 194 kW energy output from the storage system with just 44 kW AC input from the grid, maximizing energy efficiency and reducing dependency on traditional power sources.



### Peak Shaving & Smart Load Management

Optimize energy costs with bidirectional AC/DC power modules that intelligently balance supply and demand by storing excess energy and delivering power back to the grid when needed.



### Grid Resilience & Uninterrupted Backup Power

Ensure continuous power supply to critical infrastructure, buildings, and essential equipment during outages, keeping operations running smoothly.



### Modular, Flexible & Scalable Design

Adapt to evolving energy needs with a plug-and-play system that allows for easy expansion and seamless integration into various applications.



### Advanced Safety & Reliability

Equipped with multi-layer thermal runaway protection, fire detection, and rapid response systems, ensuring the highest level of safety and reliability.



### Seamless Renewable Energy Integration

Maximize sustainability with built-in photovoltaic (PV) functionality, offering up to 30 kW, allowing direct solar energy storage for a greener, more self-sufficient power solution.

# Innovative In-house Battery Solution



## Battery Highlights



### Pack-Level Fire Suppression

Each pack is equipped with 4 sensors (CO, H<sub>2</sub>, air pressure, and light) and features 3 security levels. It supports early warning and automated response, with the world's first built-in water tank for enhanced safety.



### SoC Active Balancing at the Cell Level

Utilizes unique active balancing technology at the cell level, transferring energy from higher to lower cells with a 10A current, maximizing efficiency and ensuring more stable performance.



### Advanced Temperature Control

Equipped with a triple-layer side liquid cooling system, providing 2.38 times more heat dissipation surface than competitors, efficiently maintaining a constant temperature of 37°C.



### Unparalleled Safety

Built to meet leading safety standards—including UL 1973 and NFPA 855 (2023). Gas concentration is maintained below 25% LFL, aligned with NFPA 69 for fire prevention.



### Easy Maintenance with Pack-Level Replacement

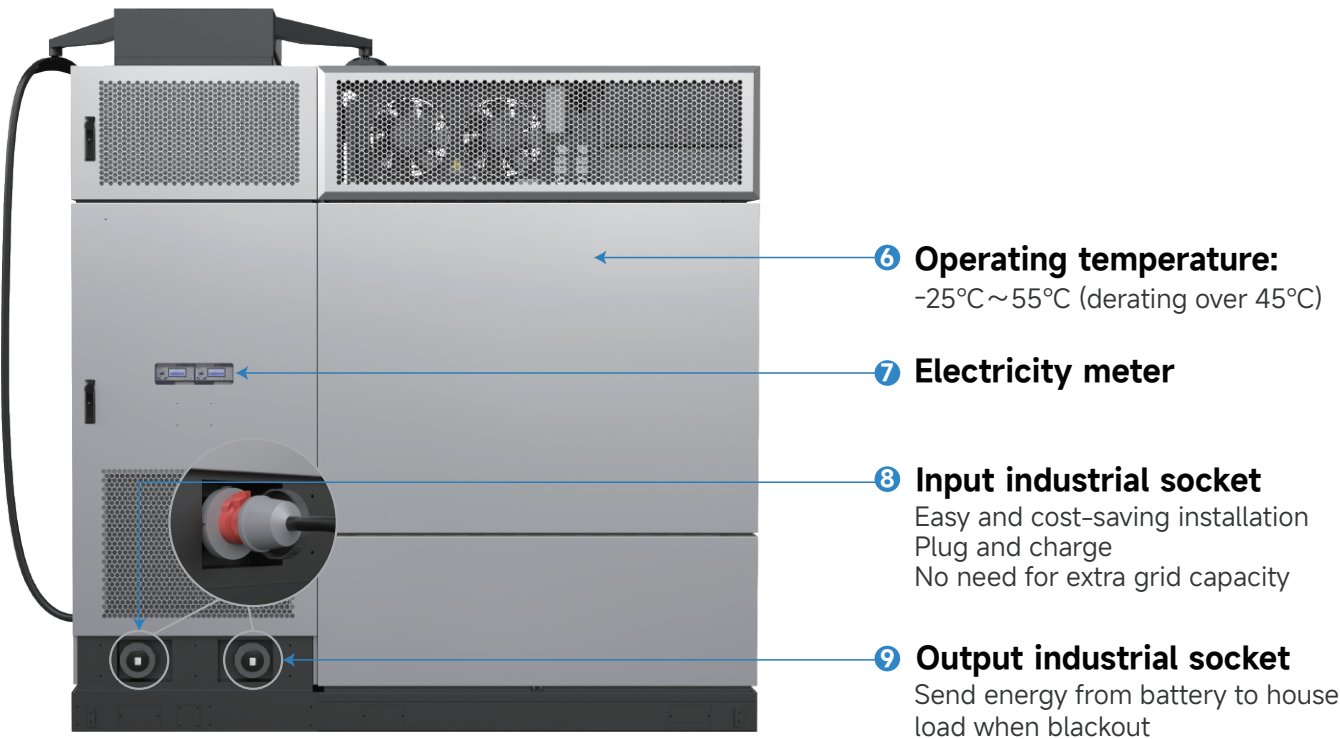
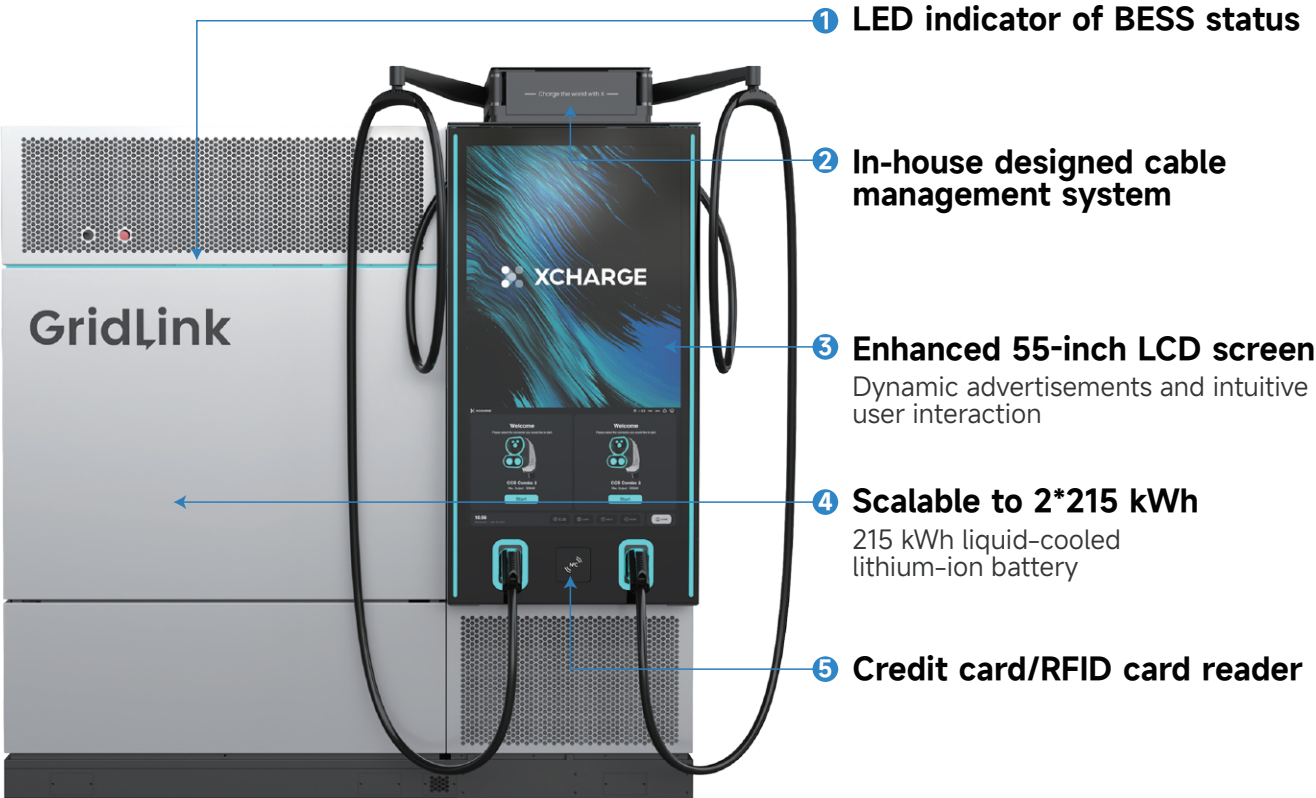
Designed for easy maintenance, enabling straightforward pack-level replacement.



### High-Power Performance (Up to 1C)

Delivers fast 1C charge/discharge rates, reducing the number of battery packs required and maximizing return on investment.

# System Overview



|          | DC Max.                                  | Up To  |
|----------|------------------------------------------|--------|
| GridLink | 150 kW + 22 kW / 44 kW = 172 kW / 194 kW | 194 kW |

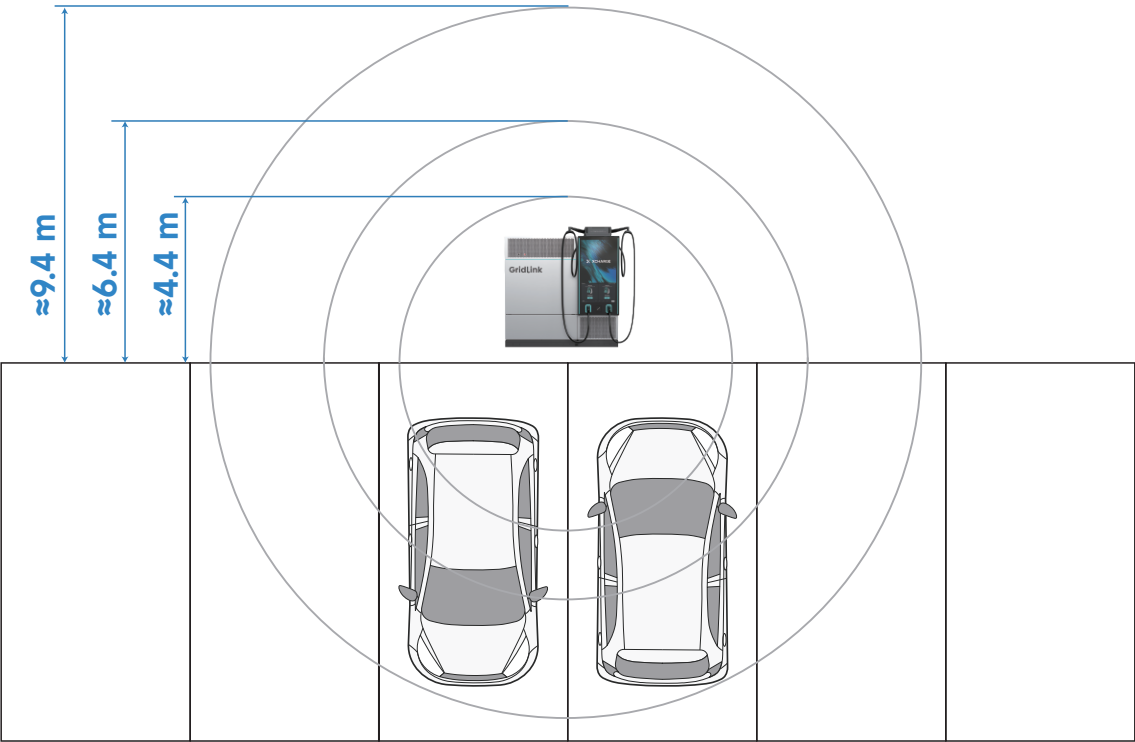
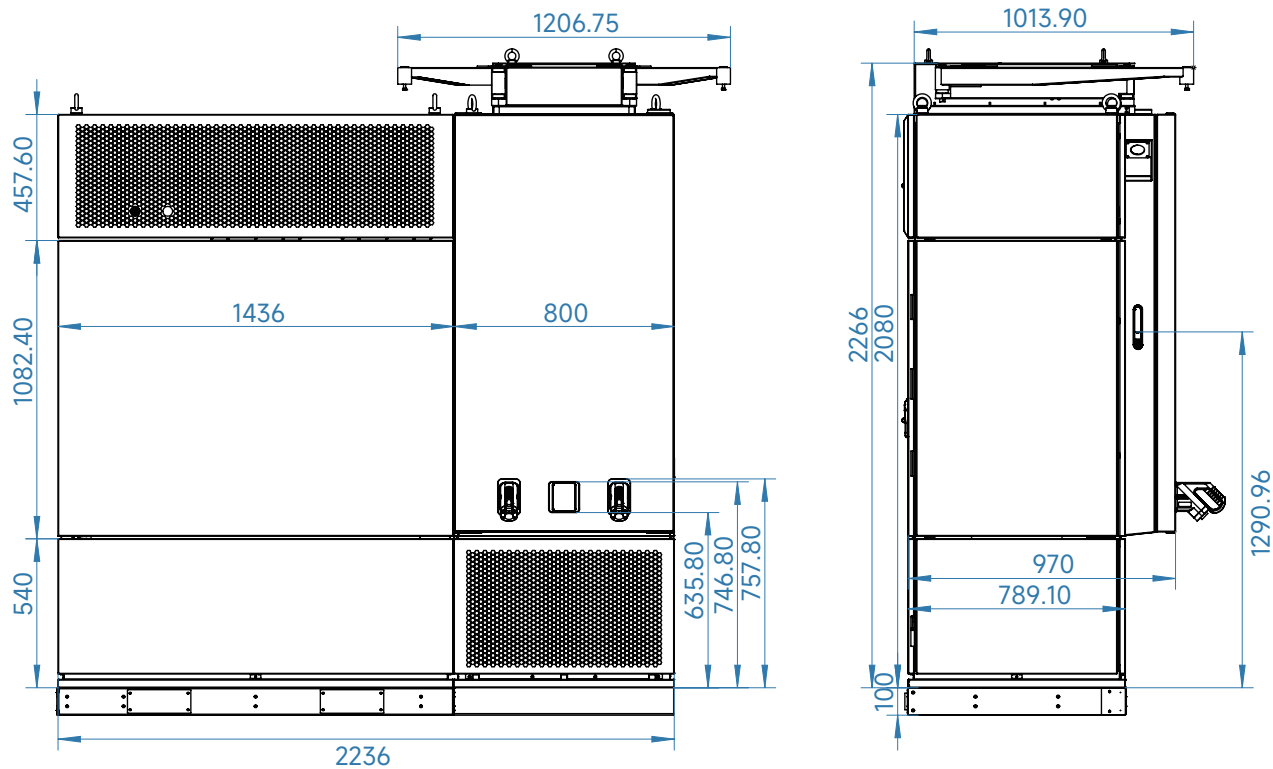
# Technical Specifications

Battery integrated compact charging station 194 kW with 215 kWh energy storage (ESS extendable)

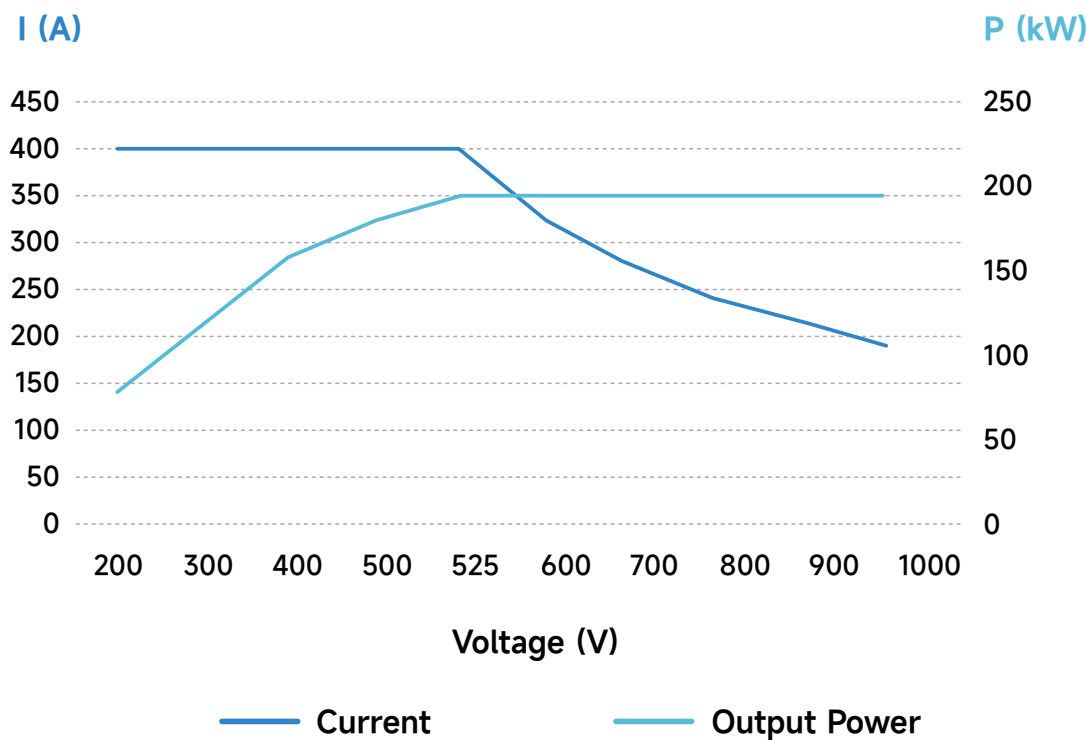
| GridLink              |                                        |                                                                                                                                                                                                                                                                    |                                       |                                                                 |
|-----------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------------|
| Basic Parameter       | Product Specification                  | Type                                                                                                                                                                                                                                                               | DC charging station                   |                                                                 |
|                       |                                        | Dimension(w*d*h)                                                                                                                                                                                                                                                   | Cable management and metal base       | 2236*970*2080 mm (Not included)<br>2236*1014*2366 mm (Included) |
|                       |                                        | Installation                                                                                                                                                                                                                                                       | Floor type                            |                                                                 |
|                       |                                        | Material                                                                                                                                                                                                                                                           | Industrial grade alloy                |                                                                 |
|                       |                                        | Color                                                                                                                                                                                                                                                              | Silver                                |                                                                 |
|                       |                                        | Weight                                                                                                                                                                                                                                                             | 3600 kg                               |                                                                 |
|                       | Energy-Storage-System                  | Cell Type                                                                                                                                                                                                                                                          | LFP                                   |                                                                 |
|                       |                                        | Rated Energy                                                                                                                                                                                                                                                       | 215 kWh / 2*215 kWh                   |                                                                 |
|                       |                                        | Max. Recharge Power                                                                                                                                                                                                                                                | 22/44 kW                              |                                                                 |
|                       |                                        | Battery Charging Rate                                                                                                                                                                                                                                              | ≤0.5C                                 |                                                                 |
|                       |                                        | Battery Discharge Rate                                                                                                                                                                                                                                             | ≤1C                                   |                                                                 |
|                       | Charging System                        | Battery Efficiency                                                                                                                                                                                                                                                 | ≥94.5% under nominal situation        |                                                                 |
|                       |                                        | Connectors                                                                                                                                                                                                                                                         | 2                                     |                                                                 |
|                       |                                        | Charging Power                                                                                                                                                                                                                                                     | DC Max. 194 kW                        |                                                                 |
|                       |                                        | Power Distribution                                                                                                                                                                                                                                                 | 2 connectors intelligent distribution |                                                                 |
|                       | Meter                                  | Efficiency                                                                                                                                                                                                                                                         | ≥96.5%                                |                                                                 |
|                       |                                        | AC Side                                                                                                                                                                                                                                                            | AC meter                              |                                                                 |
|                       | Cooling System                         | DC Side                                                                                                                                                                                                                                                            | 2-access DC meter                     |                                                                 |
|                       |                                        | Battery Cooling                                                                                                                                                                                                                                                    | Liquid-cooled                         |                                                                 |
|                       |                                        | Power Modules                                                                                                                                                                                                                                                      | Air-cooled                            |                                                                 |
|                       | Fire Suppression System                | Cable Cooling                                                                                                                                                                                                                                                      | Air-cooled                            |                                                                 |
|                       |                                        | Water                                                                                                                                                                                                                                                              |                                       |                                                                 |
|                       |                                        | Payment System                                                                                                                                                                                                                                                     |                                       |                                                                 |
|                       |                                        | Connectivity                                                                                                                                                                                                                                                       |                                       |                                                                 |
|                       |                                        | Communication                                                                                                                                                                                                                                                      |                                       |                                                                 |
| Environment Parameter | Applicable Site                        | Outdoors                                                                                                                                                                                                                                                           |                                       |                                                                 |
|                       | Ambient Temperature                    | -25℃~55℃ (Over 45 °℃ derating)                                                                                                                                                                                                                                     |                                       |                                                                 |
|                       | Humidity                               | ≤95%, no condensation                                                                                                                                                                                                                                              |                                       |                                                                 |
|                       | Altitude                               | ≤2000m                                                                                                                                                                                                                                                             |                                       |                                                                 |
|                       | Noise Emission                         | ≤75dB under nominal situation                                                                                                                                                                                                                                      |                                       |                                                                 |
|                       | EMC Emission                           | Class A                                                                                                                                                                                                                                                            |                                       |                                                                 |
|                       | Medium                                 | No explosive hazardous materials; No toxic & harmful gases.                                                                                                                                                                                                        |                                       |                                                                 |
|                       | Interference                           | Without strong vibration and shock; No strong electromagnetic interference                                                                                                                                                                                         |                                       |                                                                 |
| Input & Output        | AC Side Voltage                        | 3-phase 400V <sub>AC</sub> ±10%                                                                                                                                                                                                                                    |                                       |                                                                 |
|                       | Input Frequency (AC)                   | 50/60 Hz                                                                                                                                                                                                                                                           |                                       |                                                                 |
|                       | DC Voltage Range                       | 150-1000 VDC                                                                                                                                                                                                                                                       |                                       |                                                                 |
|                       | DC Constant-Power Voltage Range        | 300-1000 VDC                                                                                                                                                                                                                                                       |                                       |                                                                 |
|                       | Nominal Power Output (Rectifying Mode) | 194 kW                                                                                                                                                                                                                                                             |                                       |                                                                 |
|                       | Nominal Power Output (Off-Grid Mode)   | 150 kW                                                                                                                                                                                                                                                             |                                       |                                                                 |
|                       | Nominal Power Output (To-Grid Mode)    | 44 kW (Including auxiliary power consumption)                                                                                                                                                                                                                      |                                       |                                                                 |
|                       | DC Current Output                      | Max. 375A CCS2 continuously (boost 500A, 250A CCS2 optional) (646A max for whole charger)                                                                                                                                                                          |                                       |                                                                 |
| Additional Function   | Photovoltaics                          | Input voltage range: 300-740 VDC<br>Max power input: 30 kW                                                                                                                                                                                                         |                                       |                                                                 |
|                       | Off-Grid Function                      | Able to charge EV when blackout;<br>Able to provide energy to an AC load when blackout                                                                                                                                                                             |                                       |                                                                 |
| Safety                | IP Ranking                             | IP54                                                                                                                                                                                                                                                               |                                       |                                                                 |
|                       | 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 |                                       |                                                                 |

# Mechanical Dimensions

Unit: mm



# Output Power Curve



**MORE INFORMATION:**  
XCharge Europe GmbH  
Heseltücken 18, 22453 Hamburg  
eu@xcharge.com | T: 040 57128593  
www.xcharge.com