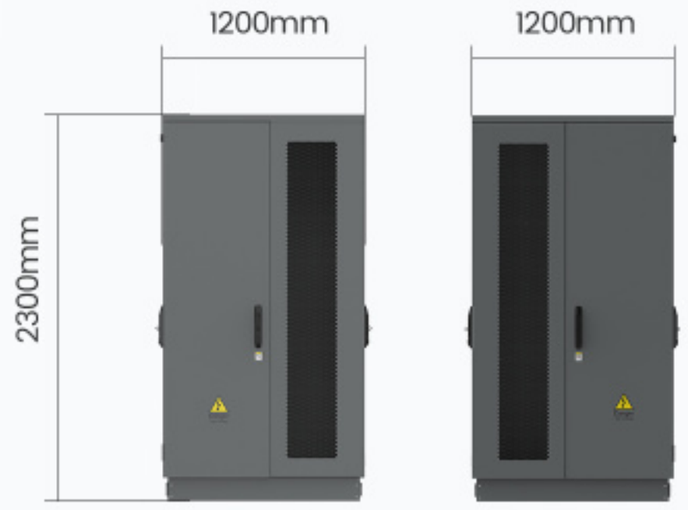
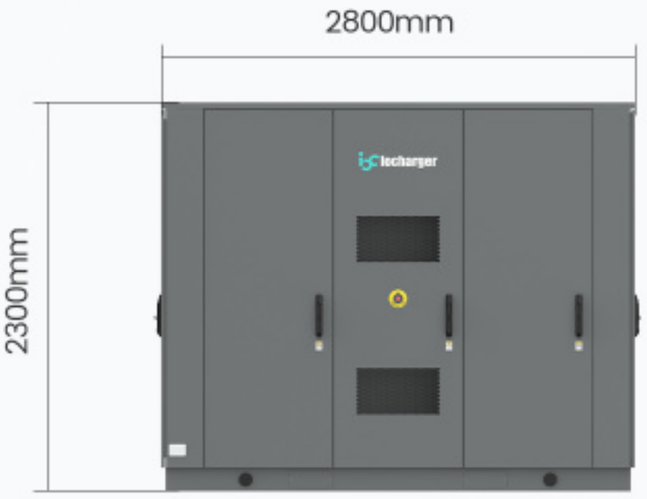
Power Cabinet





Specification

Specifications are subject to change without notice.

AC Input	**1600kW (Air Cooling)**
Earthing system	3P, PE, N
Input voltage	3-phase 400VAC ±15% (4 Routes)
Input frequency	50/60Hz
Power factor	≥0.98
Harmonic distortion (THDi)	<5%
General Characteristics	**1600kW (Air cooling)**
Power Module	40kW Independent airduct cooling power module
Number of outputs (Max.)	20
Minimum adjustable power	80kW
Connectivity	4G, Ethernet
Peak efficiency	≥95%
Enclosure rating	IP55, IK10
Operating altitude	≤2000m
Operating temperature range	-30℃ ~ +55℃
Storage temperature range	-30℃ ~ +80℃
Mounting	Floor Standing
Dimensions (H×W×D)mm	2300 x 2800 x 1200
Certification and Standards	**1600kW (Air cooling)**
Safety standards	EN IEC 61851-1 EN IEC 61851-23
Certification	EN 61000-6 Series EN IEC 61851-21-2 EN 301 489-1/-52 EN 301908-1/-13 EN 62311 LTE 8 Band

1600kW High-Power Integrated Matrix

Featuring an industry-leading 1600kW single-chassis integrated design, our system eliminates the efficiency loss of traditional fragmented units. As the "Super Energy Heart" of the station, it delivers extreme power density for heavy-duty trucking, mega-hubs, and highway corridors.

Independent Air-duct Cooling & Maintenance-Free

Equipped with IP65-rated independent air-duct modules, ensuring total physical isolation between core electronics and cooling airflow. This effectively eliminates erosion from dust, salt spray, and humidity, doubling the system lifespan and reducing on-site maintenance to near zero.

Smart 5-Level Priority Power Allocation

Proprietary algorithm-driven 5-level prioritization. From grid-demand response to paid "Boost" access, operators can monetize power like a premium commodity, assigning higher priorities to VIPs to maximize ROI.

- Level 1, Temporary Control Mode
  Applied during special operational needs such as demand response events, peak-time load management, or grid emergencies, where charging power may be reduced or redistributed.
- Level 2, Guest / Unregistered Users
  Non-registered users have the lowest regular priority, but are guaranteed a minimum charging power to complete their charging needs.
- Level 3, Registered Standard Users
  Regular registered users have higher priority than unregistered users, ensuring better charging performance in most cases.
- Level 4, VIP Members (High Priority without Boost)
  VIP users receive high charging priority even without a boost purchase, typically ahead of standard registered users.
- Level 5, Boost Access (Temporary Paid Priority)
  Users who temporarily pay for a boost get the highest charging priority, ensuring maximum available power allocation during their session

Flexible Terminal Configurations

Charging terminals support various specifications: 250A, 400A, 500A, 600A, and 1000A. Operators can flexibly mix and match these based on vehicle types to achieve the perfect balance between asset utilization and charging efficiency.

Functionality & Scalability via MQTT

Replacing legacy low-speed CAN-bus with the MQTT protocol. Its lightweight, high-bandwidth nature enables millisecond-level data sync, significantly enhancing real-time monitoring and providing limitless scalability for EMS and cloud platform integration.

Banking-Grade Security with TLS

The system implements end-to-end encrypted communication based on TLS 1.3 with Mutual Authentication, ensuring that charging commands, user privacy, and transaction data are immune to tampering or eavesdropping in any network environment.

Standard Compliance: ISO 15118-20

Fully compliant with OCPP 2.0.1 and the cutting-edge ISO15118-20 standard. Supporting Plug&Charge, it ensures seamless, long-term interoperability with global leading EV brands and next-generation models.

Terminal-Wide Proactive Safety Protection

The dispenser features a proactive safety array with high-precision thermal sensors embedded from the connector to the terminals. Combined with millisecond-level shut-off capability, it ensures absolute safety for vehicles and users during high-power sessions.