

# Satellite DC Charger



## Flexibility Output Power: Easily scale to 960 kW with 2 480 kW cabinets in series

- 6-12 pcs 40kW power modules per Power Unit cabinet
- One Power Unit can support up to 6 single air-cooling dispensers simultaneously
- Two single dispensers can be combined into a dual dispenser
- Any two or three single air-cooling dispensers can be combined into one liquid-cooling dispenser for enhanced performance

## Flexible expansion with additional power modules for installment investment

- Start with a minimum power unit and gradually expand by adding modules before increasing the number of units
- Each power unit can have a variable number of power modules and dispensers
- Reserve space and wiring during installation to facilitate future power unit and dispenser expansion with minimal effort

## Eco-friendly with Solar & Battery systems

- Dynamic pricing strategy support
- Storing energy for use and keep devices running without interruption
- Flexible power expansion with ESS and Solar
- Intelligent energy management system

## Secure Encrypted Communication (TLS Mutual Authentication)

- The system implements fully encrypted communication based on TLS (Transport Layer Security), ensuring all transmitted data is protected against leakage and tampering. It supports 'mutual authentication', verifying both communication parties to guarantee a trusted, end-to-end secure connection.

# Smart Priority Charging

## 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

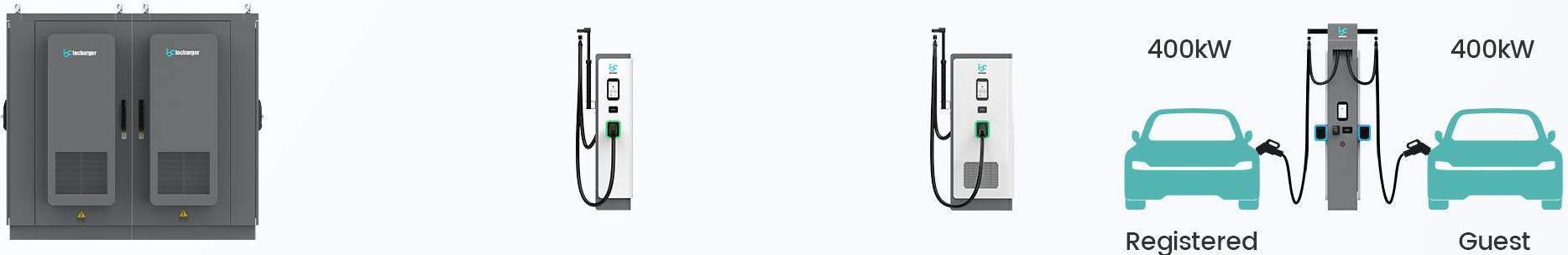
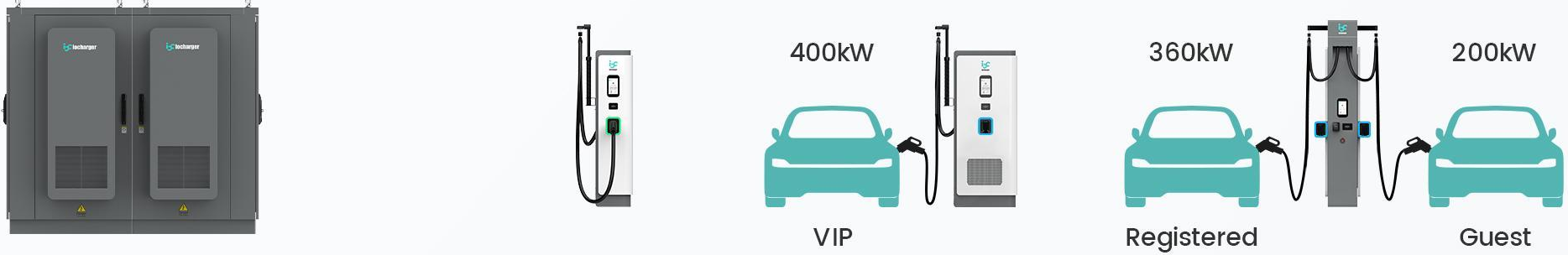
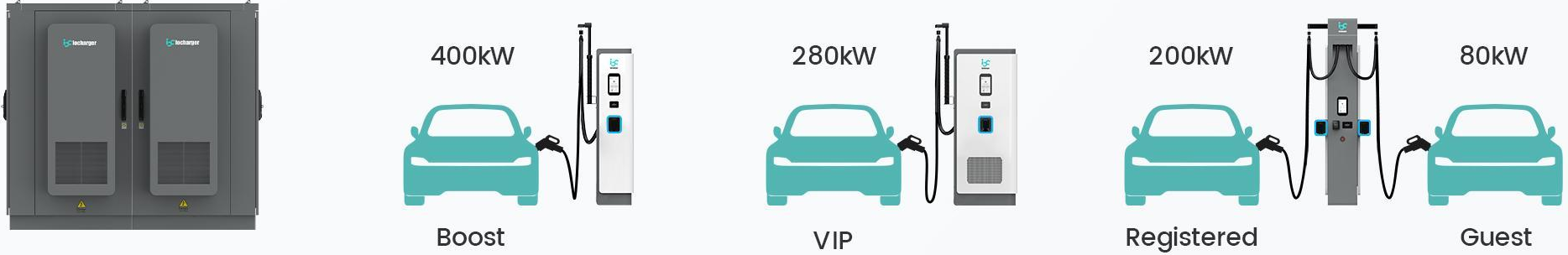
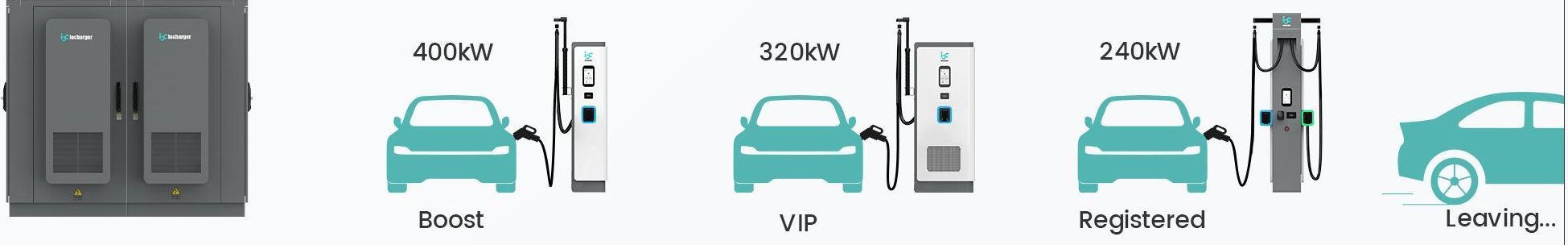
Regular registered users have higher priority than unregistered users, ensuring better charging performance in most cases.

## Level 4, VIP Members (High Priority without Boost)

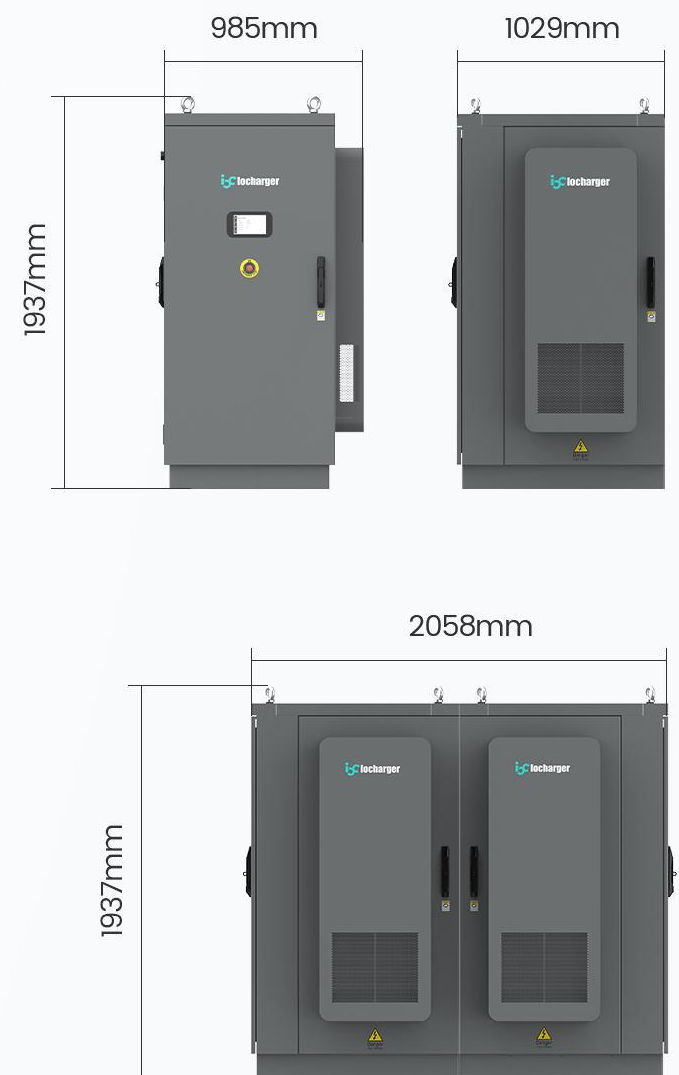
VIP users receive high charging priority even without a boost purchase, typically ahead of standard registered users.

## 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.

|                   |   |
|-------------------|---|
| <p>Scenario 1</p> | <p>800/960kW</p>  |
| <p>Scenario 2</p> | <p>960/960kW</p>  |
| <p>Scenario 3</p> | <p>960/960kW</p>  |
| <p>Scenario 4</p> | <p>960/960kW</p>  |

# Power Cabinet

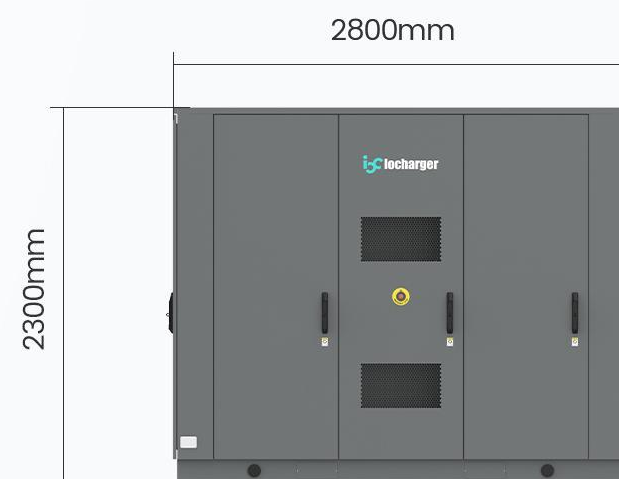
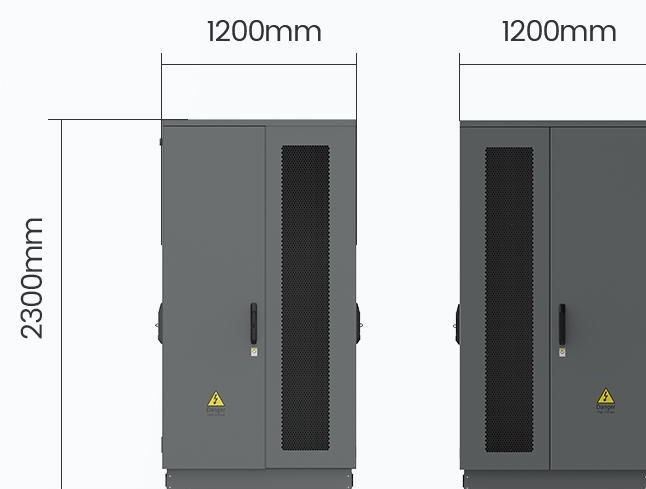


## Specification

Specifications are subject to change without notice.

| AC Input                    | 480kW (Air Cooling)  | 960kW (Air Cooling)  |
|-----------------------------|--|--|
| Earthing system             | 3P, PE, N  | 3P, PE, N  |
| Input voltage               | 3-phase 400VAC ±15% (2 Routes)   | 3-phase 400VAC ±15% (4 Routes)   |
| Input frequency             | 50/60Hz  | 50/60Hz  |
| Power factor                | ≥0.98  | ≥0.98  |
| Harmonic distortion (THDi)  | <5%  | <5%  |
| General Characteristics     | 480kW (Air cooling)  | 960kW (Air cooling)  |
| Number of outputs (Max.)    | 6  | 12   |
| Minimum adjustable power    | 40kW   | 40kW   |
| Connectivity                | 4G, Ethernet   | 4G, Ethernet   |
| Peak efficiency             | ≥95%   | ≥95%   |
| Enclosure rating            | IP55   | IP55   |
| Operating altitude          | ≤2000m   | ≤2000m   |
| Operating temperature range | -30°C ~ +55°C  | -30°C ~ +55°C  |
| Storage temperature range   | -30°C ~ +80°C  | -30°C ~ +80°C  |
| Mounting                    | Floor Standing   | Floor Standing   |
| Dimensions (H×W×D)mm        | 1937 x 1029 x 985  | 1937 x 2058 x 985  |
| Shipping weight             | 854kg  | 1703kg   |
| Certification and Standards | 480kW (Air cooling)  | 960kW (Air cooling)  |
| Safety standards            | EN IEC 61851-1<br>EN IEC 61851-23  | EN IEC 61851-1<br>EN IEC 61851-23  |
| Certification               | EN 61000-6 Series<br>EN IEC 61851-21-2<br>EN 301 489-1/-52<br>EN 301908-1/-13<br>EN 62311 LTE 8 Band | EN 61000-6 Series<br>EN IEC 61851-21-2<br>EN 301 489-1/-52<br>EN 301908-1/-13<br>EN 62311 LTE 8 Band |

# Power Cabinet



## Specification

Specifications are subject to change without notice.

|                                    |  |
|------------------------------------|--|
| <b>AC Input</b>                    | <b>1600kW (Air Cooling)</b>  |
| 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%  |
| <b>General Characteristics</b>     | <b>1600kW (Air cooling)</b>  |
| 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°C ~ +55°C  |
| Storage temperature range          | -30°C ~ +80°C  |
| Mounting                           | Floor Standing   |
| Dimensions (H×W×D)mm               | 2300 x 2800 x 1200   |
| Shipping weight                    | 3427kg   |
| <b>Certification and Standards</b> | <b>1600kW (Air cooling)</b>  |
| Safety standards                   | EN IEC 61851-1<br>EN IEC 61851-23  |
| Certification                      | EN 61000-6 Series<br>EN IEC 61851-21-2<br>EN 301 489-1/-52<br>EN 301908-1/-13<br>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.

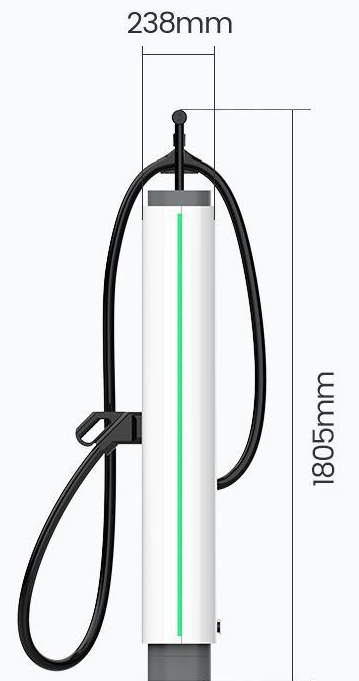
## Standard Compliance: ISO 15118-20

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.

# Air Cooling Dispenser



## Specification

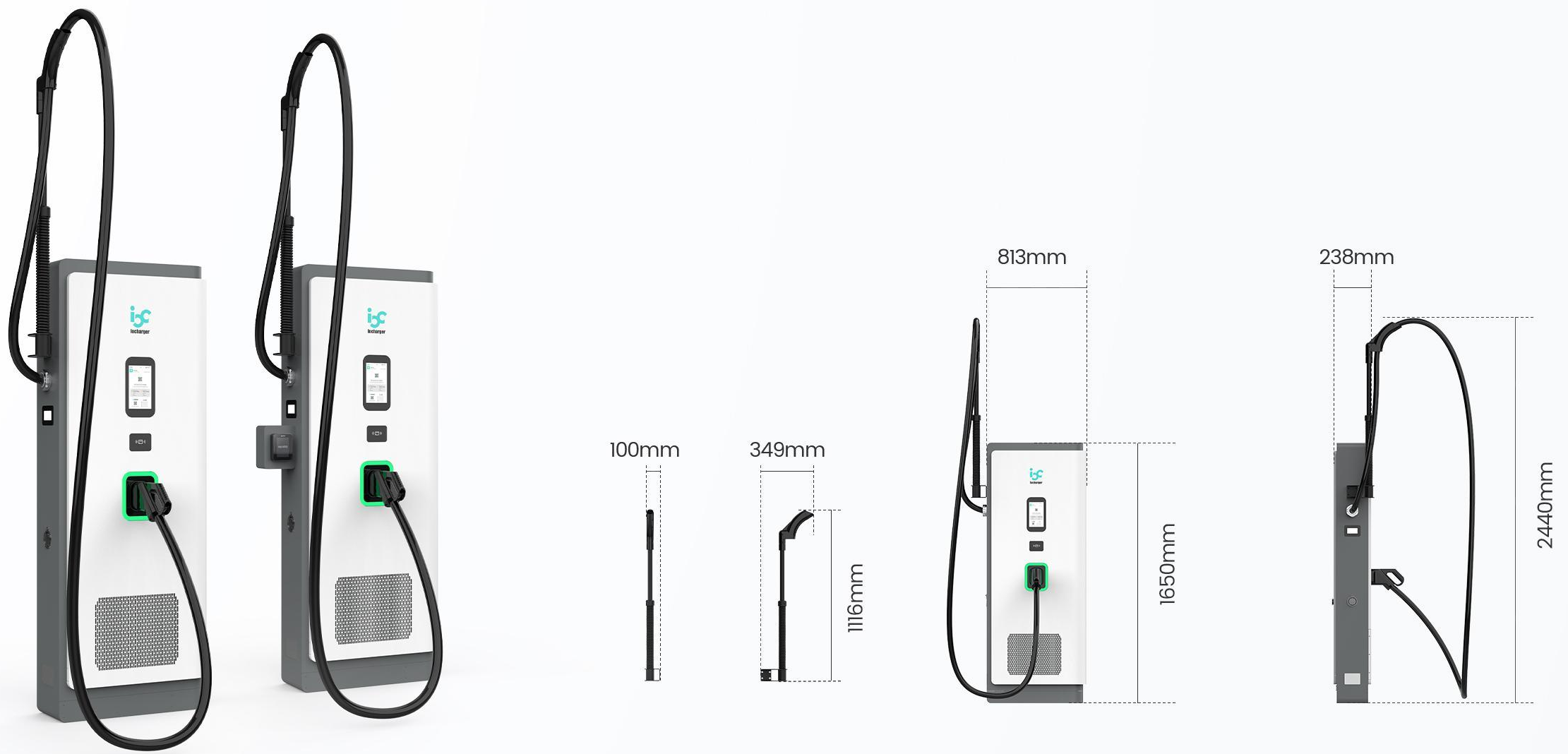
Specifications are subject to change without notice.

### DC Output Connection

### Air Cooling Dispenser

|                                |  |
|--------------------------------|--|
| Charging mode                  | Mode 4: CCS2   |
| Output power                   | 400kW, 375kW, 250kW (Optional)   |
| Output voltage                 | 150-1000V  |
| Output current                 | CCS2 250A/ 375A/ 400A, CCS1 200A/ 300A   |
| <b>Charging interface</b>      | <b>CCS2, or CCS1, or GB/T, or CHAdeMO</b>  |
| <b>General Characteristics</b> | <b>400kW, 375kW, 250kW (Air cooling) (Optional)</b>  |
| Enclosure rating               | IP55   |
| Operating altitude             | ≤2000m   |
| Operating temperature range    | -30°C ~ +55°C  |
| Storage temperature range      | -30°C ~ +80°C  |
| Mounting                       | Floor Standing   |
| Dimensions (H×W×D)mm           | 1805 x 552 x 238 (With CMS)  |
| Screen type                    | 7 inch LCD Touch Screen  |
| Cable length                   | 5m   |
| Status indication              | LED/LCD/APP  |
| User interface                 | iocharger APP  |
| Connectivity                   | Ethernet   |
| Protocols                      | OCPP 1.6J & OCPP 2.0.1 Full support, GB/T 27930, CHAdeMO 2.0, ISO15118 (PnC & EIM), DIN70121 |
| User authentication            | APP, RFID card, QR code, Credit Card (Optional)  |
| Software Update                | OTA updates via web portal   |
| Shipping weight                | 120kg(CCS2 250A 5m), 127kg(CCS2 400A 5m)   |
| <b>Safety standards</b>        | <b>EN IEC 61851-1, EN IEC 61851-23</b>   |
| Certifications                 | EN 61000-6 Series, EN IEC 61851-21-2, EN 301 489-1/-3, EN 300 330, EN 62479 RFID             |

# Liquid Cooling Dispenser

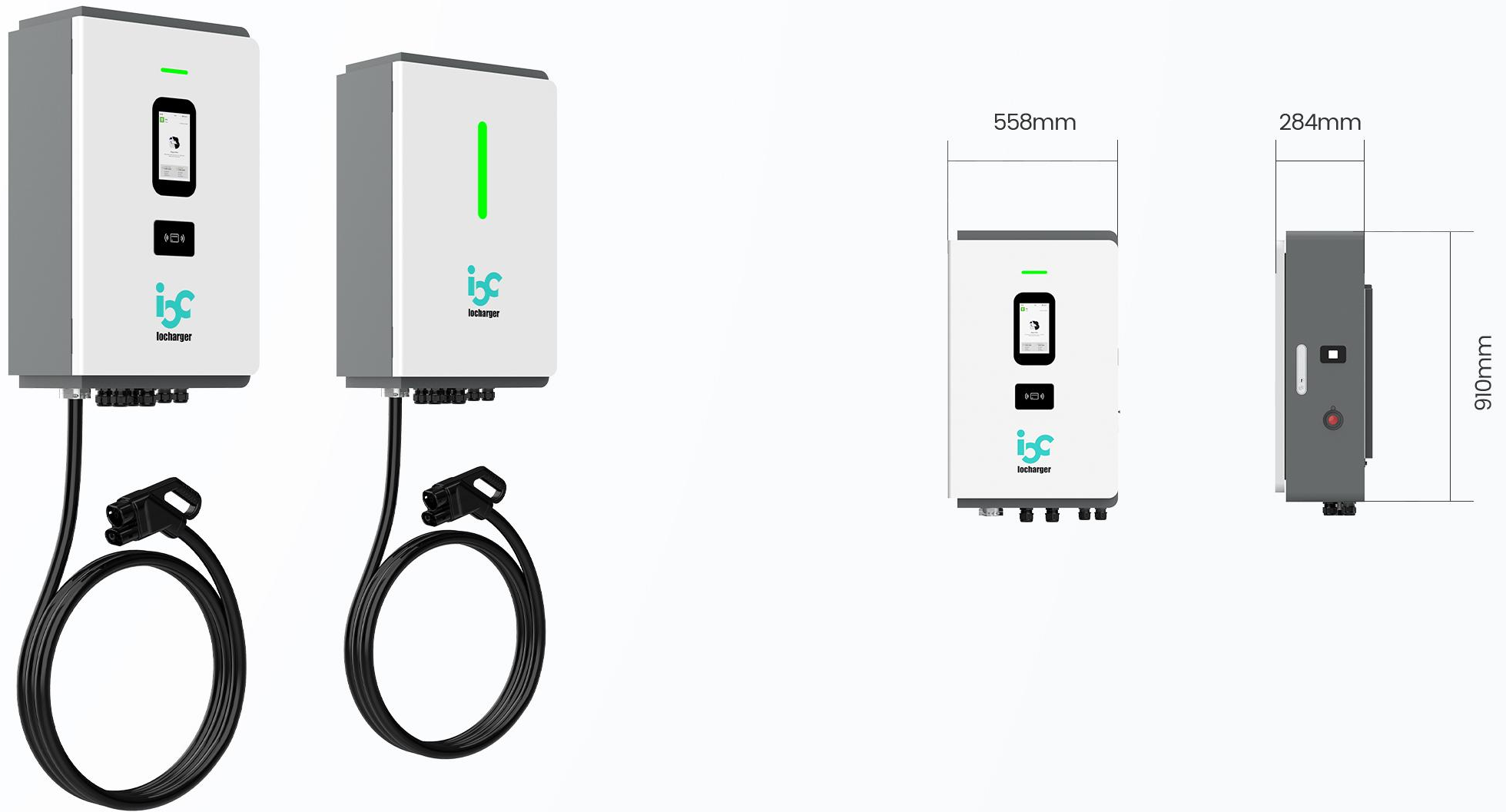


## Specification

Specifications are subject to change without notice.

| DC Output Connection        | Liquid Cooling Dispenser   |
|-----------------------------|--|
| Charging mode               | Mode 4: CCS2   |
| Output power                | 500kW (Max 600kW)  |
| Output voltage              | 150-1000V  |
| Output current              | CCS2 500A (Max. 600A)  |
| Charging interface          | CCS2   |
| General Characteristics     | 500kW (Liquid cooling)   |
| Enclosure rating            | IP55   |
| Operating altitude          | ≤2000m   |
| Operating temperature range | -30°C ~ +55°C  |
| Storage temperature range   | -30°C ~ +80°C  |
| Mounting                    | Floor Standing   |
| Dimensions (H×W×D)mm        | 1650 x 813 x 238 (Without CMS)   |
| Screen type                 | 7 inch LCD Touch Screen  |
| Cable length                | 5m   |
| Status indication           | LED/LCD/APP  |
| User interface              | iocharger APP  |
| Connectivity                | Ethernet   |
| Protocols                   | OCPP 1.6J & OCPP 2.0.1 Full support, GB/T 27930, CHAdeMO 2.0, ISO15118 (PnC & EIM), DIN70121 |
| User authentication         | APP, RFID card, QR code, Credit Card (Optional)  |
| Software Update             | OTA updates via web portal   |
| Shipping weight             | 158kg  |
| Safety standards            | EN IEC 61851-1, EN IEC 61851-23  |
| Certifications              | EN 61000-6 Series, EN IEC 61851-21-2, EN 301 489-1/-3, EN 300 330, EN 62479 RFID             |

# Air Cooling Wall-mounted Dispenser

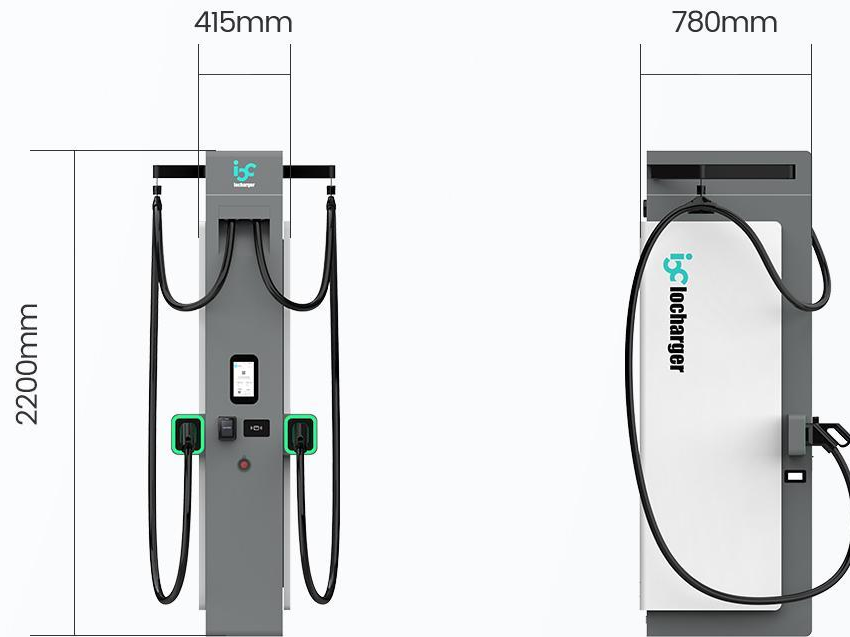


## Specification

Specifications are subject to change without notice.

| DC Output Connection        | Air Cooling Dispenser  |
|-----------------------------|--|
| Charging mode               | Mode 4: CCS2   |
| Output power                | 400kW, 375kW, 250kW (Optional)   |
| Output voltage              | 150-1000V  |
| Output current              | CCS2 250A/ 375A/ 400A, CCS1 200A/ 300A   |
| Charging interface          | CCS2, or CCS1, or GB/T, or CHAdeMO   |
| General Characteristics     | 400kW, 375kW, 250kW (Air cooling) (Optional)   |
| Enclosure rating            | IP55   |
| Operating altitude          | ≤2000m   |
| Operating temperature range | -30°C ~ +55°C  |
| Storage temperature range   | -30°C ~ +80°C  |
| Mounting                    | Wall-mounted   |
| Dimensions (H×W×D)mm        | 910 x 558 x 284  |
| Screen type                 | 7 inch LCD Touch Screen  |
| Cable length                | 5m   |
| Status indication           | LED/LCD/APP  |
| User interface              | iocharger APP  |
| Connectivity                | Ethernet   |
| Protocols                   | OCPP 1.6J & OCPP 2.0.1 Full support, GB/T 27930, CHAdeMO 2.0, ISO15118 (PnC & EIM), DIN70121 |
| User authentication         | APP, RFID card, QR code  |
| Software Update             | OTA updates via web portal   |
| Safety standards            | EN IEC 61851-1, EN IEC 61851-23  |
| Certifications              | EN 61000-6 Series, EN IEC 61851-21-2, EN 301 489-1/-3, EN 300 330, EN 62479 RFID             |

# Air Cooling Dual Dispenser



## Specification

Specifications are subject to change without notice.

| DC Output Connection        | Air Cooling Dual Dispenser   |
|-----------------------------|--|
| Charging mode               | Mode 4: CCS2   |
| Output1 power               | 400kW, 375kW, 250kW (Optional) + 400kW, 375kW, 250kW (Optional)                              |
| Output1 voltage             | 150-1000V  |
| Output1 current             | CCS2 250A/ 375A/ 400A, CCS1 200A/ 300A   |
| Output2 power               | 400kW, 375kW, 250kW (Optional)   |
| Output2 voltage             | 150-1000V  |
| Output2 current             | CCS2 400A , 375A, 250A (Optional)  |
| Charging interface          | 2*CCS2, 1*CCS2+1*GB/T, or 1*CCS2+1*CHAdeMO   |
| General Characteristics     | 400kW+400kW (Air cooling) (Optional)   |
| Enclosure rating            | IP55   |
| Operating altitude          | ≤2000m   |
| Operating temperature range | -30°C ~ +55°C  |
| Storage temperature range   | -30°C ~ +80°C  |
| Mounting                    | Floor Standing   |
| Dimensions (H×W×D)mm        | 2200 x 415 x 780   |
| Screen type                 | 7 inch LCD Touch Screen  |
| Cable length                | 5m   |
| Status indication           | LED/LCD/APP  |
| User interface              | iocharger APP  |
| Connectivity                | Ethernet   |
| Protocols                   | OCPP 1.6J & OCPP 2.0.1 Full support, GB/T 27930, CHAdeMO 2.0, ISO15118 (PnC & EIM), DIN70121 |
| User authentication         | APP, RFID card, QR code, Credit Card (Optional)  |
| Software Update             | OTA updates via web portal   |
| Safety standards            | EN IEC 61851-1, EN IEC 61851-23  |
| Certifications              | EN 61000-6 Series, EN IEC 61851-21-2, EN 301 489-1/-3, EN 300 330, EN 62479 RFID             |