

GreenGiant Parking & Charging Integrated Unit (Fast Charging)

SV-CS-D1-EX



Making Cities Better

Product Overview

The GreenGiant Parking & Charging Integrated Unit (Fast Charging) is an intelligent DC charging pile product for integrated parking and charging management.

The product integrates DC charging components and intelligent monitoring and recognition components, which can simultaneously meet the needs of electric vehicle charging and intelligent management of charging parking spaces. The charging component consists of charging modules, monitors, electricity meters, card readers, human-machine interaction touch screens, communication modules, charging interfaces, actuators, and outdoor cabinets, with an output power of 120KW. It cooperates with the electric vehicle Battery Management System (BMS) to realize intelligent control of the entire charging process and provide fast charging capability for electric vehicles. Battery Management System (BMS) to realize intelligent control of the entire charging process and provide fast charging capability for electric vehicles.

The intelligent monitoring and recognition component includes a dual 4MP resolution AI recognition camera, with built-in multi-person-machine non-multi-target detection and recognition algorithm, which can simultaneously monitor 2 charging parking spaces in real time, recognize vehicle entry and exit behaviors, extract feature information such as vehicle type and license plate number, and also detect and alarm abnormal events such as motor vehicle cross-line occupancy parking, non-motor vehicle occupancy parking, fuel vehicle occupancy parking, personnel loitering, flame and smoke, and send alarm data.

The product meets various parking and charging application scenarios such as parking lots, charging stations, and service areas.

Product Appearance

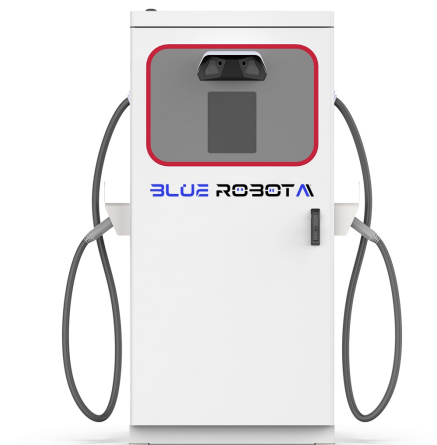
BLUE ROBOT AI

Address: RM1903, 19/F LEE GARDEN ONE, 33 HYSAN AVENUE, CAUSEWAY BAY, HK

Email: support@bluerobotai.com

Website: <https://www.bluerobotai.com/>





Functional Features

- Integrated parking and charging design, equipped with dual 4MP resolution intelligent recognition video module, built-in human-vehicle-non-motor multi-target AI detection algorithm. Can simultaneously monitor 2 charging parking spaces in real-time, recognize vehicle entry and exit behaviors, extract feature information such as vehicle type and license plate number, with recognition rate >99%;
- The product power module adopts resonant dual soft-switch technology, with high charging conversion efficiency, charging efficiency not less than 95%;
- The product adopts wide voltage constant power output design, greatly improving charging speed;
- The product adopts multiple high-frequency switching power supply modules in parallel redundant backup operation, with high reliability and easy maintenance;
- The human-machine interaction interface adopts high-performance 7-inch true color touch screen, humanized design, simple and convenient operation;
- The human-machine interaction interface is connected to the Battery Management Unit (BMS) or vehicle instrument through CAN bus, operates according to the given parameters of battery inspection (BMS), sets different charging operation modes, and realizes fast charging;
- Complete safety protection functions, including input overvoltage, input undervoltage, output overvoltage, output short circuit, insulation grounding, over-temperature protection, battery reverse connection, emergency stop protection, etc.;
- Supports WeChat QR code mini-program charging;
- Equipped with operating status monitoring and fault monitoring functions;
- Can detect and generate alarms for cross-line occupancy of charging vehicles, non-motor vehicle occupancy, gasoline vehicle occupancy, and personnel loitering; can detect and generate

BLUE ROBOT AI

Address: RM1903, 19/F LEE GARDEN ONE, 33 HYSAN AVENUE, CAUSEWAY BAY, HK

Email: support@bluerobotai.com

Website: <https://www.bluerobotai.com/>



alarms for abnormal events such as smoke and flame;

- Equipped with video capture function, covering 180° horizontal field of view

Technical Parameters

Parameters	Parameter Value
Rated Input Voltage	AC380V±15%
Rated Input Frequency	50±1Hz
Rated Output Voltage	200~1000V DC
Single Gun Output Current Range	3~250A
Whole Machine Output Current Range	3~400A
Constant Power Voltage Output Range	300~1000V
Maximum Output Power	120kW
Voltage Regulation Accuracy	≤±0.5%
Current Regulation Accuracy	≤±0.5%
Efficiency	≥95%
Power Factor	≥0.98 (above 50% load)
Harmonic Distortion THD	≤5% (above 50% load)
Auxiliary Power Voltage	DC12V/DC24V Optional
Display Screen	7-inch Touch Display
Storage	Reserved TF Card Interface
Protection Functions	Input overvoltage, input undervoltage, output overvoltage, output short circuit, insulation grounding, battery reverse connection, emergency stop, etc.
Cooling Method	Forced Air Cooling
Ingress Protection Rating	IP54
Charging Gun Quantity	2 units
Noise	≤65dB
Communication Interface	CAN (default baud rate 250K, supports 500K), RS485
External Communication	Ethernet, 4G
Operating Temperature	-25°C~+55°C
Dimensions (mm)	800*540*1700
Image Sensor	Dual 4MP Starlight CMOS
Fill Light	Intelligent High-Brightness LED Fill Light
Video Encoding	Supports H.264/H.265 video encoding
OSD	Real-time OSD Overlay Supported
Video	2560×1440, 2304×1296, 1920×1080, 1280×720, 1~30fps
Intelligent Recognition	Manages 2 charging parking spaces, automatically recognizes vehicle entry/exit events, vehicle type, license plate number
Abnormal Monitoring	Motor vehicle cross-line occupancy parking, non-motor vehicle occupancy parking, fuel vehicle (blue license plate) occupancy parking, personnel

BLUE ROBOT AI

Address: RM1903, 19/F LEE GARDEN ONE, 33 HYSAN AVENUE, CAUSEWAY BAY, HK

Email: support@bluerobotai.com

Website: <https://www.bluerobotai.com/>



	loitering, flame and smoke
--	----------------------------

Application Scenarios

Parking and Charging Scenarios

BLUE ROBOT AI

Address: RM1903, 19/F LEE GARDEN ONE, 33 HYSAN AVENUE, CAUSEWAY BAY, HK
Email: support@bluerobotai.com
Website: <https://www.bluerobotai.com/>

