Elite

EV + CHARGING

Charging Solutions

MADE CONVENIENT

Los Angeles | www.IuseElite.com | 323.888.1973

Quality Power

Safe

Convenient

Wi-Fi

Flexible

Durable

Sustainable & Efficient

Made for Convenience

Residential & Commercial Charging Solutions

Secure and Efficient

All chargers are ETL or CSA certified, ensuring safety and reliability.

Durability

Equipped with a premium 25-foot cable that is easy to store when not in use and remains flexible even in cold weather conditions.

Versatile Installation Options

All chargers feature a minimalist design that blends into any space, with one offering a compact form and the other a more robust, versatile option for indoor and outdoor use.

Charge with Peace of Mind

Backed by comprehensive warranties and exceptional customer support, we give you the confidence and assistance you need throughout your entire charging journey.

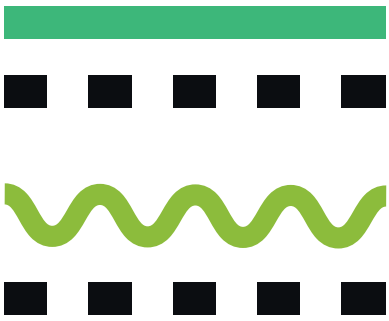
Understanding EV Charging

Essential Terms and Key Insights

1. AC & DC Charger Differences
2. AC & DC Types & Performance
3. Selectable Amperage
4. OCPP Compliant
5. NEMA 14-50 & 6-50
6. Load Balancing vs. Load Management
7. What is Cable Management for EV Chargers?

1. AC vs. DC EV Chargers: **Key Differences**

Feature	AC Chargers	DC Chargers
Power Type	Alternating Current (AC)	Direct Current (DC)
Conversion	AC to DC by EV's onboard charger	DC directly delivered to the battery
Charging Speed	Slower than DC	Faster than AC
Typical Use Case	Residential, office, public Level 2	Public, commercial, highway charging
Installation	Requires dedicated 240V outlet or station	High-cost installation, robust infrastructure



DC chargers are faster because they **bypass the vehicle's onboard AC-to-DC conversion process** and deliver high levels of direct current directly to the battery. This makes them ideal for **quick charging** in public and commercial settings, especially for long trips or high-demand use cases.

2. AC vs. DC EV Chargers: **Types & Performance**

Type	**Level 1 AC (120V)**	**Level 2 AC (240V)**
Charging Speed	2-5 Miles per Hour	10-60 Miles per Hour
Application	Home overnight charging	Home, workplaces, public

Type	**Level 3 DC Fast Charging (+400V)**	**Level 3 DC Ultra-Fast Charging (+400V)**
Charging Speed	100-200 Miles in 30 Minutes	Up to 300 Miles in 15-20 Minutes
Application	Public, highways	High-traffic commercial areas

3. **Selectable Amperage in EV Charging**

Importance:

- Faster Charging: Higher amperage options allow quicker charging, reducing downtime for your EV.
- Vehicle Compatibility: Ensures the charger operates within your EV's specifications, optimizing performance without exceeding the vehicle's limits.
- Safety: Proper amperage selection prevents overloading your electrical system, ensuring safe operation.
- Cost Efficiency: Balances charging speed with installation and operational costs for long-term savings.

EV Charging Time and Breaker Panel Requirements for Level 2 Chargers

		Nissan Leaf SV Plus Hatchback	Hyundai Ioniq 5 AWD SUV	
Amperage	**Power Output (kW)**	**Estimated Charge Time (60 kWh Battery)**	**Estimated Charge Time (80 kWh Battery)**	**Suggested Breaker Panel Size**
16A	**3.8kW**	**16 Hours**	**21 Hours**	**20A**
32A	**7.6kW**	**8 Hours**	**10.5 Hours**	**40A**
40A	**9.6kW**	**6.5 Hours**	**8.5 Hours**	**50A**
48A	**11.5kW**	**5.2 Hours**	**7 Hours**	**60A**
96A	**23kW**	**2.6 Hours**	**3.5 Hours**	**120A**

4. **OCPP Compliant**

OCPP **1.6J**

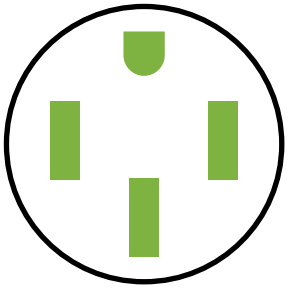
Open Charge Point Protocol (OCPP) in Simple Terms:

- OCPP is a common standard used in the EV charging industry.
- It allows communication between charging stations and central management systems.
- It enables functions like starting/stopping charging, data collection, and monitoring.

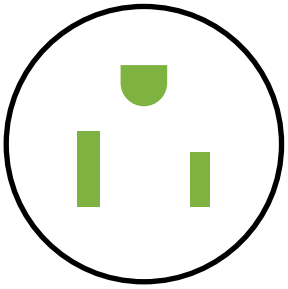
Benefits in EV Charging Apps:

- Creates a more accessible and standardized charging network.
- Increases compatibility across different providers and systems.
- OCPP 1.6J improves collaboration, making it easier for various stations and software to work together.

5. **NEMA 14-50 vs. NEMA 6-50**



NEMA 14-50



NEMA 6-50

Feature	NEMA 14-50	NEMA 6-50
Power Type	Four hot, hot, neutral, ground	Three hot, hot, ground
Conversion	Yes	No
Charging Speed	Supports other appliances	Designed specifically for EV Charging

6. **Load Balancing vs. Load Management**

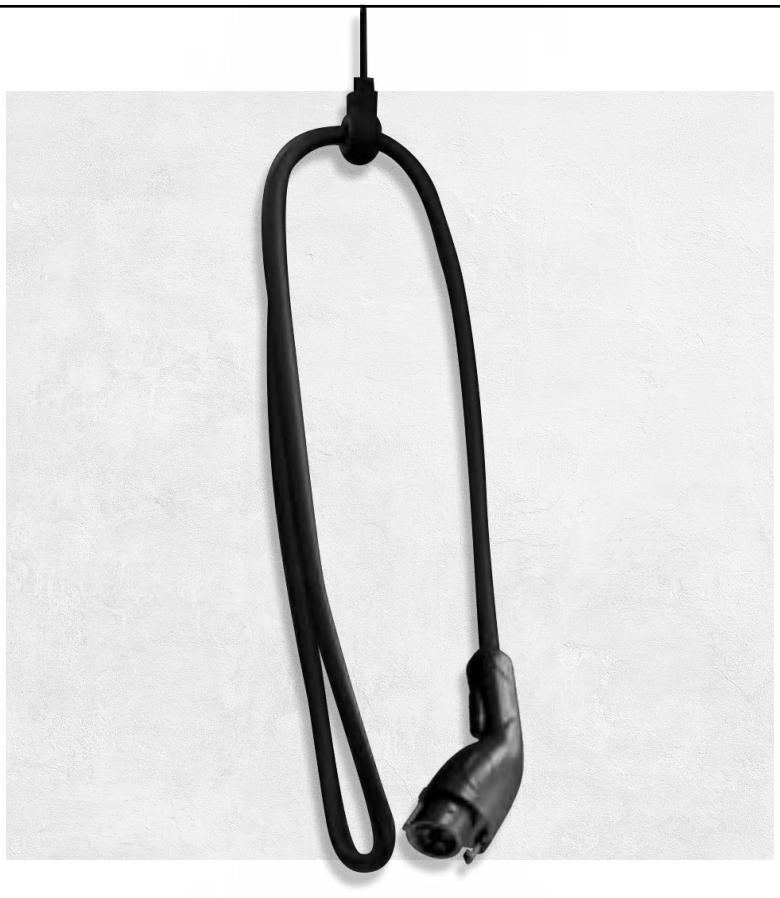
Load Balancing: Distributes

Distributes power evenly across devices or areas to avoid overloading any part of the system.

Load Management: Controls

Controls when and how much power is used to save energy and costs. Both work together to ensure efficiency and reliability.

7. **What is Cable Management for EV Chargers?**



Cable management for EV chargers ensures charging cables are kept organized, tangle-free, and safe, providing a clean and efficient charging experience.

Elite EV Charging Hardware:

Key Features at a Glance

RESIDENTIAL **SINGLE-FAMILY**

WI-FI • BLUETOOTH

Level 2

AC
Alternating Current

- Control Pilot Fault Protection
- Under Voltage Protection (UVP)
- Over voltage protection (OVP)
- Residual Current Device (RCD)
- Surge Protection Device (SPD)
- Over Current Protection (OCP)
- Over Temperature Protection (OTP)

EVR3-1-40A/32A/16A

SINGLE-FAMILY • 9.6KW

TYPE 1, SAE J1772 PLUG

NEMA 14-50 OR NEMA 6-50

EVR4-1-40A/32A/16A

SINGLE-FAMILY • 9.6KW

TYPE 1, SAE J1772 PLUG

NEMA 14-50

RESIDENTIAL **MULTI-FAMILY**

WI-FI • BLUETOOTH

Level 2

AC
Alternating Current

- Control Pilot Fault Protection
- Under Voltage Protection (UVP)
- Over voltage protection (OVP)
- Residual Current Device (RCD)
- Surge Protection Device (SPD)
- Over Current Protection (OCP)
- Over Temperature Protection (OTP)

EVM3-1-40A/32A/16A

MULTI-FAMILY • 9.6KW

TYPE 1, SAE J1772 PLUG

NEMA 14-50 OR NEMA 6-50

OCPP 1.6J

EVM4-1-40A/32A/16A

MULTI-FAMILY • 9.6KW

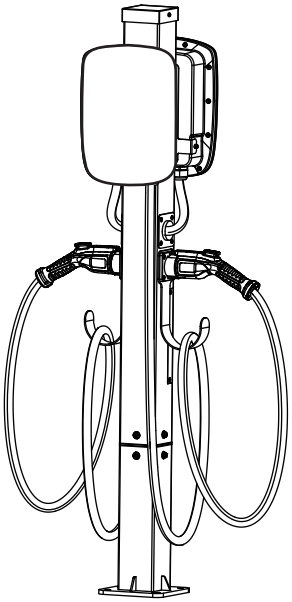
TYPE 1, SAE J1772 PLUG

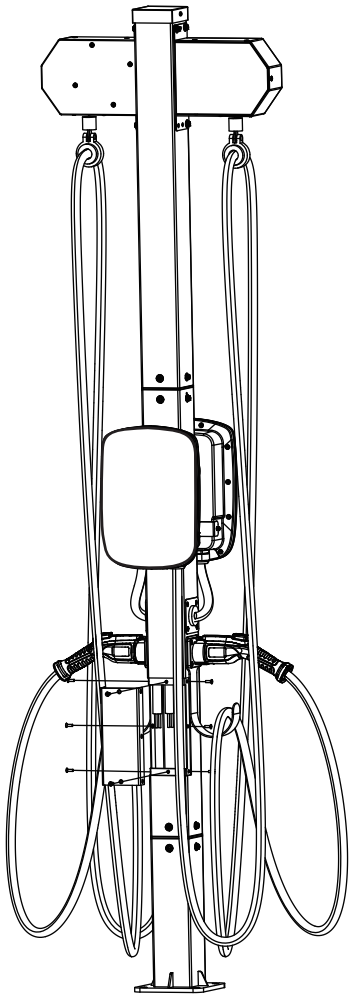
NEMA 14-50

OCPP 1.6J

PEDESTAL FOR EVM3

HOOK OR CABLE MANAGEMENT SYSTEM





EVP1-M3

PEDESTAL + HOOK

FOR EVM3/ EVC5/ EVC8

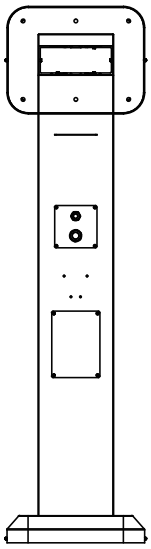
EVP2-M3

PEDESTAL + CABLE MANAGEMENT SYSTEM

(DUAL) FOR EVM3/ EVC5/ EVC8

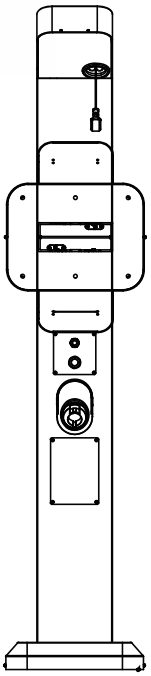
PEDESTAL FOR EVM4

HOOK OR CABLE MANAGEMENT SYSTEM



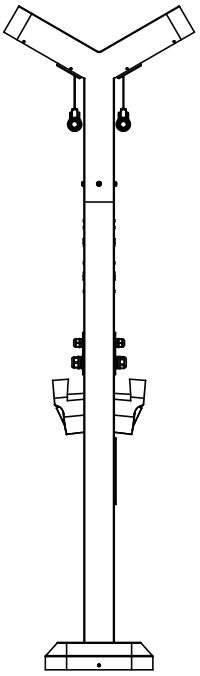
EVP6-M4

PEDESTAL + HOOK
FOR EVM4



EVP7-M4

PEDESTAL + CABLE MANAGEMENT SYSTEM
(SINGLE) FOR EVM4



EVP8-M4

PEDESTAL + CABLE MANAGEMENT SYSTEM
(DUAL) FOR EVM4

Residential Hardware

EVR3 & EVR4: Single-Family (Detached, Private Dwellings)

Home Charging Convenience:

• Effortless charging with the EVR3 and new EVR4.

Elite EV App Control:

• Schedule charging, monitor energy use, and adjust charging speed.

Proven Superiority of Elite EV Chargers:

• Certified for safety.

• Weatherproof design for outdoor use.

Warranty Support:

• Backed by reliable warranties for added peace of mind.


elite

EVR3-1-40A/32A/16A

RESIDENTIAL • SINGLE-FAMILY

Easily schedule charging, set reminders, and monitor energy consumption. The EVR3 is ETL-listed for safety, built to withstand outdoor conditions with its IP65-rated weatherproof design, and backed by a 3-year warranty for added reliability.

Specifications

Model Number	EVR3-1-40A/32A/16A
Charging Type	Level 2
Output Power And Current	9.6kW • 40A / 7.6kW • 32A / 3.8kW • 16A
Recommended Service Panel Breaker	50A 40A 20A
Input / Output Voltage	208/240VAC • 50/60Hz
Power Distribution	Single Phase / Split Phase
Cable Type	SAE J1772, Type 1 plug
Charging Cable Length	25 ft
Protection	Under Voltage Protection (UVP), Over Voltage Protection (OVP), Residual Current Device (RCD), Surge Protection Device (SPD), Over Current Protection (OCP), Over Temperature Protection (OTP), Control Pilot Fault Protection
Ground Fault Protection	Integrated 20 mA CCID (CCID20)
Energy Metering Accuracy	Revenue grade energy meter Class B (±1%)
Overvoltage Category	III
Available Configurable Contacts	1 Input, 1 Output

General Information

Receptacle Types	NEMA 14-50 or NEMA 6-50
Enclosure Rating	Indoor and Outdoor; NEMA 6-50, IP65, IK08
Operating Altitude (Max)	2,000 m (6,561 ft)
Operating Temperature Range	-30 °C to +50 °C (-22 °F to +122 °F)
Storage Temperature Range	-40 °C to +85 °C (-40 °F to +185 °F)
Max Humidity	Up to 95% non-condensing
Mounting	Wall, Pedestal Option
Dimensions H × W × D	14.20" x 9.80" x 4.40"
Weight	15 lbs

Interface

Connectivity	Wi-Fi, Bluetooth
Wi-Fi Signal	2.5 G
User Interface / Installer Interface	Elite Ev App or Portal For Setup, OCPP 1.6J
Communication Protocols	LAN Standard
Status Indication	Power On / Ready to Charge / Charging / Error / Standby
LED Indicator	Power On (All lights: Red, Green, Blue) / Ready to Charge (Steady Green) / Charging (Blinking Green) / Error (Red) / Standby (Blue)

Intertek FC IP65

EVR4-1-40A

RESIDENTIAL • SINGLE-FAMILY

The Elite EVR4 offers Wi-Fi connectivity for easy control via the Elite EV app, allowing you to schedule charging, set reminders, and monitor energy use. CSA-listed and Energy Star certified for safety and efficiency, its IP66-rated weatherproof design withstands outdoor conditions. PV compatible for solar power integration, the EVR4 is also backed by a 2-year warranty for peace of mind.

Specifications

Model Number	EVR4-1-40A/32A/16A-9KW-BLE-WIFI
Charging Type	Level 2
Output Power And Current	9.6kW • 40A / 7.6kW • 32A / 3.8kW • 16A
Circuit Rating	50A 40A 20A
Input / Output Voltage	240VAC • 60Hz
Power Distribution	Single Phase, L1+L2+G
Cable Type	SAE J1772, Type 1 plug
Charging Cable Length	25ft
Protection	Under Voltage Protection (UVP), Over Voltage Protection (OVP), Residual Current Device (RCD), Surge Protection Device (SPD), Over Current Protection (OCP), Over Temperature Protection (OTP), Control Pilot Fault Protection
Ground Fault Protection	Integrated 20 mA CCID (CCID20)
Energy Metering Accuracy	Onboard Measurement (±2%)
Overvoltage Category	II
Available Configurable Contacts	1 Input, 1 Output

General Information

Receptacle Type	NEMA 14-50 with 3ft cable or Hardwired
Enclosure Rating	Indoor and Outdoor; NEMA 4/ IP66, IK10
Operating Altitude (Max)	2,000 m (6,561 ft)
Operating Temperature Range	-30 °C to +50 °C (-22 °F to +122 °F)
Storage Temperature Range	-40 °C to +85 °C (-40 °F to +185 °F)
Max Humidity	Up to 95% non-condensing
Mounting	Wall, Pedestal Option
Dimensions H × W × D	13.54" x 7.54" x 3.93"
Weight	13.22 lbs

Interface

Connectivity	Wi-Fi, Bluetooth
Wi-Fi Signal	2.4 G
User Interface / Installer Interface	APP • RFID
Communication Protocols	OCPP 1.6 J
Status Indication	Power On / Ready to Charge / Charging / Error / Standby
LED Indicator	Green/Yellow/Red

C SP US 303748 ENERGY STAR FC IP66

Residential Hardware

EVM3 & EVM4: Multi-Family Homes (shared dwelling spaces)

Highlight Revenue Opportunities:

• Show how the EVM3 or EVM4 can boost income through charging fees and higher occupancy rates.

Support Sustainability Initiatives:

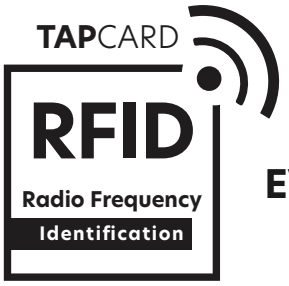
• Align properties with Green Residence branding to meet environmental goals.

Drive Property Value:

• Demonstrate how EVM3 or EVM4 installations enhance property marketability and value.

Warranty Support:

• Backed by reliable warranties for extra peace of mind.



EVM3 & EVM4 CHARGING FOR TENANTS

RFID EV Charging refers to the process of electric vehicle (EV) charging that utilizes Radio Frequency Identification (RFID) technology. This technology enables EV owners to initiate and manage the charging process by simply tapping an RFID card or tag on the charging station. It offers a convenient and secure way to access and control charging sessions.

Effortless Authentication
Users can quickly start charging by tapping their RFID card.

User-Friendly
Straightforward and accessible.

Reliability
RFID technology is known for its reliability and quick response times, minimizing potential technical glitches that could interrupt the charging process.

Guest Access
Charging station owners can issue RFID cards/tags to guests, visitors, or temporary users, providing them with convenient access to charging without requiring app downloads or account setups.

EVM3-1-40A/32A/16A

RESIDENTIAL • MULTI-FAMILY

The EVM3 offers Wi-Fi connectivity for easy management of charging within your garage or parking facility. Residents can control their charging sessions using RFID cards. OCPP 1.6J compliant, the Elite EVM3 is ETL-listed for safety, built to withstand outdoor elements with its IP65-rated weather-resistant design, and backed by a reliable 3-year warranty.

Specifications

Model Number	EVM3-1-40A/32A/16A
Charging Type	Level 2
Output Power And Current	9.6kW • 40A / 7.6kW • 32A / 3.8kW • 16A
Recommended Service Panel Breaker	50A 40A 20A
Input / Output Voltage	208/240VAC • 50/60Hz
Power Distribution	Single Phase / Split Phase
Cable Type	SAE J1772, Type 1 plug
Charging Cable Length	25 ft
Protection	Under Voltage Protection (UVP), Over voltage protection (OVP), Residual Current Device (RCD), Surge Protection Device (SPD), Over Current Protection (OCP), Over Temperature Protection (OTP), Control Pilot Fault Protection
Ground Fault Protection	Integrated 20 mA CCID (CCID20)
Energy Metering Accuracy	Revenue grade energy meter Class B (±1%)
Overvoltage Category	III
Available Configurable Contacts	1 Input, 1 Output

General Information

Receptacle Types	NEMA 14-50 or NEMA 6-50
Enclosure Rating	Indoor and Outdoor; IP65, IK08
Operating Altitude (Max)	2,000 m (6,561 ft)
Operating Temperature Range	-30 °C to +50 °C (-22 °F to +122 °F)
Storage Temperature Range	-40 °C to +85 °C (-40 °F to +185 °F)
Max Humidity	Up to 95% non-condensing
Mounting	Wall, Pedestal Option
Dimensions H × W × D	14.20" x 9.80" x 4.40"
Weight	15 lbs

Interface

Connectivity	Wi-Fi, Bluetooth
Wi-Fi Signal	2.5 G
User Interface / Installer Interface	RFID, OCPP 1.6J
Communication Protocols	LAN Standard
Status Indication	Power On / Ready to Charge / Charging / Error / Standby
LED Indicator	Power On (All lights: Red, Green, Blue) / Ready to Charge (Steady Green) / Charging (Blinking Green) / Error (Red) / Standby (Blue)

Intertek FC IP65 OCPP OCPP **1.6J**

EVM4-1-40A

RESIDENTIAL • MULTI-FAMILY

The Elite EVM4 offers Wi-Fi connectivity for easy control via the Elite EV app, allowing you to schedule, set reminders, and monitor energy use. CSA-listed and Energy Star certified for safety and efficiency, its IP66-rated weatherproof design withstands outdoor conditions. PV compatible for seamless solar integration, the EVM4 also comes with a 2-year warranty for peace of mind.

Specifications

Model Number	EVM4-1-40A/32A/16A-9KW-BLE-WIFI
Charging Type	Level 2
Output Power And Current	9.6kW • 40A / 7.6kW • 32A / 3.8kW • 16A
Recommended Service Panel Breaker	50A 40A 20A
Input / Output Voltage	240VAC • 60Hz
Power Distribution	Single Phase, L1+L2+G
Cable Type	SAE J1772, Type 1 plug
Charging Cable Length	25ft
Protection	Under Voltage Protection (UVP), Over Voltage Protection (OVP), Residual Current Device (RCD), Surge Protection Device (SPD), Over Current Protection (OCP), Over Temperature Protection (OTP), Control Pilot Fault Protection
Ground Fault Protection	Integrated 20 mA CCID (CCID20)
Energy Metering Accuracy	Onboard Measurement (±2%)
Overvoltage Category	II
Available Configurable Contacts	1 Input, 1 Output

General Information

Receptacle Types	NEMA 14-50 with 3ft cable or Hardwired
Enclosure Rating	Indoor and Outdoor; NEMA 4/ IP66, IK10
Operating Altitude (Max)	2,000 m (6,561 ft)
Operating Temperature Range	-30 °C to +50 °C (-22 °F to +122 °F)
Storage Temperature Range	-40 °C to +85 °C (-40 °F to +185 °F)
Max Humidity	Up to 95% non-condensing
Mounting	Wall, Pedestal Option
Dimensions H × W × D	13.54" x 7.54" x 3.93"
Weight	13.22 lbs

Interface

Connectivity	Wi-Fi, Bluetooth
Wi-Fi Signal	2.4 G
User Interface / Installer Interface	APP • RFID
Communication Protocols	OCPP 1.6 J
Status Indication	Power On / Ready to Charge / Charging / Error / Standby
LED Indicator	Green/Yellow/Red

OCPP **1.6J**

Safety & Protection

Ensuring Peace of Mind

Control Pilot Fault Protection

Explanation:

- This feature keeps an eye on the charging signal and steps in if something goes wrong to keep everything safe.

Importance:

- Detects issues in the communication between the EV and the charger, ensuring safe and proper charging.

Under Voltage Protection (UVP)

Explanation:

- UVP protects the charging system by detecting low voltage and preventing damage to the charger or vehicle.

Importance:

- Protects the system when voltage drops below a safe threshold, preventing malfunction or damage to the charger and EV.

Over Voltage Protection (OVP)

Explanation:

- OVP prevents high voltage from damaging the charger, vehicle battery, and electrical components, ensuring safe charging.

Importance:

- Protects against excessive voltage levels that could damage the EV or charging system.

Residual Current Device (RCD)

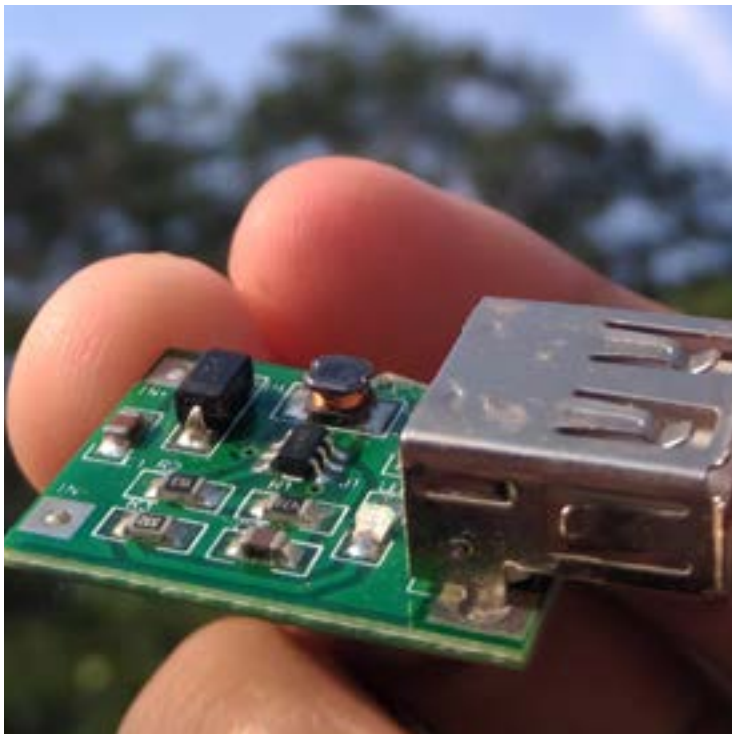
Explanation:

- An RCD is a safety device that shuts off power if it detects a current leak, preventing electric shock or fire.

Importance:

- Detects leakage currents (potential electric shock hazards) and disconnects the circuit to ensure user safety.

Surge Protection Device (SPD)



Explanation:

- SPD protects the charging system by diverting extra voltage from power surges or lightning, preventing damage to sensitive equipment.

Importance:

- Shields the charging system and EV from power surges, such as those caused by lightning strikes or grid instability.

Over Current Protection (OCP)

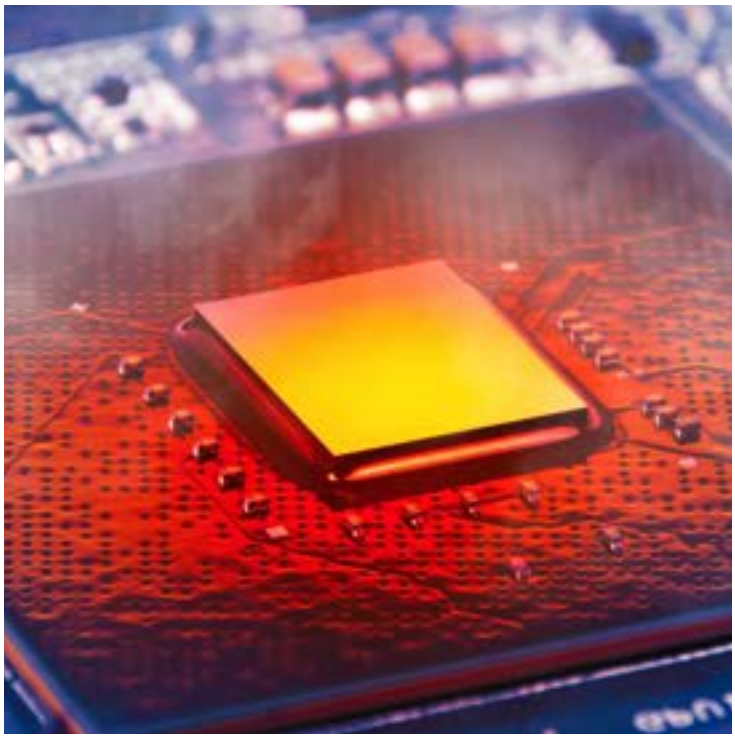
Explanation:

- OCP detects excessive current and prevents overheating or damage to the charger, vehicle battery, and electrical components from overloading.

Importance:

- Prevents excessive current from flowing, protecting the charger and EV from overheating or damage.

Over Temperature Protection (OTP)



Explanation:

- OTP monitors the temperature of critical components in the charging system. If temperatures exceed safe limits, it activates protection to prevent overheating and damage to the charger, battery, and electrical circuits.

Importance:

- Monitors and mitigates overheating in the charging system, shutting down operations to avoid thermal damage.

The App

Control, Monitor, and Optimize Your Charging

Elite EV Charging Residential

Download on the App Store

GET IT ON Google Play

A range of benefits, including convenience, cost savings, customization, and the potential to contribute to a more sustainable and efficient charging process for your electric vehicle.

Monitor EV Charging Status
View SOC (state of charge) information and start charging

Automate Charging
Set charging schedules to take advantage of lower energy costs during off-peak hours.

Connect via Wi-Fi
Wi-Fi connectivity enables remote monitoring and easy management of your charger.

Connect via Bluetooth
Bluetooth allows quick pairing and integration with your smartphone.

Select Amperage
Tailor your charging speed by adjusting the amperage to suit your needs.

Load Management

EV load management involves monitoring and controlling electricity demand in EV charging systems to optimize charging efficiency and prevent infrastructure overloading. Techniques include scheduling off-peak charging, adjusting rates based on grid conditions, and prioritizing charging. The aim is to enhance EV charging efficiency and reliability while reducing costs and grid strain.

- **Charging Scheduling:** Schedule EV charging sessions to optimize timing for off-peak rates or personal preferences.
- **Charging Rate Adjustment:** Adjust charging rates based on grid capacity, energy prices, or user preferences.
- **Energy Consumption Monitoring:** Track EV energy consumption for insights into usage patterns.
- **Charging Session Prioritization:** Prioritize charging sessions based on battery level, urgency, or cost.
- **Integration with Energy Tariffs:** Use real-time pricing data to minimize costs.
- **Renewable Energy Integration:** Prioritize charging during periods of high renewable energy availability.

Sustainability

Driving Green Energy Forward

New Construction: LEED Certification for Homes

LEED (Leadership in Energy and Environmental Design) for Homes is a green building certification program developed by the U.S. Green Building Council (USGBC) that focuses on the environmental performance of residential buildings.

Incentive Programs:

- **Tax incentives**
- **Tax reductions**
- **Density zoning bonuses**
- **Fee reductions**
- **Priority or accelerated permitting**
- **Discounted technical support**
- **Grants and low-interest financing**

- The certification process considers aspects such as energy and water efficiency, indoor environmental quality, sustainable site development, and materials selection.
- LEED uses a rating system where projects earn points based on adherence to specific criteria.

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