Electric Vehicle Charging Solutions

Powering the Future of Sustainable Mobility

Catalog
2800CT1001

2011
Class 2800

CONTENTS

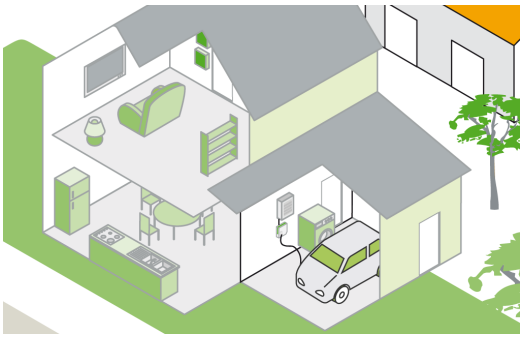
Schneider Electric

Description

Smart Charging, Smart Savings, Smart Grid

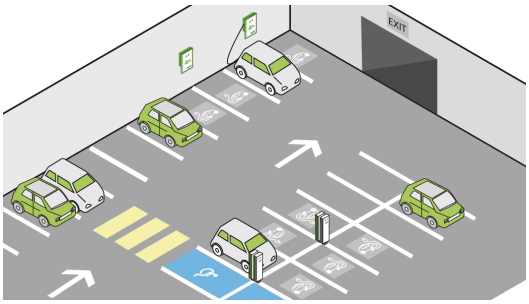
Schneider Electric has developed a line of Electric Vehicle (EV) charging solutions for your unique needs. Schneider Electric will work with you to deliver the best charging infrastructure solution that includes product, installation, maintenance, and an infrastructure management system.

Our EV charging products are compatible with safety standards and industry specific standards, such as the Society of Automotive Engineers standards (SAE J1772).



Residential Charging Solutions

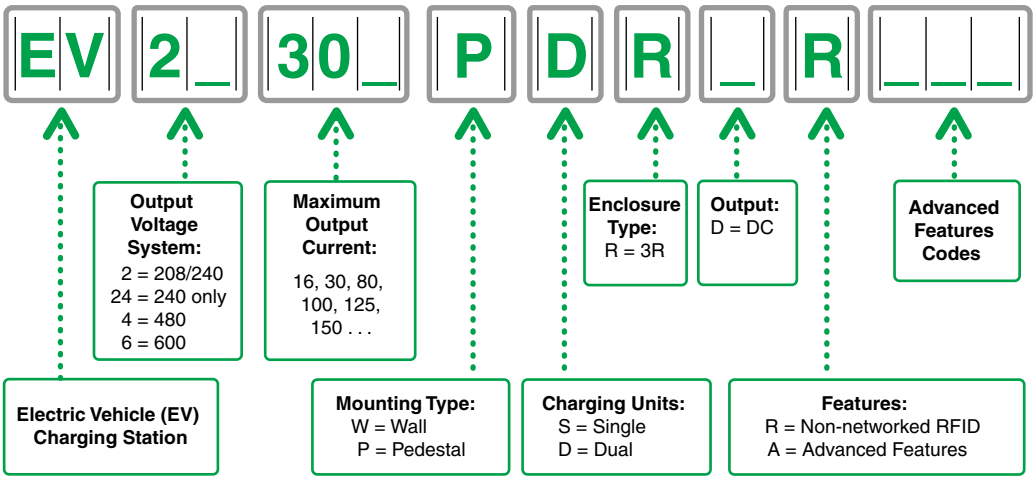
Our residential charging stations provide simple, easy-to-install, and user-friendly solutions for charging electric vehicles at home. Installations are provided by a network of licensed installers. Advanced versions feature intelligent communications and smart-grid integration options.



Commercial and Fleet Charging Solutions

Fleet and commercial customers can count on charging solutions that offer convenient public and private access. Advanced versions will feature remote monitoring and billing capabilities servicing multiple charging points.

Catalog Numbering System

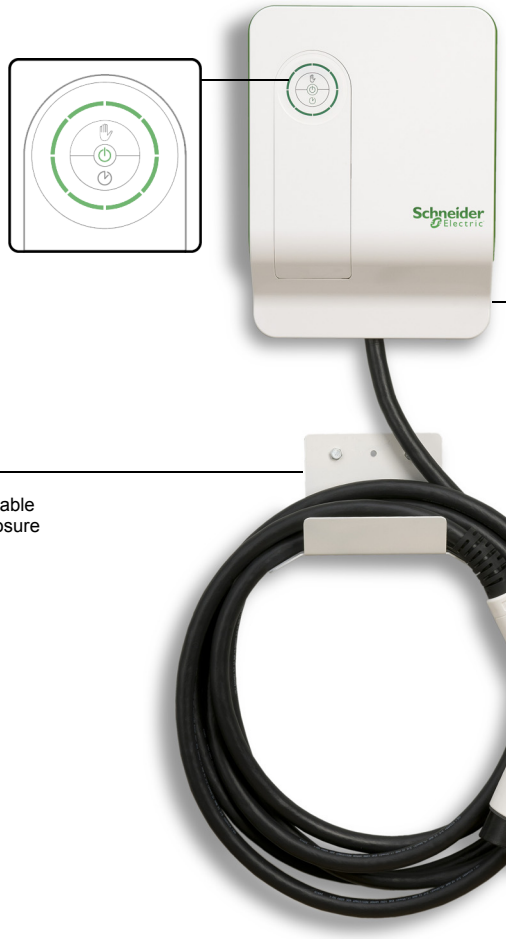


Indoor Charging Stations

Features

Interface:

- Segmented charge and delay charge progress indicator
- Stop Button and Indicator
- Power status and system detected fault indicator
- Delay button and indicator



Protection:

- Integral Ground Fault Protection at 5 mA
- Ground fault function tested before each charge cycle begins
- Auto restart after ground fault or main power loss

Enclosure:

- Non-metallic
- Indoor wall-mount (stud, drywall, or masonry wall)

Cable Holder:

- Supports and helps organize the cable
- Independently mounted from enclosure

Connector and Cord:

- Complies with SAE J1772
- Cable length: 18 ft. (5.5 meter)

Indoor Charging Station

Residential Applications

Catalog Numbers

Table 1: Indoor Charging Station—Wall-Mount

Catalog Number	Output Voltage System	Output Current	Mounting Type	Charging Units	Application	Features
EV2430WS	240 Vac only	30 A	Wall	Single	Indoor	Delay Start

Technical Specifications

Figure 1: Indoor Charging Station Wiring Diagram

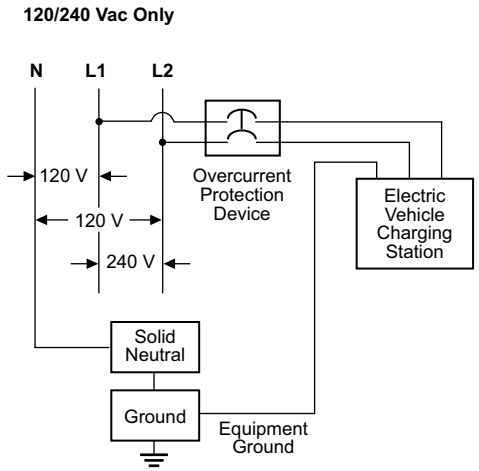


Table 2: Indoor Charging Stations

Power Specifications	
Input Power	240 Vac Only, single-phase, 60 Hz, 30 A maximum
Input Power Connection	Line 1, Line 2, and Ground
Feeder Circuit Breaker	2-pole, 40 A, non-GFCI type
Output Power	240 Vac, 30 A, 7.2 kW max.

Physical Specifications	
Enclosure Type	Type 1 (Indoor only)
Enclosure Dimensions (W x H x D)	9.53 x 12.73 x 4.36 in. (242 x 323 x 111 mm)
Enclosure Mounting	Wall-mount
Cable Type	SAE J1772
Cable Length	18 ft. (5.5 m)
Cable Management	Non-retractable, separate from the enclosure
Shipping Weight	17.0 lbs. (7.71 kg)

User Interface	
Power Available	Status indicator
Charging	Eight-segment progress indicator
Ground Fault	Red status indicator
Stop	Push button and red stop indicator
Delay Start	Push button to delay up to eight hours, in one-hour increments

Protection	
Ground Fault Protection	Integral, CCID 5 mA, auto reset
Ground Fault Protection System Test	Automatic at the beginning of each charge cycle

Environmental	
Operating Temperature	-22°F to 131°F (-30°C to 55°C)
Electro-static Discharge	15 kV open air, 8 kV contact
Surge	6 kV
Radiated Immunity	20 V/m
Conducted Immunity	20 V
Electrical Fast Transient/Burst (EFTB)	2 kV
Emissions	FCC Class B

Standards Compliance
NEC Article 625
SAE J1772
UL 2594, UL 2231-1, UL 2231-2, UL 991, UL 1998, and UL 2251

Dimensions

Figure 2: Indoor Charging Station

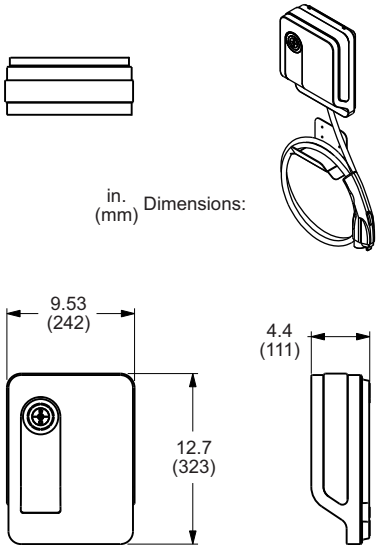
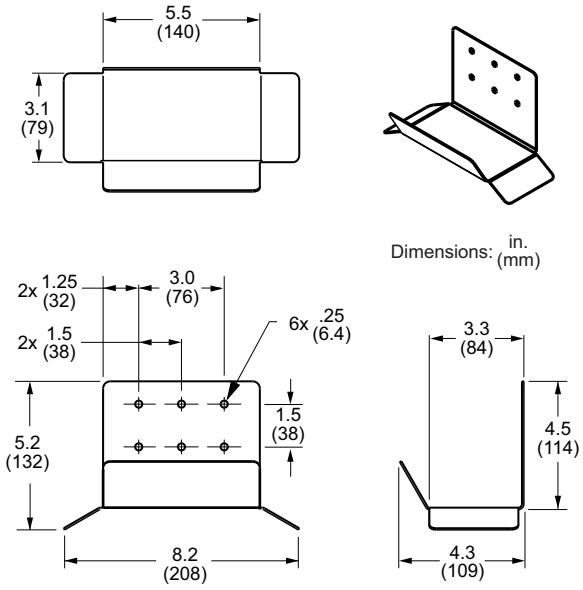


Figure 3: Cable Bracket



Outdoor Charging Stations

Wall-Mount

Features

Interface:

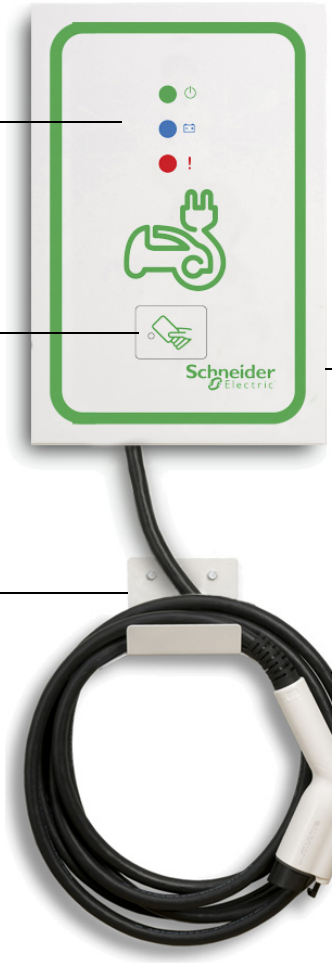
- Power status
- Charge indicator
- System detected fault indicator

Authentication:

- Localized RFID solution (optional)

Cable Holder:

- Supports and helps organize the cable
- Independently mounted from enclosure



Protection:

- Integral Ground Fault Protection at 5 mA
- Ground fault function tested before each charge cycle begins
- Auto restart after ground fault or main power loss

Enclosure:

- Metallic enclosure
- Indoor/outdoor wall-mount

Connector and Cord:

- Complies with SAE J1772
- Cable length: 18 ft. (5.5 meter)

Outdoor Charging Station (Wall-Mount)

Residential and Commercial Applications

Catalog Numbers

Table 3: Outdoor Charging Stations—Wall-Mount

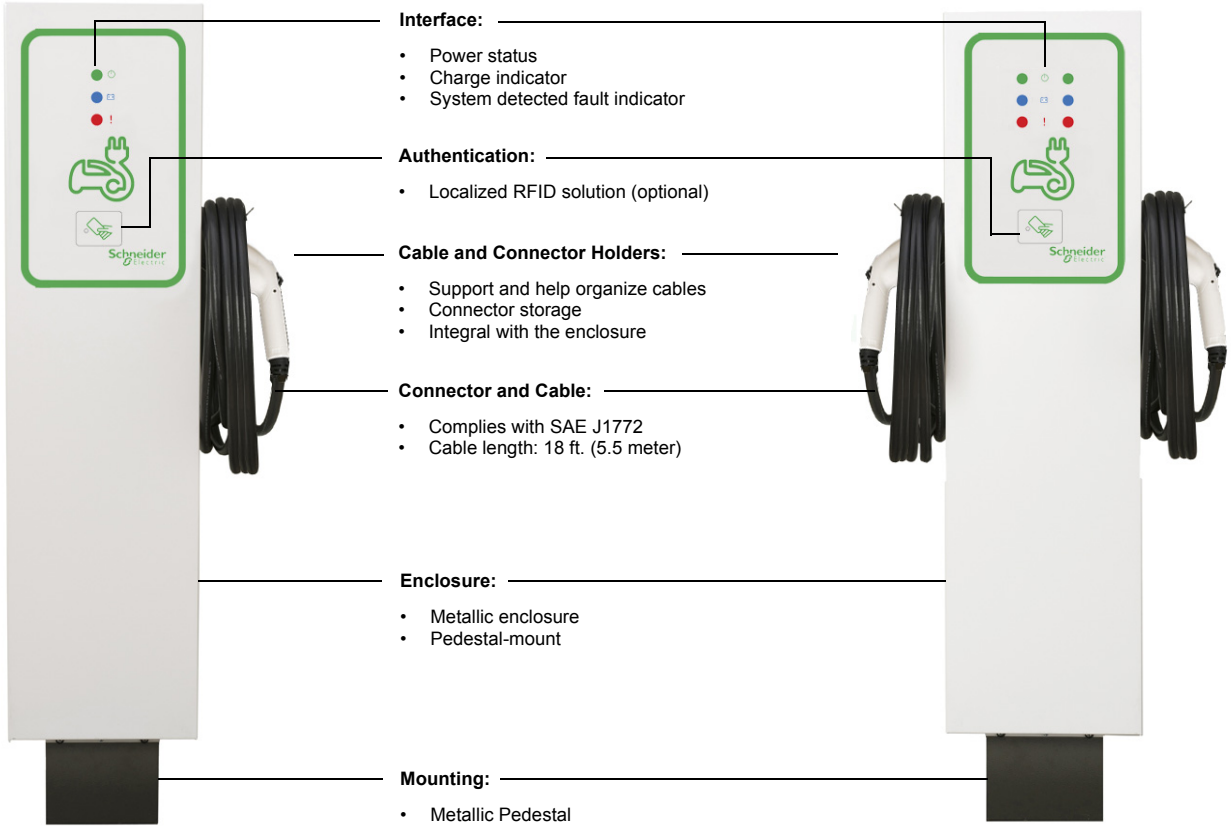
Catalog Number	Output Voltage System	Output Current	Mounting Type	Charging Units	Application	Features
EV230WSR	208–240 Vac	30 A	Wall	Single	Indoor/Outdoor	—
EV230WSRR	208–240 Vac	30 A	Wall	Single	Indoor/Outdoor	RFID (non-networked)

Pedestal-Mount

Features

Protection:

- Integral Ground Fault Protection at 5 mA
- Ground fault function tested before each charge cycle begins
- Auto restart after ground fault or main power loss



Outdoor Charging Station (Single Unit, Pedestal-Mount)

Commercial Applications

Outdoor Charging Station (Dual Unit, Pedestal-Mount)

Commercial Applications

Catalog Numbers

Table 4: Outdoor Charging Stations—Pedestal-Mount

Catalog Number	Output Voltage System	Output Current	Mounting Type	Charging Units	Application	Authentication
EV230PSR	208–240 Vac	30 A	Pedestal	Single	Outdoor	—
EV230PDR	208–240 Vac	30 A	Pedestal	Dual	Outdoor	—
EV230PSRR	208–240 Vac	30 A	Pedestal	Single	Outdoor	RFID (non-networked)
EV230PDRR	208–240 Vac	30 A	Pedestal	Dual	Outdoor	RFID (non-networked)

Technical Specifications

Outdoor Wall-Mount Charging Station

Single Unit **Dual Unit**

Outdoor Pedestal-Mount Charging Stations

Table 5: Outdoor Charging Stations (Wall and Pedestal Mount)

Power Specifications (Each charging unit)	
Input Power	208–240 Vac, 30 A, single phase, 60 Hz
Input Power Connection	Line 1, Line 2, and Ground
Feeder Circuit Breaker	2-pole, 40 A, non-GFCI type
Output Power	208–240 Vac, 30 A

Physical Specifications	
Enclosure Type	Type 3R
Enclosure Dimensions	See Dimensions on Page 9
Enclosure Mounting	Wall or Pedestal
Cable Type	SAE J1772
Cable Length	18 ft. (5.5 m)
Cable Management	Non-retractable, integral with the enclosure
Unit Options	Single unit (Wall-mount) Single or Dual units (Pedestal-mount)

User Interface	
Power Available	Status indicator
Charging	Blinking blue indicator
System Detected Fault	Red status indicator

Authentication	
Type	Non-networked RFID authentication card
Programming	Radio frequency remote control

Protection	
Ground Fault Protection	Integral, CCID 5 mA, auto reset
Ground Fault Protection System Test	Automatic at the beginning of each charge cycle

Environmental	
Operating Temperature	-22°F to 131°F (-30°C to 55°C)
Electro-static Discharge	15 kV open air, 8 kV contact
Surge	6 kV
Radiated Immunity	20 V/m
Conducted Immunity	20 V
Electrical Fast Transient/Burst (EFTB)	2 kV
Emissions	FCC Class B

Standards Compliance
NEC Article 625
SAE J1772
UL 2594, UL 2231-1 & UL 2231-2, UL 991, UL 1998 and UL 2251

Dimensions

Figure 4: Outdoor Wall-Mount Charging Station

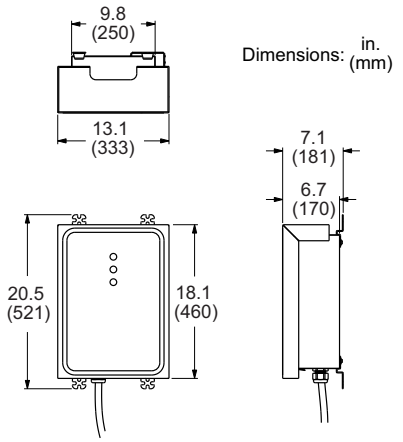


Figure 5: Pedestal Base for Outdoor Charging Station

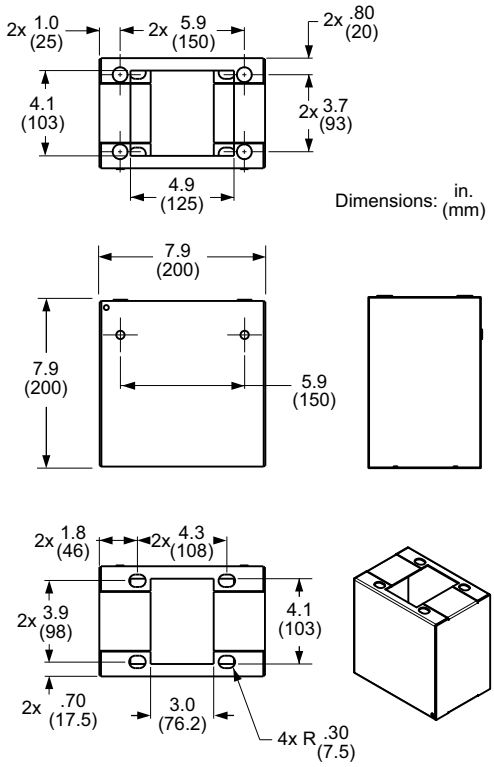
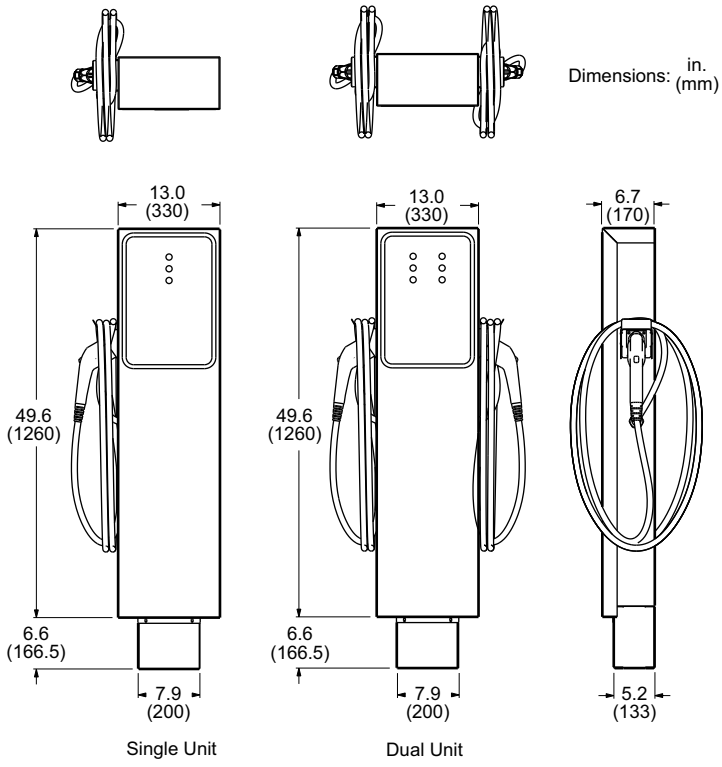


Figure 6: Outdoor Pedestal-Mount Charging Station



Radio Frequency Identification (RFID) Accessories

The RFID solution for Schneider Electric EV charging stations consists of the following accessories:

- Handheld Programmer
- RFID Authentication Card

Catalog Numbers

Description	Catalog Number
RFID Handheld Programmer	EVRFIDHP
RFID Authentication Card (Quantity of 10)	EVRFIDKF-10

Handheld Programmer

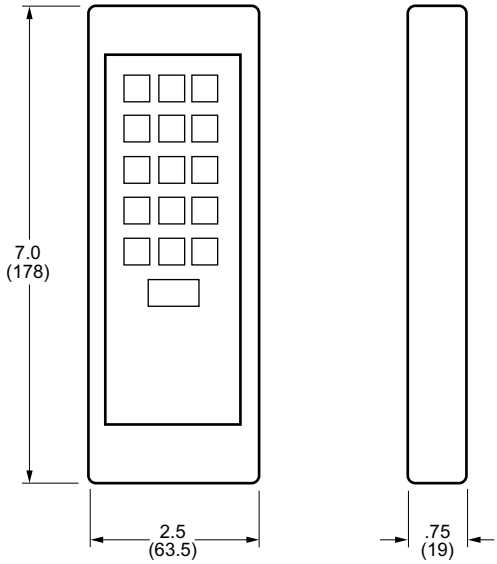
Features

- Used to add and remove users
- One needed for total charging station system
- Connects via radio frequency
- Feedback via audio tone and LED indicator on Proximity Reader
- 4-digit PIN access

Technical Specifications

Frequency	125 kHz / 62.5 kHz
Dimensions	7.0 x 2.5 x 0.75 in. (178 x 63.5 x 19 mm)
Weight	7 oz. (200 g)
Operating Temperature	-22°F to 131°F (-30°C to 55°C)
Color	Black
Material	ABS

Dimensions



RFID Authentication Cards

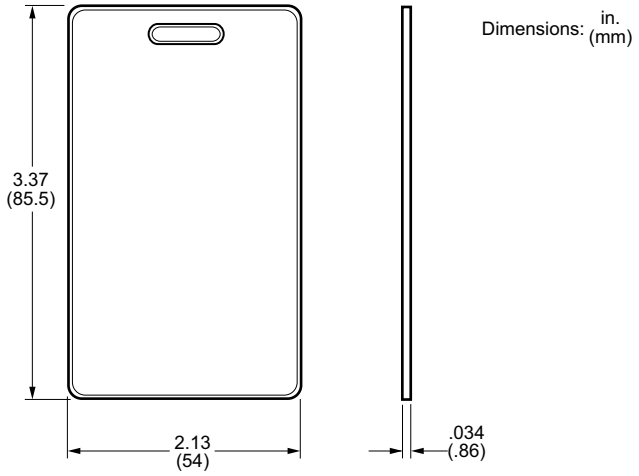
Features

- Wallet friendly
- Robust and durable design
- Industry standard format
- Unique ID codes

Technical Specifications

Frequency	125 kHz / 62.5 kHz
Weight	0.31 oz. (8.8 g)
Operating Temperature	-40°F to 158°F (-40°C to +70°C)
Humidity	0–100% non-condensing
Material	ABS

Dimensions



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