

# Ultra Fast Charge Station



## Product description

Focused on bringing new and innovative solutions to the EV charging market characterized by a growing trend for fast high-power chargers, Efacec developed a new and innovative solution that fits all features of this emerging market. The HV175 is a High Power Ultra Fast charging solution, able to supply up to 320 kW by connecting two HV175 units to a user interface unit with adequate cable and connector. Connecting more HV175 units to a mechanical connection allows higher currents as can be used by some heavy vehicles.

Using Efacec's more than 30 years of experience in power electronics technology, the HV175 is the most powerful charging system, safe, robust, durable, stable and environmentally friendly.

## Overview

- Charge any compatible vehicle with CCS standard
- Output voltage up to 920 V
- Different power levels available (160 or 320 kW)
- Combo DC output (Mode-4) / Option CHAdeMO
- TFT color display
- Network integration (OCPP or proprietary protocol)
- Built-in communications (3G; LAN; Wi-Fi)

## Available Models

HV160 HV175 HV350

## DC plug-in charging system



CCS



CHAdeMO

## Main features

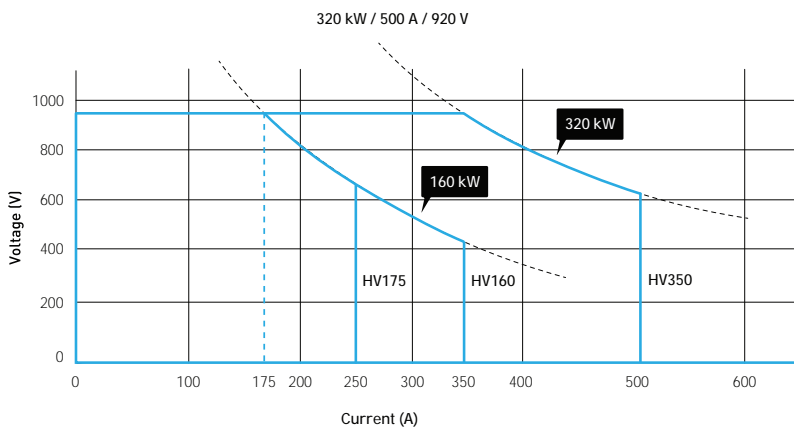
- Fits all CCS and CHAdeMO vehicles
- Customizable
- Mode-4 charging
- HV350 = 2 x HV175
- Liquid cooled CCS cable
- Indoor/Outdoor (IP54/NEMA 3R)

## Applications

- Long-range EVs charging spots

Technical data	HV160	HV175	HV350
<b>Nominal Input</b>			
Phases / lines	3 phases + PE		
Voltage	480 Vac ± 10 %		
Frequency	60 Hz		
Power Factor	0,98		
Nominal input current & power	210 A @ 172 kVA	210 A @ 172 kVA	2 x (210 A @ 172 kVA)
Efficiency	> 95 % @ full power		
<b>DC Output</b>			
Maximum Voltage	920 V	920 V	920 V
Maximum current	175 A 350 A up to 457 V	175 A 250 A up to 640 V	350 A 500 A up to 640 V
Nominal Power (@920V)	161 kW	161 kW	322 kW
<b>General Specifications</b>			
Communication with EV	IEC61851-23 PLC (CCS / Combo-1) and JEVS G104 (CHAdeMO)		
DC Plug	Combo T1 (SAE / Type 1) and JEVS G105 (CHAdeMO)		
Human machine Interface	By default 15.6"		
Display	Mifare (Classic, DesFire EV1) or others upon request		
RFID system (optional)	3G (GSM or CDMA)   LAN   Wi-Fi		
Communication	OCPP1.5. Others under request		
Communication Protocols			
Place of installation	Indoor/Outdoor		
Altitude	Up to 3280 ft		
Protection degree	NEMA 3R   Rainproof		
Operating temperature/optional cold option	-13 °F to +122 °F / -31 °C to +50 °C		
Storage temperature	-40 to +140 °F		
Humidity	5% to 95%		
Sound noise	<55 dB in all directions		
Dimensions (W x D x H)	40" x 32" x 75" + User interface unit (for current greater than 200 A)	40" x 32" x 75" inches + User interface unit (for current greater than 200 A)	2x (40" x 32" x 75" )
Weight	2,204 pounds + user interface unit	2,204 pounds + user interface unit	2 x (2,204 pounds) + User interface unit
<b>User Interface Unit</b>			
Dimensions (W x D x H)	23.62" x 11.81" x 94.49"		
Weight	573 pounds		
Charging cable length	Inside:144.88 inches / outside:91.33 inches		

## Output Characteristics



## Output Configurations

- Scenario 1**
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- Direct connection of the HV175 cable to the electric vehicle limited to 175 A due to the cable.
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- Scenario 2**
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- One HV160 unit connected to an user interface unit
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- Scenario 3**
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- Two HV175 units, with a total output current of 350 A connected to an user interface unit equipped with a 350 A changing cable
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- Scenario 4**
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- Two or more HV175 units connected to a mechanical connection device.

