



ENERGY STAR® Certified DC Fast Electric Vehicle Chargers



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The Importance of DC Fast EV Charging

The number of electric vehicles (EVs) on U.S. roads is predicted to reach between 30-42 million by 2030 and to require approximately 28 million charging ports (public and private). Currently, 182,000 are projected to be direct current (DC) fast chargers.¹ There are around 50,000 DC fast chargers nationwide, which are increasingly in demand to support the deployments of medium and heavy-duty EV fleets.² To promote energy efficiency during the growth of EV infrastructure, the U.S. Environmental Protection Agency (EPA) developed a specification to recognize the most energy efficient EV charging products.³

Specification Overview

ENERGY STAR certified DC fast chargers meet the following criteria:

- **Chargers 50 to 65 kW:** Minimum active charging efficiency of 93% and maximum standby losses*
- **Chargers 65 to 350 kW:** Maximum standby losses*

*The specification offers additional power allowances during standby for products with a high-resolution display or a battery management system.

Connected Functionality

EV chargers listed on the ENERGY STAR Product Finder as connected functionality capable must support **open standards for communication protocols**. Connected functionality allows for:

- Load dispatch
- Price notification – allowing for lower customer electricity costs
- Optimizing energy use through Demand-Response
- Full Vehicle to Grid Integration (VGI)

Bipartisan Infrastructure Law Investments:

The Bipartisan Infrastructure Law is investing in EV charging with the following investments and goals:

- \$7.5 billion in EV charging
- \$7 billion in EV battery components, critical minerals, and materials
- EVs to account for 50% of new car sales by 2030
- Building national network of 500,000 electric vehicle chargers

¹ EEI/IEI, June 2022, [EV Sales Forecast and the Charging Infrastructure Required through 2030](#).

² EV Atlas Hub 2023, [Atlas EV Hub: EV Charging Deployment](#).

³ U.S. EPA, 2021, [ENERGY STAR Version 1.1 EV Chargers Specification](#).

All ENERGY STAR Certified EV Chargers:

- ✓ Provide Energy Savings
- ✓ Meet Safety Requirements
- ✓ Use Open Standards

Did you know? ENERGY STAR certified DC EV chargers up to 65 kW will generate:

- **Annual cost savings up to \$185,** which is equivalent to saving about **1.5 MWh/year.**
- **Over \$1,650 in cost savings during the lifetime** of the charging station.

ENERGY STAR® is the simple choice for energy efficiency. For more than 25 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Learn more at energystar.gov/products/other/ev_chargers