

C50

Built to Power Places



ABB E-mobility

The Destination Opportunity

As e-mobility matures, it's time to enter an era of charging that is accessible for everyone, with destination sites uniquely positioned to meet this demand.

Retail locations, supermarkets and gyms are already frequented by drivers, making them ideal destinations for fast, convenient EV charging. With advanced, fit-for-purpose DC chargers, customers can recharge their vehicle in under an hour while completing their shopping.

For retail operators, destination charging unlocks an unmatched opportunity. By introducing weekly charging into the routine of customers, dwell times, foot traffic and customer loyalty increases. It's not just about charging—it's about reimagining the customer experience and spearheading a new era of convenient e-mobility.

Prolonged Store Times

Boost the average dwell time by up to 30 minutes, aligning optimal shopping and charging durations.

New Revenue Streams

Increased foot traffic, advertising, and electricity resale create multiple layers of new revenue.

New Customers

Attract on-the-go EV drivers who spend 20% more per minute compared to the average driver.

Loyalty Integration

Seamlessly integrate charging with loyalty apps to reinforce weekly shopping habits and increase LTV.

Built to Power Places

The C50 is a premium and compact charging solution tailor-made for retail operators. Optimized for the one-hour use case, the C50 delivers a superior performance at the smallest footprint to electrify destinations.

Form and Power-fit for Purpose

- Optimized for 1 hour dwell time: 50 kW at 150 A
- Maximizes plug availability on-site: 25 kW dual output
- Slimmest design with a depth of 235 mm

Branded Experiences

- Color, materials and finish to match brand identity
- Configurable digital moments
- Integration into destination apps

Fully Managed Solutions

- Asset set-up and management
- On-site support with locally stored spare parts
- Full operational handling
- Scalable commercial models





Best-in-Class Experience

Intuitive Interface

A smartphone-like digital interface and industrial design deliver a seamless user experience.

Superior Screen

The large HD touch screen at 21.5 inches enables easy interaction and displays real-time charging data.

Premium Design

High-quality materials and sleek aesthetics come together to create a body worthy of brand activation.

Automated Updates

Over-the-air updates continuously improve user experiences and enhance features in real time.



Your Brand Made Visible

Configurable physical and digital experiences are tailored to your brand identity.

Design Aesthetics

Choose logo placements and custom cabinet colors in automotive-grade paint for the most premium site experience.

Digital Moments

Insert digital brand interactions into our award-winning user interface without compromising on charging success rate.



Our Core Technology

Next-generation power modules are developed entirely in-house for improved efficiency and long-term durability.

96.5%

Peak Conversion Efficiency

Engineered with SiC technology

SiC semiconductors deliver up to 96.5% conversion efficiency and reduce energy costs by 20-40% compared to traditional silicon-based systems.

Reactive Power Support

Resilience against grid disturbances

Reactive Power Support with ride-through capability actively balances the grid against 90% of known disturbances, maximizing charger uptime.

25 kW

Power Granularity

Power sharing for optimal utilization

Dynamic Power Allocation distributes power where it's needed, optimizing energy delivery across two outlets.

Advanced Remote Diagnostics

Setting new standards in remote monitoring

Critical grid and charger data is monitored at 10,000 times per second with Advanced Remote Diagnostics, improving serviceability.

500,000 hrs

Accumulated Testing Efforts

Over 50 years of accelerated life testing

ABB E-mobility chargers and power modules are designed with modular sub-assemblies, enabling rigorous testing of individual components and subsystems.

Protected from the Elements

A rear raincatcher system with optimized lateral airflow vents keeps moisture away from critical components.



A Fully Managed Charging Solution

Allowing you to focus on your core business, while we manage the charging infrastructure.



Network
Operation



Service &
Maintenance



Site
Configuration



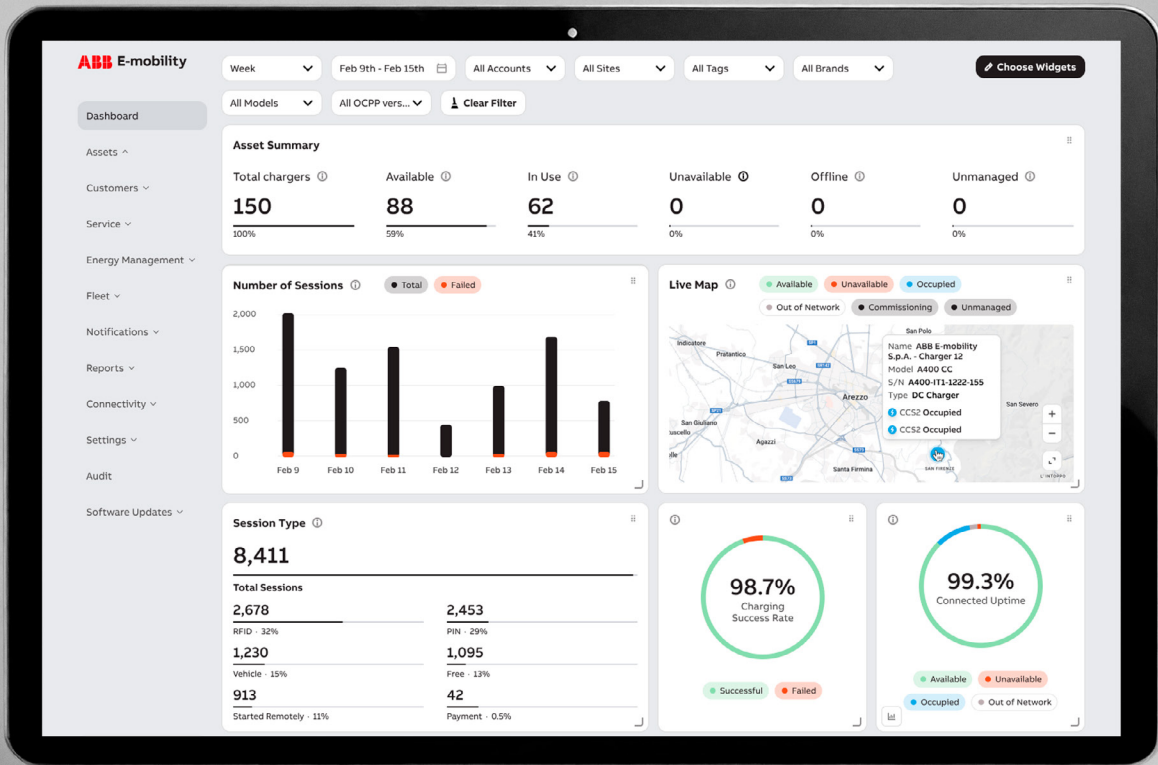
Business
Case



Destination-
Optimized
Charging



Software
Integration



Key Features

Compact Flexibility

Made **235 mm thin** to fit tight parking areas and space-constrained garage settings.

In-house Power Electronics

50 kW output is delivered through **SiC power modules** engineered in-house.

Real-time Remote Monitoring

A unified toolchain with integrated connected services **maximizes charging success rates.**

Dual Outlet

Two vehicles charge simultaneously with **25 kW granularity** for optimal site utilization.

User-centric Display

The central **21.5" touch screen** with a unique UI provides clarity during the charging process.

Built to Last

Designed with a **10-year lifespan** using robust hardware to withstand the harshest conditions.



**D 235 mm
H 1967 mm
W 653 mm**

Dimensions

**OCPP
1.6J & 2.0.1**

Ready

ISO 15118-2

Ready

**4.2 m
3.9 m**

Cable Length
and Reach

**CCS1
CCS2
NACS**

Dual Connector

We Electrify Mobility



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