



TECHNICAL DATASHEET

COMMERCIAL CHARGING STATION

TR Model

Durable and certified charging solutions designed to withstand the Quebec climate and optimize installation management.

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TECHNICAL DATASHEET COMMERCIAL - EV CHARGING STATION

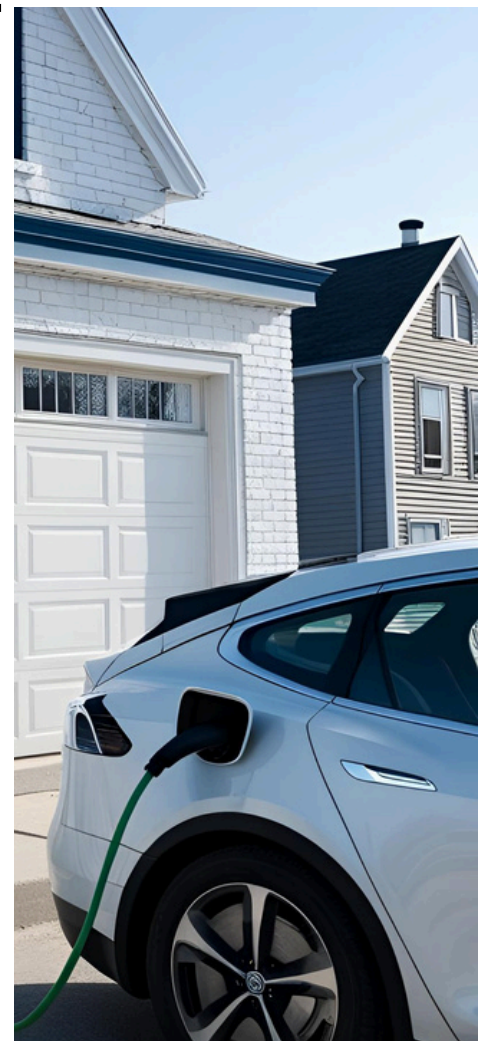
Product Identification

- Manufacturer: TechnoVE Inc.
- Address: 7804 Maurice-Guillemette Street, Bécancour (QC) G9H 4Y7, Canada
- Commercial Model: TR Charging Station (Commercial)
- Product Type: AC charging station for electric vehicles with RFID authentication
- Connector Standard: SAE J1772 and NACS (North American Charging Standard)

General Description

The TechnoVE TR commercial charging station is a Level 2, 240 V charging solution designed for business parking lots, condominiums, municipalities, and fleet operations. It is based on the certified BR240V-x48 / BR240V-x32 hardware platform and offers:

- Up to 48 A power output (adjustable current)
- Indoor and outdoor operation adapted to the Canada's climate (-40°C to +40°C)
- Smart management through OCPP 1.6j, TechnoVE Web Portal, and mobile application
- Dynamic power sharing
- RFID card access control for authorized users
- 3-year warranty
- Lifetime warranty on the aluminum enclosure



CHARGING STATION

SR-48 Model (Commercial)



ELECTRICAL SPECIFICATIONS

Typical Applications

- Apartment buildings and condominiums
- Offices, industrial parks, retail businesses, and hotels
- Corporate fleets and service vehicles
- Public or private parking lots with user management and billing capabilities

Parameter	Value / Specification
Input Voltage	208–240 VAC, 60 Hz
Connection Type	Hardwired
Output Current	12 A to 48 A (adjustable depending on installation)
Maximum Power	11.5 kW (240 V) / 9.9 kW (208 V)
Charging Protocols	SAE J1772 / NACS - SAE J3400
Cable Length	7.5 m (25 ft) – EVE type EV cable / AWG #10 or #8
Amperage Configuration	Programmable through application or DIP switch
Amperage Configuration	Up to 4 charging stations on a single circuit (40A–60A)
Amperage Configuration	Automatic adjustment according to supply voltage (208–240 Vac)
Amperage Configuration	Optimized for indoor and outdoor environments
Amperage Configuration	Wi-Fi 2.4 GHz (IEEE 802.11 b/g/n) / optional cellular connectivity
Amperage Configuration	Compatible with copper or aluminum conductors, 6 AWG



MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification
Enclosure Material	Industrial aluminum, thickness ± 3.8 mm
Enclosure Dimensions	H: 230 mm \times W: 150 mm \times D: 75 mm (9.06 \times 5.91 \times 2.95 in)
Installation Type	Wall-mounted or pedestal-mounted
Protection Rating	IP65
Impact Resistance	IK08
Enclosure Protection	NEMA 3R / NEMA 4X (indoor & outdoor), compliant with CSA/UL humidity tests
Temperature Range	-40°C to +40°C
Available Coupler	SAE J1772 / NACS - SAE J3400
Cable Length	7.5 m (25 ft) – EVE type EV cable / AWG #8 or #10
Cable Management	Wall support or pedestal stand (optional)
Weight	Depending on configuration (\approx 4–6 kg / 8.8–13.2 lb)



SAFETY & PROTECTION

Protection	Description
CCID 5 mA	Integrated UL 2231 ground fault protection
Ground Leakage Monitoring	RCMB121 module
Overtoltage / Undervoltage Protection	Compliant with EVSE standards CSA-C22.2 No. 280 / UL 2594
Relay / Contactor Protection	Automatic diagnostics
Thermal Management	Internal temperature monitoring
User Safety	Low-voltage circuit within the connector

USER INTERFACE & VISUAL SIGNALING

The TechnoVE TR commercial charging station includes a status LED to clearly indicate different operating conditions (ready, charging, error, load sharing).

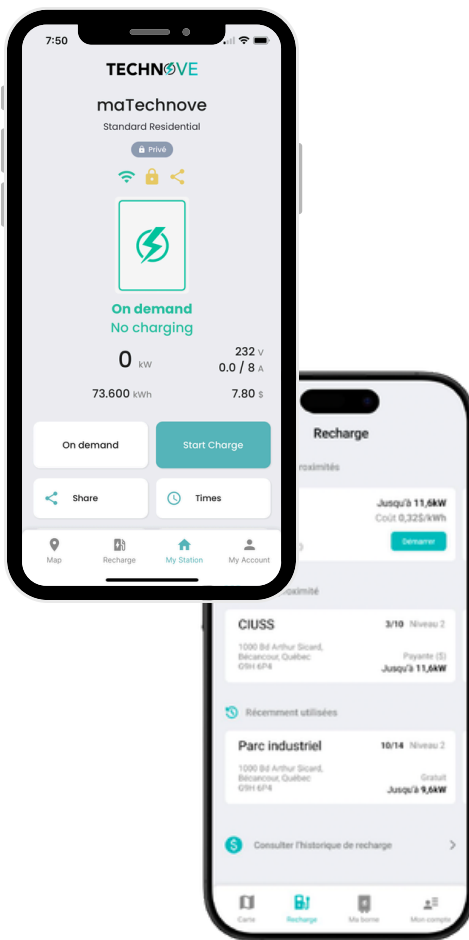
Status	Color
Initialization / Error	Red
Ready to Charge	Green (not used during load-sharing mode)
Vehicle Connected	Blue
Charging in Progress	Flashing Blue
Load Sharing Mode	Yellow (replaces green when load sharing is active)
RFID Card Addition	Cyan
Switching to Automatic Mode	Purple

STANDARDS & CERTIFICATIONS

Standard / Certificate	Details
CSA C22.2 No. 280 / UL 2594	EV charging equipment
CSA C22.2 No. 281.1 / UL 2231-1	User protection
CSA C22.2 No. 281.2 / UL 2231-2	Additional safety tests
FCC Part 15B Class A	Electromagnetic compatibility
ICES-003 Class A	Digital devices
LabTest Listing (official report)	BR240V-x48 / x32 platform
RFID Module	MIFARE 13.56 MHz

Les processus d'inspection, d'essai et de certification associés au produit respectent les normes ISO 17020, ISO 17025, ISO 17065 (ISO/IEC 17067), tandis que le système RFID est conforme à la norme ISO 14443A.

ADVANCED FEATURES



The TechnoVE TR commercial charging station integrates a complete suite of smart functionalities that enable optimal management of charging infrastructures for both small installations and large-scale multi-service sites. Thanks to its wireless connectivity, open protocol, and TechnoVE digital ecosystem, it offers a modern, flexible, and fully centralized charging experience.

Compatible with OCPP 1.6j, it can be integrated into an existing charging network or connected to the TechnoVE portal to allow:

- Real-time monitoring
- Remote configuration
- Access to detailed statistics

The charging station can dynamically adjust its amperage based on available electrical capacity and allows load sharing between multiple units installed on the same circuit, ensuring optimal power distribution without overloading the network.

Wi-Fi connectivity enables the charging station to be integrated into a management network and remotely configured, including communication with the portal or mobile application. This connectivity also simplifies technical adjustments, diagnostics, and access to advanced settings by managers or technical support when required.

An optional 4G/LTE cellular connectivity solution is available through a separately installed gateway, depending on the selected configuration.

The TechnoVE digital ecosystem also includes a mobile application for users. The app allows users to:

- Locate compatible charging stations
- View charging station characteristics
- Start charging sessions
- Monitor charging progress
- Access charging history and related payments

Users benefit from a simple, fast, and intuitive charging experience both at home and in commercial environments.



For managers, the TechnoVE customer portal provides a professional interface allowing them to view kiosks in real time, administer several sites, create user groups, to manage access, adjust operating parameters, and view detailed statistics.

The portal also facilitates pricing, energy management and reporting, providing a comprehensive tool for operational and business needs

Thanks to this combination of hardware and software features, the commercial TR terminal is a flexible, efficient and scalable solution that meets the modern requirements of commercial and institutional environments.

