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# TH-R
## TOWNHOUSE EVEMS

The TH-R is a Wireless Electrical Vehicle Energy Management System designed specifically for townhouse applications with private garages. The TH-R monitors the townhouse service feeders located in townhouses breaker panels. It then wirelessly communicates with the upstream SEC-R which monitors the main service entrance located in the electrical rooms. This system provides a cost effective solution to permit EV chargers for all owners in townhouse applications.

### Key Features:

- Monitors incoming 120/240V or 120/208V feeders with the included 200A split-core current transformers. (Optional 3ph measurement)
- Robust Wireless Mesh Long Range Radio communication between the townhouses and main electrical rooms
- Prevents expensive underground trenching and wiring required for communication between the electrical rooms and all townhouses.
- Prevents expensive utility service upgrades
- Fail-safe hardware and software design for maximum safety
- Allows each owner to install an EV Charger of their preference
- No Subscription Fees
- Design and Manufactured in Canada
- Compact Design (10"H x 8"W x 4"D) Can be surface or recess mounted
- CSA Approved

### Control Operation:

The main constraint for installing EV chargers in most townhouses are the main service entrances which typically do not have enough capacity to allow all owners to install EV chargers. When an EVEMS system is installed which monitors all main electrical distribution points and individual unit breaker panels, the EV charging loads will efficiently utilize all available electrical capacity in the distribution system.

Our TH-R monitors in real-time the incoming electrical feeders in the townhouse panel while also communicating with the upstream SEC-R in the main electrical room. The SEC-R utilizes FIFO logic to balance all TH-R groups as needed to ensure maximum system up-time while safeguarding the electrical distribution system as to not exceed 80% at any measured point. It will automatically turn off TH-R groups as the system demand approaches the maximum limit and turn the TH-R groups back on as the system demand is reduced.

### Specifications:

- EVEMS: Electrical Energy Management System
- Monitors townhouse breaker panels, either 120/240V or 120/208V, 1ph.
- Includes two 200A split-core current transformer with 6.0 meter leads
- Ensures all EVSE loads are turned off once any measured point exceeds 80% of its rating
- Balances programmed control groups providing maximum system up-time
- Requires dedicated 208V or 240V hardwired connection from the breaker panel to power internal controls and provide power out to the EV charger. Maximum circuit size is 50 Amps.
- Communicates with upstream SEC-R equipment via long range radio utilizing mesh technology for excellent reliability
- Enclosure dimensions are 10"H x 8"W x 4"D with cable knock-outs for easy installation
- Can be surface or recess mounted
- No monthly or annual monitoring or subscription fees

**Contact us today for more information or pricing!**

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