

HOW TO MANAGE YOUR INSTALLATION WALL CONNECTOR GEN 3 (208/240V)

Step 1: Determine Electrical Capacity & Parking Space Location

- Choose parking spaces within proximity to electrical infrastructure; less than 150ft away from main electrical room is ideal for cost effective projects.
- Install costs rise significantly with trenching and pedestals, look for parking that is adjacent to the building or the wall where conduit can run from the electrical room.

How many should I install?

New Sub-panel rating on 208V/240V	Tesla Connectors	
100A	No less than 3 and up to 6	
150A	No less than 5 and up to 8	
225A	No less than 8 and up to 16	

Step 2: Design with Power-Sharing in mind

- Power sharing enables groups of up to 16 Tesla Connectors to automatically share a common load maximum. *Reference NEC 625.42 Rating.*
- Power-sharing works through point-to-point wireless communication between Tesla Connectors, make sure each power-sharing grouping is within line of sight of each other.

Step 3: Ensure Internet Connectivity

- Tesla Connectors should be enabled with a stable internet connection for software updates, firmware upgrades, plus billing + management services.
 - Strong house Wi-Fi, or an external 4G Cellular gateway are required, please ensure this is factored into the scope of work with your electrician.
- If you don't bring internet the Tesla Connectors will still charge cars, you will just provide the electricity for free, which for many hotels, resorts, and small apartments is a great free amenity.

Step 4: Follow up Value Engineering Questions

- Review the estimate your electrician gave you, given the shared guidance above.
- Is this close to a common install price of \$3,000* dollars per unit?
- Can you and your electrician make any modification to reduce costs?

*Target cost for wall mounted units installed on existing power and < 150ft

Existing Electrical Service Entrance and Load Center Wi-Fi Router or Extender ſ, 2 6 ſ, New 225A 6 Sub-Panel 1↓ 225A/2P G. Up to 16 Wall 60A/2P Connectors per 6 225A Sub-Panel 60A/2P G. 60A/2P à 60A/2P **To Utility Service** ſ. 60A/2P ò 60A/2P -6 6 ſ'n, ſ,

Single Line Diagram for Power-sharing

SAMPLE QUOTE

Electrician to install the following to power (6) 208/240v Tesla Connectors, on a 100A sub-panel.

- Furnish and install one (1) 100-amp circuit breaker in house panel to feed new EV panel.
 - \circ $\;$ New EV panel will be fed from existing 1200-amp 208-volt house panel.
 - Panel will be located outside of the main electrical room.
- Furnish and install one (1) 120/208-volt 100-amp panel board with (6) 60-amp circuit breakers to feed Tesla Connector.
 - Run (6) #4 AWG feeds from panel board to each Tesla Connector.
 - Install (6) Tesla Connectors, wall mount Tesla Connectors in each designated parking space.
 - Commission power-sharing between each Tesla Charging station.
- Connect Tesla Connectors to house Wi-Fi.
- Tesla Connectors to be furnished by others.

Includes all labor, material, and electrical permit(s)......\$15,750.33

New Multi-Unit Development and Future Proofing



Project Guidance

In an Apartment setting, designate one or more EV charging transformers.

- Ensure transformer is sized to support at least 20% of total residential parking space count at 8kW per space.
- Stub 100% of spaces in development to take advantage of cost efficiencies during development, ad EVSE as needed post occupancy.

In a **Condominium** setting with deeded parking and metering, developers can allocate less power per space; no less than 3kW to 100% of spaces.

- Power-sharing will not be needed in cases of dedicated metering per deeded condo.
- Let condo owners purchase Tesla Connector as needed, developer only needs to stub out conduit.

Example

Туре	Units	Initial EV Spaces	kW
Apartment	200	40	320
Condo	75	75	300