

Networked vs Non-Networked Solutions

Charging infrastructure solutions are either non-networked or networked. For the majority of multifamily housing (MFH) properties, networked chargers will best satisfy the needs of residents.

Non-networked chargers are relatively inexpensive and simple plug-in and charge options. They work best where chargers are directly connected to a resident’s meter. Level 1 and Level 2 portable chargers are non-networked, and many Level 2 chargers are hardwired in single-family homes, fleets, and some condominiums.

There are also more limited **“smart” Level 2** chargers that use Wi-Fi to schedule charging sessions, optimize for utility rate structures, and remotely monitor and control charging sessions.

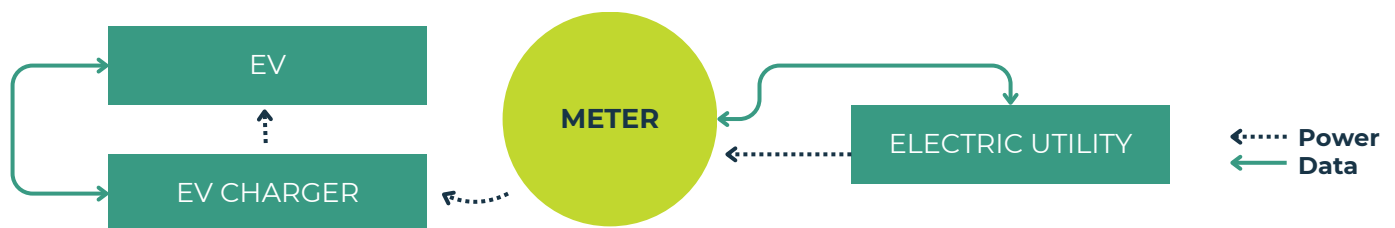
ADVANTAGES FOR A NON-NETWORKED CHARGER

- Less expensive and quicker to install
- Does not require network commissioning
- Will work for any EV, at any time, at no cost to the driver

CONSIDERATIONS FOR A NON-NETWORKED CHARGER

- No integrated ability to meter electricity or access features
- If property management wants to collect revenue, a billing system will be needed

NON-NETWORKED EV CHARGER CONFIGURATION ¹



Networked Level 2 chargers, sometimes called “Smart” chargers, are connected to the internet, as shown below.

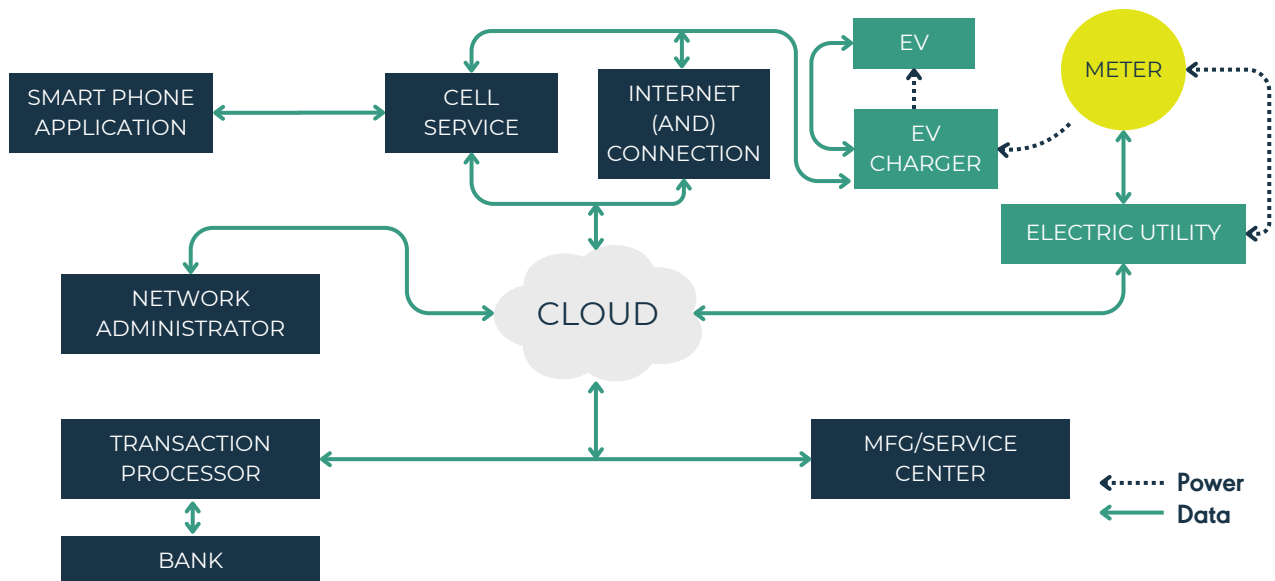
ADVANTAGES FOR NETWORKED CHARGERS

- Can collect revenue and control who has access, fees, and charge timing
- Are typically sturdier

CONSIDERATIONS FOR NETWORKED CHARGERS

- More expensive than non-networked chargers
- Monthly or annual operation costs, including networking, service, and transaction fees
- Require internet connectivity, through cellular, Wi-Fi, or ethernet cable to provide features
 - Cellular repeaters or wifi boosters may be necessary in subterranean garages

NETWORKED EV CHARGER CONFIGURATION ²



For more information on charging features and smart charging technologies click [here](#)

1. California Energy Commission et al., Electric Vehicle Charger Selection Guide, 2017, https://afdc.energy.gov/files/u/publication/EV_Charger_Selection_Guide_2018-01-112.pdf
 2. California Energy Commission et al., Electric Vehicle Charger Selection Guide.