Powerhouse stainless steel pedestal case study

Eaton power pedestals innovate hospitality for RV travelers

The recreational vehicle (RV) industry has been experiencing a boom since 2020 - and it looks like it won't end any time soon.

- More than 9 million households in the United States own an RV
- Nearly 10 million more households intend to buy an RV over the next several years
- 46 million Americans plan to take an RV trip in 2022 and 2023

When a national chain of truck stops and convenience stores analyzed forecasted demands in the RV industry, it discovered an opportunity to provide travelers with a more convenient stopover alternative than RV parks, which often require reservations to be made six to eight months in advance. The company required a solution that provides travelers with wi-fi, water and 30- and 50-amp hookups to complement its safe, clean and well-maintained places to stop for the night. What's more, it needed wireless utility metering of each booked RV for billing purposes.

Summary

- **Challenge:** Rolling out the new business concept as quickly as possible to meet the explosive growth in domestic RV travel
- Solution: The Eaton Powerhouse SS stainless steel power pedestal and the MarineSync[®] Remote Utility Monitoring & Control app
- **Results:** Multiple sites were up and running in less than a year with nearly 80 additional locations under construction

Challenge

Provide durable power pedestals to dozens of new and innovative RV stopover locations, with each pedestal capable of remote utility metering. Also, meet client's aggressive construction timetable. According to Michigan Association of Recreation Vehicles and Campgrounds (MARVAC), more than 9 million households in the United States own recreational vehicles. By the end of 2022, it's expected the number will rise to 11 million households. And in the next five years, according to RV Industry Association (RVIA), a total of 9.6 million more American households intend to purchase an RV.

What's astounding is that these numbers demonstrate that the RV manufacturing industry cannot keep pace with demand. RV News projects the industry will build more than 600,000 RVs in 2022. So, for the time being, many road warriors will be renting an RV. RVIA estimates that more than 46 million Americans who own or rent an RV plan to hit the highway this year and in 2023.

Knowing that traditional RV parks have camping locations that are often booked six months or more in advance, and seeing a need to offer expanded hospitality facilities to millions of RV drivers, the truck stop and convenience store chain reached out to Eaton. It discussed its plan with our Marina Power team to see if we could accommodate its rapid-rollout benchmarks and if we could also provide a feasible solution for utility metering.



Solution

Installing single-sided, cost-efficient pedestals built to handle severe weather conditions and incorporating wireless metering and control capabilities.

For this project, Eaton engineers suggested our UL® Listed Powerhouse SS power pedestals. These pedestals feature a durable NEMA® 3RX stainless steel enclosure that withstands both moisture and severe weather ranging from extreme cold to high heat. Their coating also meets IEEE® C57.12.29 coastal corrosion requirements.

Powerhouse SS pedestals include a light-sensing photocell and backlit LED amber faceplate to facilitate night-time plug-in for users. Plus, they come with a choice of 20-, 30-, 50- or 100-amp combinations, providing flexibility for hookups.

A big selling point for the truck stop and convenience store chain was the design options for the Powerhouse SS pedestal. While a double-sided pedestal could provide two RVs with electrical and water connections and reduce the number of units installed, the chain selected a single-sided Powerhouse SS pedestal with electrical and water connections dedicated to each individual RV.

The Powerhouse SS pedestal also enables 24/7 electronic metering for both electric and water consumption. Eaton used the MarineSync app that makes it possible for site management to conduct wireless monitoring of each pedestal's utility usage. It also facilitates wireless control of both pedestal power and its connected utilities by using any web-enabled computer, smartphone or tablet.

Results:

Since work began on the rollout, Eaton has installed 250 Powerhouse SS pedestals at 13 different customer locations, providing greater convenience to RV travelers and remote metering for site managers.

The number of pedestals varies by the size of each site. Smaller locations have 8 to 12 Powerhouses installed while larger travel stops feature 30 to 40 pedestals.

The truck stop and convenience store chain plans to build approximately 90 RV park-alternative sites, with up to 1200 total remote metering-capable pedestals to provide electricity and water to vehicles. Eaton's expertise will enable the client to serve this booming market.





For more information, contact us at MarinaSales@Eaton.com or 1.800.723.8009



United Stat Eaton.com © 2022 Ea All Binhts F

Powering Business Worldwide

© 2022 Eaton All Rights Reserved Pub. No. CS006001EN / GG May 2022

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

Follow us on social media to get the latest product and support information.

