



[The Endless Highways® Edition](#) contains a 4KWh of lithium iron phosphate (LiFePO4) battery. Bowlus Road Chief® was the first travel trailer manufacturer (back in 2016) to develop a solution with this technology.

Endless Highways Power Performance Includes:

- 4 KWH battery means up to a week off-grid without generator use (Other RV's battery capability is one-night off-grid).
- Microwave runs off of battery power (This is not possible or standard in any other RV).
- A/C runs off of battery power (This is not possible or standard in any other RV).
- Inverter output to all outlets (All outlets work off of the battery - this is not standard in any other RVs).
- Run Large Appliances Overnight for a more extended time (This is not possible or standard in any other RV).
- Continuous Hot Water.
- Mobile Router with Embedded 3G/4G.
- Wifi Repeater: allows you to piggyback off of other wifi networks to create your private, secure network.
- GPS.
- The ability to booster power: If you are camping with only 15A service, but want to draw more than 15A in your Road Chief, the power booster can make up those extra amps from the power bank in the batteries. This means you can use the A/C and a blow dryer at the same time.

Bowlus Road Chief® lithium iron phosphate batteries are manufactured under European specifications and feature integrated cell balancing and cell monitoring for optimum protection. Lithium iron phosphate batteries are noted for a much wider range capacity than traditional lead-acid batteries for both "usable" capacity" and "cycle life." A lithium iron phosphate (LiFePO4) battery is on average about a third of the weight of a traditional battery with a safety discharge range to 20% of the battery capacity. Traditional lead-acid batteries can only drop to 50% before damage occurs. A lithium iron phosphate battery can last more than 3000 charge cycles (8 to 10 years of heavy camping use) versus traditional batteries, which last between 2 to 5 years depending on care. Traditional batteries will self-discharge over time and require a trickle charge to stay healthy during storage whereas LiFePO4 can sit (for months) without losing charge.



The Endless Highways design incorporates complete battery management at the cell level with a disconnect in case of under voltage, over voltage or over temperature. Much like electric vehicles, the Bowlus Power System can dynamically adjust battery charging to protect the lithium iron phosphate battery. If needed, the system will disconnect charging from the tow vehicle and solar panel charging circuits. Traditional batteries and aftermarket lithium systems do not have this level of protection and as a result, require more attention to ensure they do not dip below safe discharge level and permanently damage the batteries.

In addition, the Endless Highways® Edition can function as a four-season travel trailer. A special circuit allows power to flow in the Road Chief in sub-zero temperatures but does not allow the batteries to be charged until they warm up since LiFePO4 batteries should not be charged at low temperatures. Since the batteries are located within the Bowlus Road Chief® shell, this warm-up simply occurs by warming the inside of the Road Chief® using the heating system set on propane or 120V. Additionally, the Endless Highways® Edition allows for the lithium battery to be very slowly charged until the battery reaches over 32 degrees where it can then be charged at the full rate.

The Bowlus Power Management 2,000 W inverter delivers 15A to all the inverted 120V outlets. That means you can easily charge your devices or run a laptop or a CPAP machine while off-grid. The inverter is also pure sine wave, which means that all electrical appliances work just like plugging in at home. A control panel allows monitoring of the entire 12V system. This panel can connect via Bluetooth, allowing all this information to be checked via a smartphone.

The Bowlus Road Chief has Power Boost, an incredible feature to increase your flexibility. If you are camping with only 15A service, but want to draw more than 15A in your Road Chief, the power booster can make up those extra amps from the power bank in the batteries. This means you can use the A/C and a blow dryer at the same time.

[The Endless Highways® Edition](#) charges at up to 80 amps, so charging the lithium batteries from 20% to 90% takes just a few hours. [The Endless Highways® Edition](#) intelligently manages itself whereas any traditional battery system requires owners to stay “on top” of their power usage.

The power system is often not addressed until after you purchase an RV. Bottom line, don't



be fooled by someone saying “oh yeah, I can upgrade you to Lithium or no problem go off-grid” and think it is the same as the performance of a Bowlus Road Chief. When people talk about why they are upgrading to a Road Chief from another RV, they often comment that their previous RV dealer never adequately addressed their understanding of the power systems which left them disappointed in performance capabilities.

Whether you are looking to be on or off the grid, you need a power solution that will ensure maximum flexibility and reliability. At Bowlus Road Chief®, we focus on meaningful design so you can make every adventure your best.

Do you have further questions about Power Performance? We would love to answer them. Send us an email at sales@bowlus.com or call us at [702-762-9137](tel:702-762-9137).

Sincerely,
Geneva Long
Bowlus Road Chief®