



OFF GRID BASE TRAILER SYSTEM



A fully-integrated all-in-one off-grid portable power solution using British-made wind turbines, solar pv, and a fuel cell option to provide power to remote sites

Compact to be fully transportable and is easy to install at a new location

Typical applications include:

- Environmental monitoring
- Telemetry systems
- LIDAR & SODAR installations
- Remote weather stations
- Starlink
- CCTV and security systems
- Rural WiFi and broadband
- Radio repeater stations
- Media & Event displays
- Private LAN or WAN
- Equipment charging
- Agriculture
- Glamping

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OG BASE TRAILER Features



Quick to deploy portable power

- ~ 1.1kWh monocrystalline solar pv
- ~Dual tilt-over tower masts for turbines and/or auxiliary equipment
- ~ 24kwh of battery storage
- ~ Capacity for 1000w of wind input
- ~ Hydrogen and Methanol fuel cell compatible
- ~ IP65 Rated cabinet enclosures
- ~ Demountable from trailer using its own jacking system or with a forklift
- ~ Grid tie compatible inverter 48v 5000va
- ~ Remote monitoring to see system performance via intuitive web portal
- ~ Adjustable legs to maintain balance in alternative terrain
- ~ Maintenance free

Remotely deployable

The OG Base is a robust solution for deploying to countless locations. The sleek mounting frame design permits the system to be transported easily on a standard trailer. Once at the chosen site, the four legs are wound to the desired height allowing for a level base even on uneven terrain. Trailer mats can be placed under the feet for added stability. Once raised, the trailer can then be extracted, leaving the stand-alone solution to perform. Installation is rapid and provides an environmentally friendly alternative to concrete bases. The tilt up/down masts make for easy deployment in a safe and effective manner, even in remote areas. A galvanised finish completes the design with additional paint on the base and towers for aesthetics of your choice.

Solar Pmax	2-4 x 405W
Solar Type	Monocrystalline
Turbine Pmax	supports all LE turbines
DC voltage	24V or 48V
Max AC output	3000 VA / 5000 VA
AC output	230V+/- 2%
Max AC input	16A
Input voltage range	187-265(V)
Input frequency	45 - 65Hz (PF1)
Battery charger	16A
Battery size	up to 23kWh
Weight	1750kg
Size	300 L x 190 W x 110 H (cm) standard
Remote monitoring	Yes
Generator autostart	Yes
Ethernet connectivity	Yes
Wifi connectivity	Yes
Operating temp	-40 to +50 degrees C
Operating humidity	5-95% RH non-condensing
Enclosure material	GRP, steel, powdercoat protection
Fuel cell capacity	125W / 500W
Methanol fuel cell capacity	60kWh
Grid connect	Grid tie compatible with G98/G99



OG BASE TRAILER Technical

AC, DC and Backup

The standard OG Base Trailer has both AC and DC available, as well as a DC only version. Based on the renowned inverter-chargers from Victron Energy, the OG Base can supply 230V from 500W to 3000W. The system can also be connected to a generator or mains power supply.

When connected, the system will automatically switch away from the batteries and feed AC power directly to the electrical equipment in use. This changeover happens in about 12ms, which is fast enough to keep even sensitive electronics continuously powered. As well as feeding power from the generator or mains directly, the OG Base uses surplus power to simultaneously boost charge the battery bank.



If a backup generator with an autostart function is available, the system can be set up to automatically start & stop the generator depending on the battery state of charge. The autostart function can also be set to activate the generator when the electrical load exceeds the capacity of the onboard inverter. In these instances, the OG Base combines both power sources using Victron's onboard Power-Assist™ function.

Fuel cell or Diesel Generator Backup

An Efoyl methanol fuel cell can be used to boost the system's capabilities. The expandable fuel cell storage has capacity for up to 128kWh.



Stored Power

Batteries are essential in storing power generated. They also provide the "reserve" for days when there is neither much sun or wind, keeping equipment running no matter the weather.

The OG Base Trailer is fitted with a bank of industrial grade deep-cycle AGM (Absorbent Glass Matting) batteries designed to give 2-4 day autonomy and many years' service, even when they are heavily used. AGM batteries do not contain any free-liquid electrolyte so are suited to the rigours of transport. As standard, six 120Ah batteries storing a total of 8.64kWh of energy are used. For greater storage, systems can be "daisy-chained" together.

We are happy to discuss requirements and provide a bespoke solution.



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