

FAST FOLD

INSTANT DEPLOYABLE SOLAR POWER



HIGH POWER OUTPUT



MAN PORTABLE



FAST SETUP



EASY TO USE



SOLAR POWER MOBILITY WITHOUT COMPROMISE

A MAN-PORTABLE SOLAR HYBRID POWER SYSTEM
DELIVERING AFFORDABLE, SECURE AND SUSTAINABLE
POWER IN REMOTE LOCATIONS FASTER THAN EVER BEFORE.



RENOVA GEN

MAN-PORTABLE SOLAR HYBRID POWER

Introducing FAST FOLD – the most power you’ve ever seen before in a package that can fit in the back of a car! The system consists of FAST FOLD Solar Mats which operate in conjunction with the FAST FOLD Energy Hub.

The folding mats can be deployed in seconds – either directly on the ground, or lifted onto shipping containers, roofs or other structures. They are moved in a transport bag, which can contain up to 2 x 1.61kWp mats. Just like our larger RAPID ROLL, the key advantages are:

- A large surface area of solar PV can be deployed from a small, lightweight package = more power for less weight, hassle and transport cost
- CIGS flexible thin-film technology operates well in a wide range of irradiance conditions – so the angle of deployment or level of sunlight is less important than with glass panels
- A solar mat is deployable by 2 people in less than a minute!



FAST FOLD ENERGY HUB

The FAST FOLD Energy Hub is an entire off-grid hybrid power system packed into a robust Peli case, including up to 10kWh of energy storage (lithium-ion batteries) and up to 3kVA AC output.

The system can be run standalone with up to two 1.61kWp FAST FOLD solar mats (3.22kWp max), or it can be run in hybrid with a small diesel generator (2kVA to 5kVA), with automatic start-stop based on battery charge state (genset dependent). With this setup, you can guarantee power availability on a 24/7/365 basis. The Energy Hub is waterproof for outdoor operation and has been ruggedised for transport by road, sea, air and extensive manual handling to go even where vehicles can't!





FLEXIBLE, FAST DEPLOYMENT

This is the best way to get self-sustaining power to the most remote and difficult-to-access places, where continuous delivery of fuel for generators would be impossible or extremely expensive.

Just one of these systems could provide power for:

- A deployable camp HQ - comms, lighting, computers, or;
- 3,000 litres of seawater purified for drinking, or;
- 800+ smartphone charges, or;
- 200+ cups of tea!



CASE STUDY

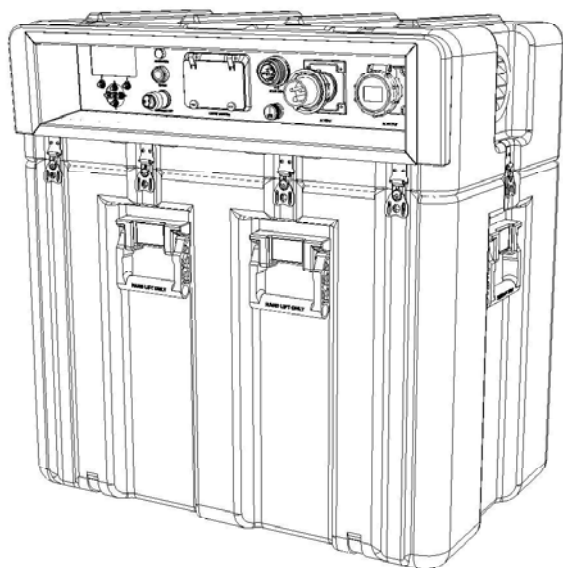
The FAST FOLD system was trialled in late August 2018 by a British military unit in the UK. One FAST FOLD 1\5 (1kW folding solar panel and 5 kWh of battery storage) supported a Command and Staff Training exercise with the FAST FOLD providing power to the deployed headquarters. Headline results were:

- Only 45 mins training required for troops to become confident with system operation.
- Unit saved 87% of the fuel normally consumed for an exercise of that duration.
- Ran only one Light Field Generator instead of three
- Ran one generator for only 6 hrs/day instead of three generators for 24hrs/day

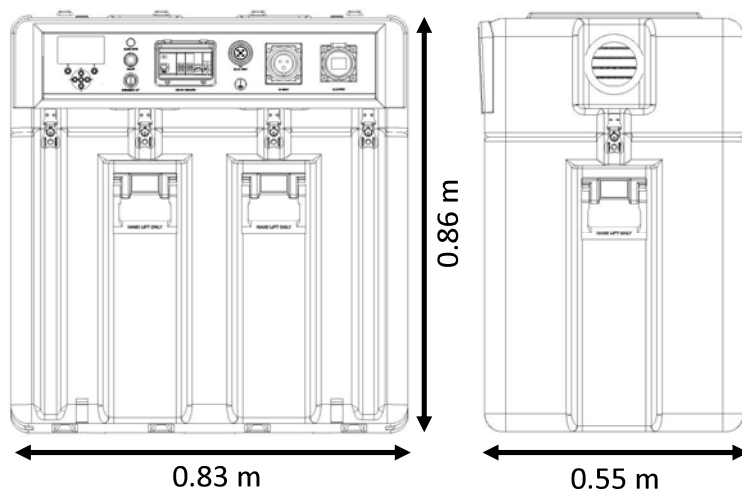


FAST FOLD Energy Hub

FFENERGYHUB-05 / FFENERGYHUB-10



Dimensions:



Model Number

FFENERGYHUB-05

FFENERGYHUB-10

Product Weight

103 kg

132 kg

Battery Capacity (Nominal)

5.0 kWh

10.0 kWh

Battery Capacity (Usable)

4.0 kWh

8.0 kWh

Battery Pack Weight

1 x 28.6 kg

2 x 28.6 kg

Battery Certification

UN 38.3

UN 38.3

Maximum AC Output (Continuous)

1.44 kW

2.88 kW

Maximum AC Output (10 minutes)

3.00 kW (pf=1)

3.00 kW (pf=1)

2.40 kW (pf=0.8)

2.40 kW (pf=0.8)

Maximum AC Output (10 seconds)

6.00 kW

6.00 kW

Maximum AC Input Current

16 A

16 A

AC Voltage Specification

230/240 V 50 Hz

230/240 V 50 Hz

Solar Input Max. Capacity

1.61 kW

2.88 kW

AC Connection Type

IEC 60309 IP67 16 A Single Phase

Electrical Safety Equipment

Integrated circuit protection devices, emergency off switch

Colour Display

Energy consumption, solar generation and battery storage

Transportation

Shock proof mounting of key components for transportation resilience (FFENERGYHUB-05 transportable as air cargo)

Start-up Time

Less than 10 seconds

IP Rating

IP44

Fully waterproof (IP67 equivalent) up to 700 mm height

Options

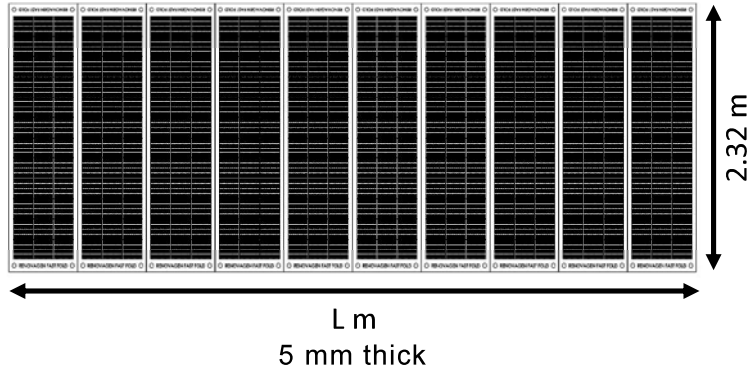
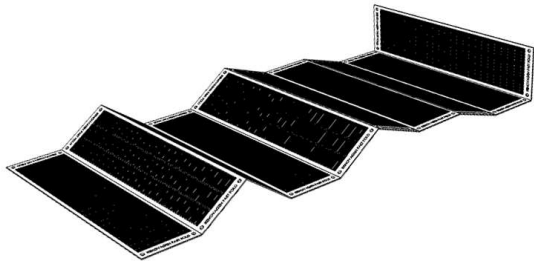
Hot Climate Pack (For operation in extreme hot conditions)

US Specification (120 V 60 Hz, NEMA L5-30 AC connectors)

FAST FOLD Mat

FFMAT-09 / FFMAT-11 /
FFMAT-14 / FFMAT-16

Dimensions:



Model Number

FFMAT-09 FFMAT-11 FFMAT-14 FFMAT-16

Peak Power

0.92 kW 1.15 kW 1.38 kW 1.61 kW

Length (L)

4.4 m 5.5 M 6.6 m 7.7 m

Product Weight

28.0 kg 35.0 kg 42.0 kg 49.0 kg

Rated Voltage

70.2 V 70.2 V 70.2 V 70.2 V

Rated Current

13.2 A 16.5 A 19.8 A 23.1 A

Open Circuit Voltage

86.8 V 86.8 V 86.8 V 86.8 V

Short Circuit Current

15.2 A 19.0 A 22.8 A 26.6 A

Deployment Time

Less than 2 minutes

Mat Construction

Flexible solar modules bonded to a high strength PVC-coated polyester fabric. Reinforced HF-welded hemmed border with steel eyelets for securing the mat

Connection

Connected to Fast Fold Energy Hub with quick release secure IP68 cable

IP Rating

IP67





RENOVA GEN



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