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Lithium Ion Phosphate: 45kVA Rated Power 100kW Capacity

PLEASE NOTE: ONLY authorised engineers can set-up and adjust this equipment. Please contact Green Voltage for any questions.

 VERY HIGH VOLTAGE <small>DANGER</small> AUTHORISED / QUALIFIED PERSONNEL ONLY	Do not connect any power source without expert assistance.	 KEEP ALL DOORS LOCKED AT ALL TIMES, FAILURE TO DO THIS COULD CAUSE HARM
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 Unlimited <small>Expandable power storage</small>	 Protect <small>Against power drop-outs and inconsistency</small>	 Emergency Stop <small>Complete site shutdown</small>	 OR <small>Grid, solar, wind or generator direct input</small>	 Auto smart <small>Automatic operation and power switching</small>	 sub zero <small>Effective battery operation below 0°C</small>
 Emissions REDUCED <small>CO₂</small>	 Plug & Play <small>Plug and play or hard wire options</small>	 <small>Remotely controlled with telemetry data display</small>	 <small>Works in harmony with Solar Pod & Solar Smart</small>	 LOW <small>Silent running. Reduce risk of noise complaints</small>	 Bypass system <small>Ensures power delivery</small>

ULTIMATE FLEXIBILITY: Store energy in many combinations

 Smart Grid + 1 or more Battery Pods	 Compatible Generator + 1 or more Battery Pods	 Smart Grid & Compatible Generator + 1 or more Battery Pods
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GreenVoltage

RAPID CHARGE CYCLE
SILENT OPERATION
COMPLETELY EMISSION FREE
RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

sub⁺zero⁻

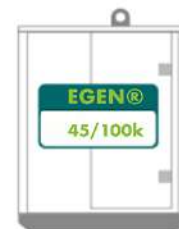
LiFe Po4 Lithium Long Life
Cycle Batteries



Side View

Top View

X-Ray



sub⁺zero 200Ah x10

datasheet

STORAGE	Battery Type	Lithium Iron Phosphate	
	Capacity @ 25°C	100 kWh	
	Number of Cycles	Up to 5000	
	Charge Time* (avg hours based on input)	4	
OUTPUT	AC Output Voltage	3 Phase 415 V Single Phase 240 V	
	Frequency Hz	50 Hz	
	Output Connections		1 x 63 A (3 Phase) 1 x 32 A (3 Phase) 2 x 63 A (Single Phase) 3 x 32 A (Single Phase) 2 x 16 A (Single Phase) Powerlock 3P + N + Earth
		Continuous Sustainable Power	45 kVA
		Sustainable Rated Power	
		Max Feed Through Current (Bypass)	400 A 3 Phase
		Max Input (Grid/Generator)	400 A 3 Phase
INPUT	Input Connection (Grid/Generator)	1x 63 A (3 phase) Powerlock 3P + N + Earth	
	Input Voltage Range	187 - 265 VAC	
	Input Frequency	45 - 65 Hz	
	Max Feed Through Current (Bypass)	400 Amp 3 Phase	
	CONTROL	System Control	Victron
Soft start timer		24/7 manually operated timer with soft start functionality to prevent overloading	
Generator Autosmart		Plug N Play HVO generator input with automatic Start/Stop	
ENVIRONMENTAL	Operating Range	Temperature range: -20°C to +45°C Humidity (non-condensing): max 95%.	
MECHANICAL	Dimensions (mm) Approx without trolley	1600(L) x 1200(W) x 2000(H)	
	Dimensions (mm) Approx with trolley	4000(L) x 1900(W) x 2600(H)	
	Weight (kg) Approx without trolley	2000 kg	
	Weight (kg) Approx with trolley	2440 kg	
	Lift Points	Fork lift pockets + Top lifting gear attachment	

DATA SHEET E GEN 45/100k

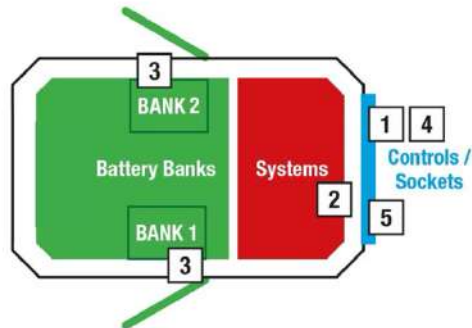


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System setup - Battery Pod



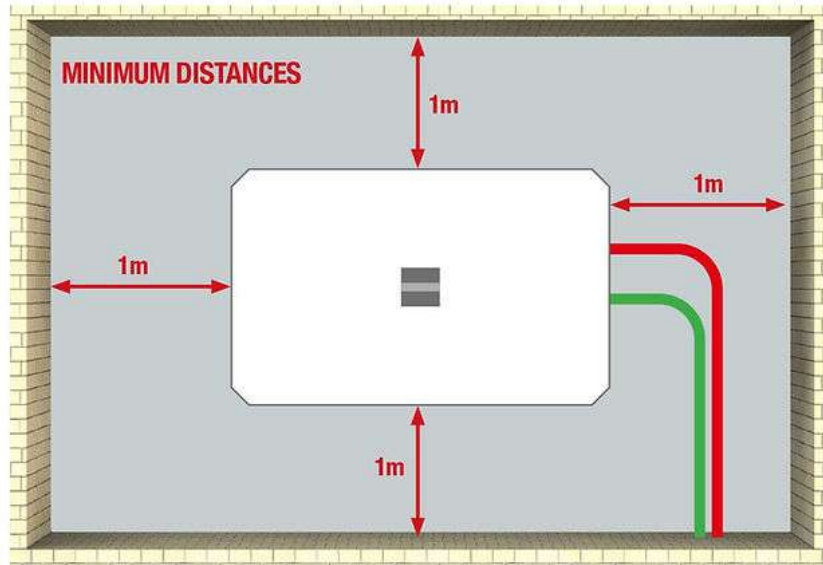


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Cabin positioning

Make sure these checks are carried out.



CORRECT POSITIONING

HOT!

Failure to position the unit as per the above picture can cause damage. Ensure connected cables have enough room to bend naturally without stress to the sockets.



IS THE GROUND LEVEL?

Always choose a level ground to position your unit.



WHAT IS THE GROUND CONDITION?

Soft wet muddy ground is not a good base to position the unit. Best positioned on concrete, asphalt or any hard surface.



IS IT A SAFE & LEGAL LOCATION?

Never position the cabin with the doors facing out into a road. Can you legally position here? Always get permission if on private land.

Soft Start System

On startup

Gen signal is sent to run gen (if connected).

Inverters turn on after booting up.

At the end of booting up, the generator stops (if no charge needed), the inverters stay on.




ON System is AUTOMATIC. Power delivery and connected generator/grid is controlled by the system.

1 **2** **3** **4** **5**

All ON

System unresponsive?
Press SYSTEM RESET



Emergency shutdown

4 Press Emergency Stop

System OFF (short periods)

Ensure the batteries are fully charged

1 External Isolator
2 Inverter Isolators OFF
3 Batteries OFF

System OFF (storage)

All OFF **1** **2** **3** **4** **5**

Ensure the batteries are fully charged

Starting the E-Gen 45/100k:

1. Switch ON all battery round metal switches (**3**) by pressing them firmly. Indicator lights will illuminate, displaying remaining capacity for each of the 10 modules.
2. Activate each battery breaker to the ON position (**3**).
3. Turn on the 3 Inverter Isolators (**2**)
4. Set the main rotary switch (system on/off) to ON (**1**). If connected, the HVO generator may momentarily activate during system boot-up.

Wait until the control panel display activates, indicating the current operational status of the system.



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Unit safety - Earthing

The nut and ground terminal should always be used to connect to a suitable ground.



DANGER

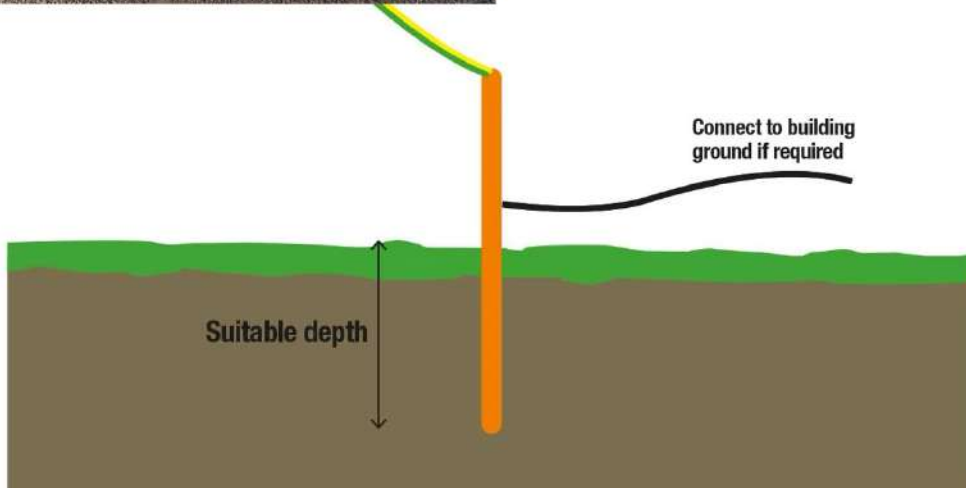
ALWAYS make sure that electrical circuits are properly grounded to a suitable earth ground (ground rod) before operating. Severe injury or death by electrocution can result from operating ungrounded.

NEVER use gas piping as an electrical ground.



**IT IS THE RESPONSIBILITY OF THE
END USER TO PROPERLY EARTH
THIS UNIT**

**The following is ONLY to
be carried out by a trained
competent person**



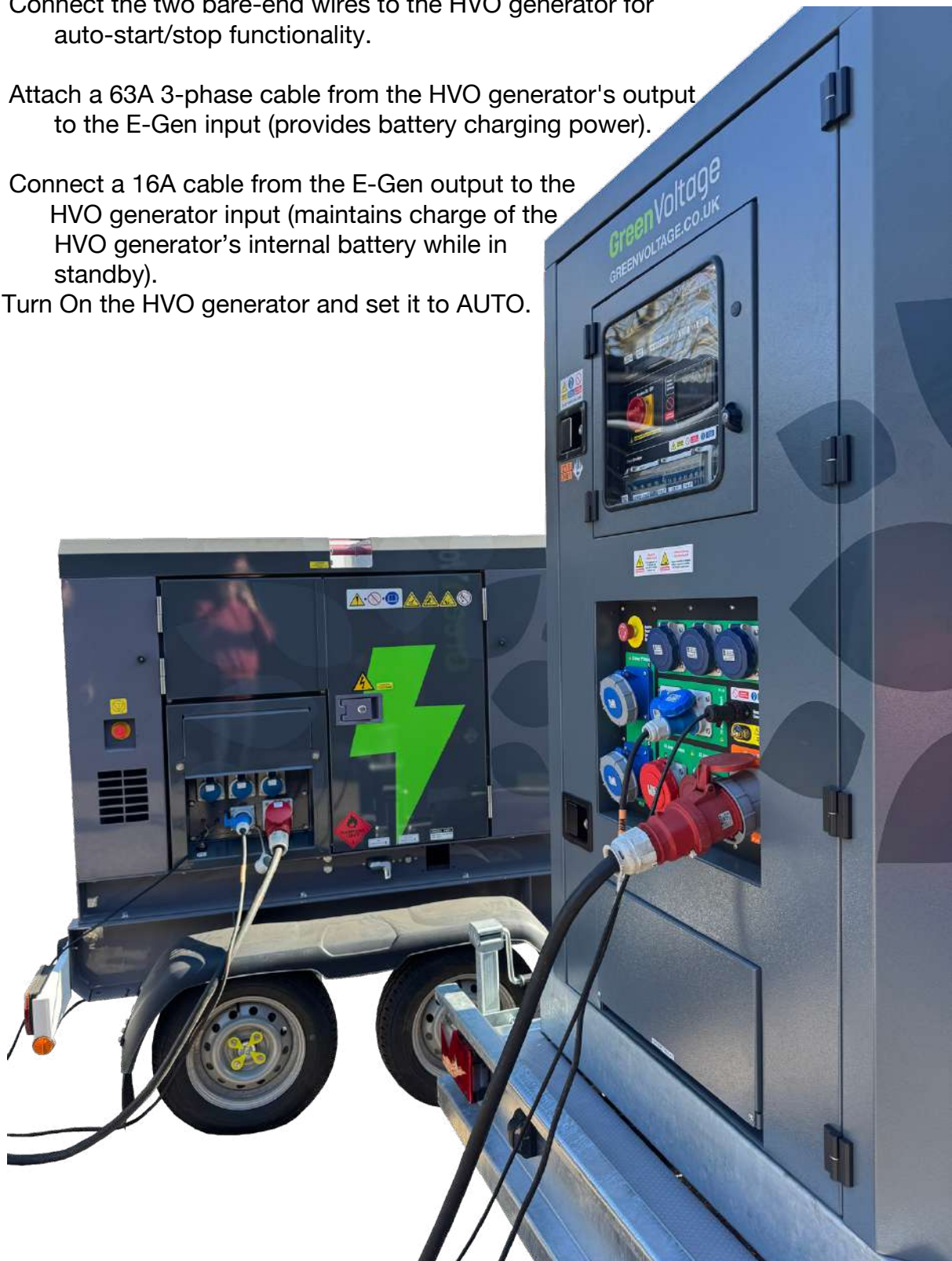


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Setting Up the E-Gen in **Hybrid Configuration** with the HVO Generator:

1. Connect the 7-pin circular connector securely to the battery unit.
2. Connect the two bare-end wires to the HVO generator for auto-start/stop functionality.
3. Attach a 63A 3-phase cable from the HVO generator's output to the E-Gen input (provides battery charging power).
4. Connect a 16A cable from the E-Gen output to the HVO generator input (maintains charge of the HVO generator's internal battery while in standby).
5. Turn On the HVO generator and set it to AUTO.



DATA SHEET E-GEN 45/100k



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40K HVO GENERATOR

37 kVA
1500 RPM
230/415V
50 Hz



STAGE V
EMISSIONS COMPLIANT

52dB 50Hz 1500 RPM 3~ 230/415V
Sound pressure at 7mtr

Measurements and Weight

	Length (L) [mm]	Width (W) [mm]	Height (H) [mm]	Dry Weight [kg]	Fuel tank [L]	Wet Weight [kg]
	3900	1800	1900	1770	170	1940

General Specifications

Revolutions [rpm]	1500
Voltage(s) [V]	230/415
Frequency [Hz]	50
Power Factor	0.8

Power

	Prime Power	Standby Power
Power in kVA*	37	40.7
Power in KW	29.6	32.6

*kVA (Kilovolt-ampere): The most common unit for measuring the power of a generator. 1 kVA is equivalent to approximately 0.8 kilowatts power.

Sockets

Quantity	Type	AMPS	Voltage
3	2P+E	32A	230V
1	3P+N+E	63A	415V

Emissions certificate

This model complies with the European Regulation 2016/1628 NRMM on StageV gas emissions.

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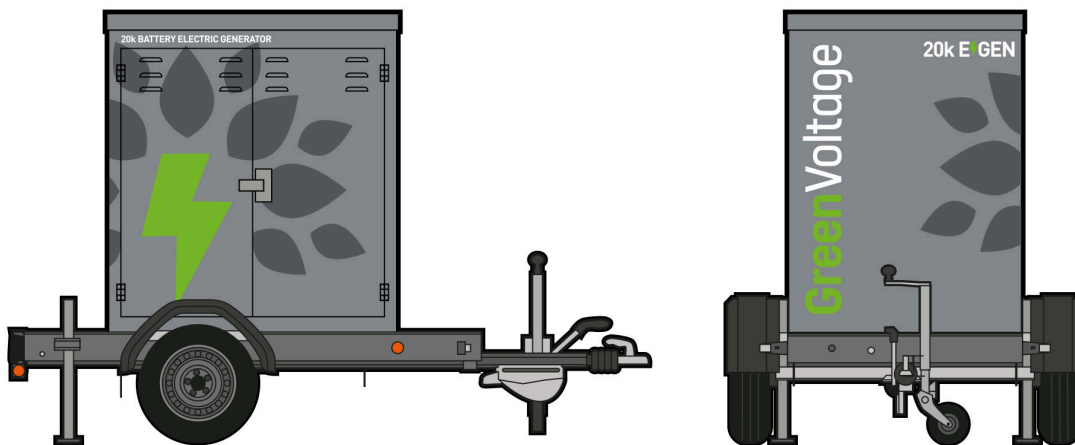
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EGEN50K® 120kWh 230V



POWER OUTPUT & PERFORMANCE

Designed to provide reliable, clean power.
Rated Output: 50kVA Pure Sine Wave Inverter.
Maximum Power: 40kW.
Voltage: 230V Single Phase.
AC Output Configuration: 1 x 125A, 2 x 63A, 2 x 32A,
4 x 16A

STORAGE & CHARGING

Charging Input: 63A / 125A Single phase.
Charging Speed: Rapid charge cycle (5 hours).
Battery Chemistry: Lithium-Ion Phosphate (LiFePO4),
ensuring safety and durability.
Capacity: 120kWh.

PHYSICAL SPECIFICATIONS & SAFETY

Weight: 2100kg (including the trailer).
Operating Temperature: -20°C up to 40°C.
Storage Temperature: Recommended 10°C - 30°C.
Build: Non-combustible Aluminium Enclosure.
Mobility: Compact design on a brake-assisted trailer

SMART CONTROL & TELEMETRY

Local Interface: Full system control via an integrated 7-inch touch screen.
Remote Management: Complete online control capabilities, allowing for operation from any location.
Advanced Telemetry: Access to real-time telemetry to monitor current performance, as well as online historical data for long-term efficiency analysis.

EFFICIENCY & SUSTAINABILITY (HYBRID MODE)

Hybrid Auto Start: Automatically switches off diesel generators during low load periods to maximize efficiency.
Carbon Savings: Potential saving of 215kg of carbon per day (1.5 tons per week)
Operation: Silent and completely emission-free

CARBON OFFSET EQUIVALENT

Offsets 160kg of CO2e for 8 hours operation

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DATA SHEET EGEN20K



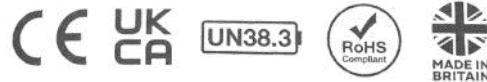
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RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

GV Kube³ 10k

Portable Power Unit — 6 kVA / 10 kWh silent zero-emission system

NEW!



RATED OUTPUT

Continuous: 6 kVA (\approx 5.3 kW at 25 °C)
Peak: 7,000W (up to 10 min) / 9,000 W (up to 3 s)
Output ports: 32 A / 16 A / 13 A / USB-C / USB-A

CHARGING

Integrated high-efficiency charger with simultaneous AC + solar input for faster turnaround.
Supports charge and discharge at the same time for uninterrupted power supply.
Typical Recharge Time: 1.5 hours
Dual MPPT Tracker: Supports up to 8 kWp PV Array
Optional 32 A jumper configuration available on request

BATTERY & STORAGE

High-stability LiFePO₄ battery pack delivering 10.24 kWh of usable energy at 51.2 V DC nominal.
Exceptional Service Life: Up to 5,000 cycles.
Safety First: Integrated Smart BMS protects against under/over voltage and temperature extremes.

CARBON OFFSET EQUIVALENT

Offsets 40 kg CO₂e for 8 hours of operation

REMOTE CONTROL & MONITORING

7-Inch Touchscreen: Integrated Victron touch screen providing instant overview.
Full Telemetry: Real-time and historical data accessible remotely via the VRM Portal.
Integrated GPS: Precise location tracking & geofencing .

OPERATING CONDITIONS

Temperature range: -20 °C to +50 °C
Recommended storage: +5 °C to +50 °C
Enclosure: Non-combustible aluminium, IP54 weatherproof rating for outdoor operation.

SCALABLE POWER & CAPACITY

Connect two units via 32 A link for up to 20 kWh / 9 kW total
Supports simultaneous charging and discharging
Ideal for extended setups or hybrid applications requiring continuous operation

DIMENSIONS & WEIGHT

80 × 60 × 75 cm
135 kg

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DATA SHEET GV Kube 10k

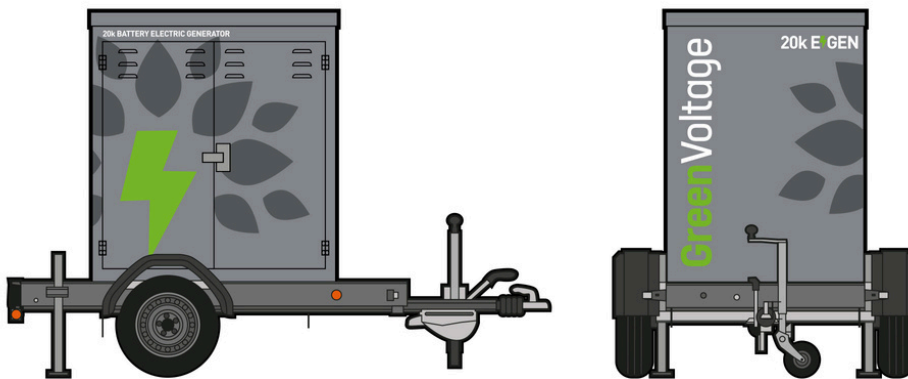


RAPID CHARGE CYCLE
SILENT OPERATION
COMPLETELY EMISSION FREE
RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

EGEN20K® 60/80/100kWh

230V

NEW!



RATED OUTPUT

20.7kW Pure Sine Wave Inverter, Clean Power
(surge rating: 24kW)

AC OUTPUT

125a 1phs/ 63a 1phs/32a 1phs/16a 1phs
24kW maximum (3 phase available upon request)

CHARGING

63a 1phs/25a 1phs (three Phase on request)
Recharge in 3 hours

Charging options:

32a 1 phs (8 hours from 0)
63a 1 phs (4.5hours from 0)
125a 1 phs (2.5hours from 0)
3 phase charging available upon request

STORAGE

60kWh / 80kWh / 100kWh Options available
Battery Type: Lithium-Ion Phosphate Additional
storage optional

OPERATING CONDITIONS

Operating temperature -20 up to 40

MEASUREMENTS

Measurements on request

WEIGHTS

1200kg/1500kg/1800kg

SAFETY

Non-Combustible Aluminium Enclosure
Recommended storage temperature: 10°C - 30°C
Brake assisted trailer

HYBRID AUTO START MODE

Switching off the generator, during low load periods, can
help maximise operational efficiency, offering a potential
saving of 215kg carbon a day, 1.5ton per week

CARBON OFFSET EQUIVALENT

Offsets 160kg of CO₂e for 8 hours operation

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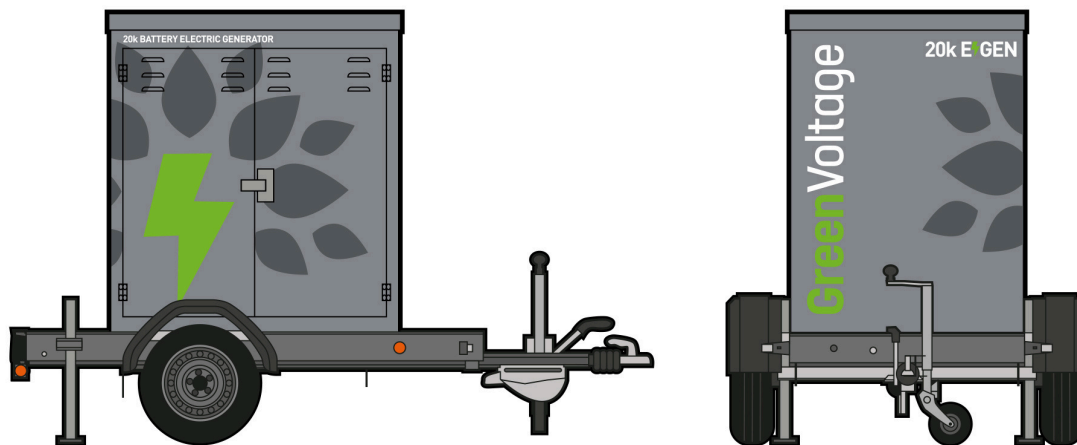


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RAPID CHARGE CYCLE
SILENT OPERATION
COMPLETELY EMISSION FREE
RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

EGEN50K® 120kWh

230V



POWER OUTPUT & PERFORMANCE

Designed to provide reliable, clean power.
Rated Output: 50kVA Pure Sine Wave Inverter.
Maximum Power: 40kW.
Voltage: 230V Single Phase.
AC Output Configuration: 1 x 125A, 2 x 63A, 2 x 32A, 4 x 16A

STORAGE & CHARGING

Charging Input: 63A / 125A Single phase.
Charging Speed: Rapid charge cycle (5 hours).
Battery Chemistry: Lithium-Ion Phosphate (LiFePO4), ensuring safety and durability.
Capacity: 120kWh.

PHYSICAL SPECIFICATIONS & SAFETY

Weight: 2100kg (including the trailer).
Operating Temperature: -20°C up to 40°C.
Storage Temperature: Recommended 10°C - 30°C.
Build: Non-combustible Aluminium Enclosure.
Mobility: Compact design on a brake-assisted trailer

SMART CONTROL & TELEMETRY

Local Interface: Full system control via an integrated 7-inch touch screen.
Remote Management: Complete online control capabilities, allowing for operation from any location.
Advanced Telemetry: Access to real-time telemetry to monitor current performance, as well as online historical data for long-term efficiency analysis.

EFFICIENCY & SUSTAINABILITY (HYBRID MODE)

Hybrid Auto Start: Automatically switches off diesel generators during low load periods to maximize efficiency.
Carbon Savings: Potential saving of 215kg of carbon per day (1.5 tons per week)
Operation: Silent and completely emission-free

CARBON OFFSET EQUIVALENT

Offsets 160kg of CO2e for 8 hours operation

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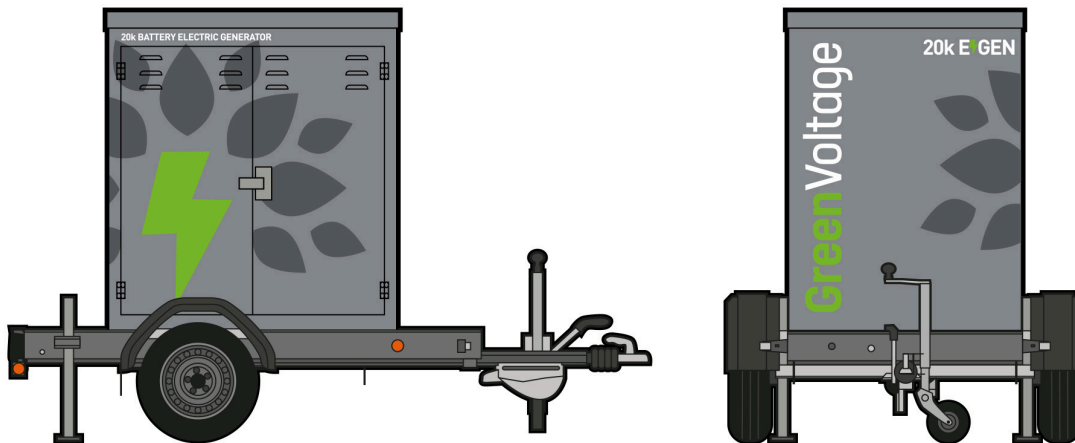
DATA SHEET EGEN20K



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SILENT OPERATION
COMPLETELY EMISSION FREE
RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

EGEN30K® 60/90/100/120kWh 230V



RATED OUTPUT

24kW Pure Sine Wave Inverter, Clean Power

AC OUTPUT - Single phase or Three phase

Three Phase: 63a 3phs/ 32a 3phs

Single Phase: 125a 1phs/ 63a 1phs/32a 1phs/16a 1phs

24kW maximum (3 phase available upon request 8kw per phase)

CHARGING

63a 1phs/125a 1phs (63a three Phase or 32a three phase on request)

Charging times:

32a 1phs (8 hours from 0)

63a 1phs (4.5hours from 0)

125a 1phs (2.5hours from 0)

3 phase charging available upon request

STORAGE

60kWh / 80kWh / 100kWh / 150kwh available

Battery Type: Lithium-Ion Phosphate Additional storage optional

OPERATING CONDITIONS

Operating temperature -20 up to 40

MEASUREMENTS

Measurements on request

WEIGHTS

1200kg/1500kg/1800kg

/2100kg

SAFETY

Non-Combustible Aluminium Enclosure

Recommended storage temperature: 10°C - 30°C

Brake assisted trailer

HYBRID AUTO START MODE

Switching off the generator, during low load periods, can help maximise operational efficiency, offering a potential saving of 215kg carbon a day, 1.5ton per week

CARBON OFFSET EQUIVALENT

Offsets 160kg of CO₂e for 8 hours operation

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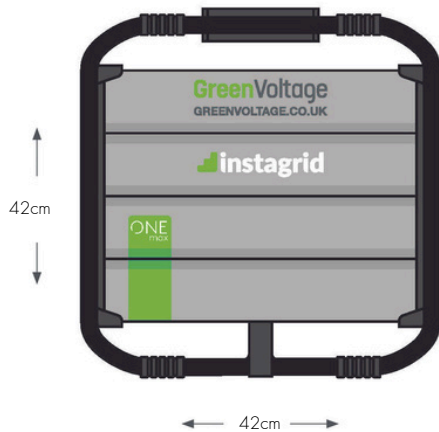
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DATA SHEET EGEN20K



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RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

Instagrid ONE Max 2kW



RATED OUTPUT

3600w continuous
Strike Peak up to 9000w
230v AC/50h

AC OUTPUT

13a Fixed Socket
16a Adaptor

AC CHARGING

13a or 16a adaptor
Pulling 12amps
Recharge time 0-100 2.5hours

WEIGHT

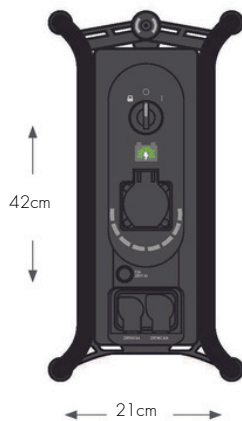
20 kg

MEASUREMENTS

420x210x420mm including frame

CONTROLS

Single switch on, off or charge
illuminated Battery level display



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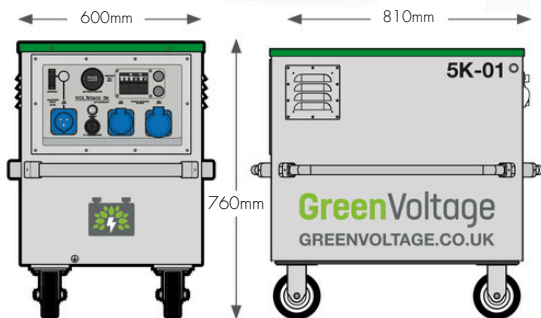
DATA SHEET INSTAGRID ONE MAX 2kW



RAPID CHARGE CYCLE
SILENT OPERATION
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RELIABLE PERFORMANCE
COMPACT, PORTABLE DESIGN

VOLTstack® 5k

230V



RATED OUTPUT

4.8 kW Pure Sine Wave Inverter, Clean Power
(Surge rating: 5.8 kW 3 sec, 7 kW peak)

AC OUTPUT

Single Phase 230V @ 20 Amp

AC CHARGING

1 x 220 - 240VAC 16 Amp Inlet
Recharge time @12 Amps - under 2.5 hours from 0-100%
Recharge using a domestic 13 Amp socket (adaptor required) Can be charged whilst in operation

OPERATING CONDITIONS

Operating temperature: -20°C up to 50°C

WEIGHT

150 kg

CARBON OFFSET EQUIVALENT

Offsets 20kg of CO₂e for 8 hours operation

DC CHARGING

Input: SUNstack™ solar panel and cable
Max Operating Input Voltage PV: 150 VDC
Max Input Short Circuit Current: 30 Amps DC

SAFETY

Non-Combustible Aluminium Enclosure
Recommended storage temperature: 10°C - 30°C

STORAGE

5.6kWh (5kWh usable)
Battery Type: Lithium-Ion
OUTLETS
2 x 230VAC 16 Amp Outlets or 1x 16 Amp and 1x 32 Amp
Outlet 2 x 15 Amp Circuits (20 Amp Combined Max)
2 x 5 VDC USB Outlets

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DATA SHEET EGEN VOLTSTACK 5k