

3 years of development has led to the ultimate EasyCabin range. Designed for the highest possible power saving & harvesting performance, even in the unpredictable UK weather.

#### **Backup HVO Stage V Generator**

Maximum Solar. Lithium Battery Bank. Intelligent, automatic systems. Efficient appliances. Same great Ecostatic comfort and usability. 100% of the power can be met from solar only.\*

#### **Off-grid Site Power Supply**

External 3 phase output socket to power other cabins.

## Eccstatic MAX\*

No compromise, sustainable, automatic power systems. The ultimate EasyCabin.

**Extra large, high quality solar panels** and lithium battery bank for maximum power harvesting and storage.

Self contained welfare units with external hybrid power supply.

3 years of development has led to the ultimate EasyCabin range. Designed for the highest possible power saving & harvesting performance, even in the unpredictable UK weather.

Ecostatic Solar MAX offers a welfare solution for companies that are working to meet the demands of future CO<sup>2</sup> reduction and clean air targets.

With increased focus on the reduction of carbon footprint and the prioritisation of corporate social responsibility issues, there is a real demand for industries to adopt alternative power whilst maintaining reliability and cost effectiveness.

The Ecostatic Solar MAX hybrid system provides an opportunity to both reduce operating costs and increase environmental performance. The systems are silent most of the time and only engage the backup generator when absolutely necessary.

Ecostatic Solar MAX have been designed to have the same user friendly operation as standard Ecosmart welfare unit. Power to run the heating, sockets, kettle, microwave & other connected units comes instantly from the large battery bank. The batteries are constantly fed by the large, powerful solar panels.





Start your journey towards ZERO **Emissions.** 





#### No fossil fuels

With HVO fuel used as a back up.



#### **Zero fuel with solar panels**

On summer days up to 100% of the power demands can be met from the solar panels.\*



#### More peace and quiet

Less generator time. Less noise and vibration.



#### **On-demand power**

On any appliance in the cabin and to external sockets



#### **Efficient power management**

The Ecosmart system controls power demands to make sure the generator is only used when absolutely necessary.



battery bank

#### Remote telemetry

View data readouts on your device or laptop from any where in the world.





**Sockets** 

**Power management** system keeps generator use to a minimum.



**Backup power** on stand by just in case!

#### External

Walls: Flat-sided heavyduty steel with low level lifting eyes. Fully insulated easy clean interior finish.

Doors: High Security doors with deadlock mechanisms. All doors have anti-jemmy design and security hinges.

Roof: Heavy-duty steel roof, fully insulated, easy clean interior finish.

Windows: UVPC Double glazed with security

Floor: Plywood finished in grey polyfloor XL.

#### **Features**

#### **Facilities**

- O Easy to use canteen facilities; 2x kettles OR 2x microwaves
- O Built in refrigerator
- O Comfortable spacious seating area
- O LED lighting & hot water
- O Separate office area
- O Easy to use cabin controls O USB device charging points
- O Warm water washing facilities
- O 2x Recirculating toilets (1x on 24)
- O Forearm wash basins
- O All interior and exterior surfaces are tough, durable and wipe clean
- O Spacious drying room with hanging clothes facility
- O Storage room (optional)

#### Sustainability

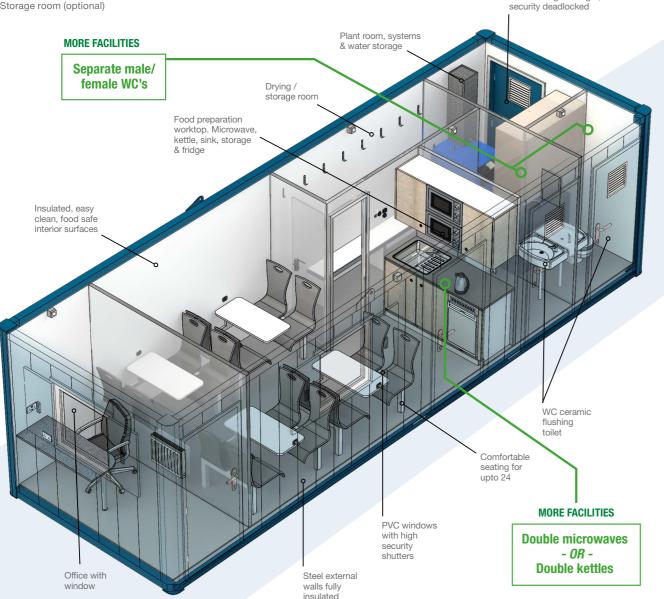
- O Large solar array, uses whole of the available roof space
- O Large, powerful lithium battery banks power storage
- O Zero fuel with solar panels, on summer days up to 100% of the power demands can be met from the solar panels
- O Fully insulated walls and roof system with no cold bridging
- O Low noise pollution
- O Low fuel consumption
- O Low or ZERO CO2 emissions
- O No need for fossil fuels
- O Automatic generator or fuel cell, stop/start technology for economical fuel usage
- O All electrical systems and appliances available without the generator

#### **Security / Safety**

O Dual heavy duty locking system per door

All doors high strength,

- O Robust galvanised exterior with high impact resistance
- O Carbon monoxide detectors





**Eccstatic** 

Off-grid hybrid welfare units.

## 6 kVA

**Backup HVO generator** 

Large solar array, uses whole of the available roof space. Large, powerful battery banks power storage.

Zero fuel with solar panels, on summer days up to 100% of the power demands can be met from the solar panels only.



**Ecostatic** 

**Eccstatic** 

Off-grid hybrid welfare with external power supply for connected units.

30-60 kVA

3 Phase External Power socket





- **✓** Reduce CO² emissions
- ✓ Reduce Noise
- ✓ Reduce Fuel costs

#### **Remote Monitoring**

#### Power generation and flow at your finger tips 24/7. Access via WiFi or 4G connection.

- O Fuel level monitoring and low level fuel alerts
- O Battery power and monitoring displays
- O Diagnostics and troubleshooting
- O Event logging
- O Fuel Cell & Generator controls, ON/OFF, load management
- O Solar & Battery information









INTELLIGENT

**Eccsmart** 

#### **Options**

- O Air conditioning
- O Diesel blown air heating
- O Wind turbine increases battery charging speed
- O Tilted solar panels to increase solar gain in winter months
- O Pin boards
- O Extra storage / shelving
- O External signage / branding



#### upgrade: Adjustable tower mounted to the chassis frame.

Increase battery charging speed. > Greater than 99% system efficiency.





We have a dedicated service department, ready to respond.

- O UK Wide on-site servicing and repair
- O Over the phone technical support
- O Diagnostics and troubleshooting
- O Hydrogen Fuel Cell experts
- O Solar & battery experts
- O Comprehensive training packages
- O Welfare fleet care
- O Detailed product manuals
- O Online Parts shop for account customers

















# Solar + Lithium Battery Bank + Stage 5 HVO Generator

= No fossil fuels (or low emission diesel)

# Ready for the transition away from fossil fuels.

We have been working hard behind the scenes to develop new ways to save harmful emissions and get ready for the future.

We need to provide piece-of-mind to our customers who are moving towards new alternative fuels. Our Biosmart products are designed to run both HVO and regular diesel whilst maintaining a manufacturers warranty. The perfect solution whilst in the transition away from fossil fuels.

HVO (Hydrogenated Vegetable Oil) is becoming more popular and accessible to off-road machinery users. It offers an easy way to cut emissions and fossil fuel use, whilst running traditional generators.

Biosmart HVO fits neatly into our product line offering real flexibility with fuel availability. Biosmart working in combination with our solar powered systems, will lower emissions even further!

## HVO. Every drop powers lower harmful emissions

Due to changes in tax relief on red diesel coming into force in 2022, the drive towards green fuel alternatives is getting stronger. There are many established UK wide suppliers and prices are falling.

HVO is virtually the same as mineral diesel, but with added green benefits.

#### **Fuel Benefits**

(\*varies depending on fuel brand/supplier)

- O Up to 30% lower NOx\*
- O Up to 85% less particulates\*
- O Up to 90% less CO2\*
- O Meets EN 15940:2016
- Enhanced cold weather storage & performance, compared to mineral diesel
- O Non toxic biodegradable
- O Low sulphur, FAME and fossil content\*

## **Power output models**

EC	estatic 32 &	40		MAX 3P 30kVA	MAX 3P 60kVA						
	Prime Rating @ 25°C	85Amp / 25kVA / 20kW	100Aamp / 30kVA / 24kW	200Amp / 60kVA / 48kW	125Amp 3P / 60kVA / 48kW						
	AC Output Voltage	50Hz, 230V									
OUTPUT POWER	Output Connections	5 x 32A single phase IP67 CEE Socket outlets, RCBO protected OR 1 x 125A single phase IP67 CEE Socket outlet, RCBO protected.	5 x 32A single phase IP67 CEE Socket outlets, RCBO protected OR 1 x 125A single phase IP67 CEE Socket outlet, RCBO protected.	10 x 32A single phase IP67 CEE Socket outlets, RCBO protected	1 x 125A three phase IP67 CEE Socket outlet, RCB0 protected OR 5 x 32A single phase IP67 CEE Sock outlets, RCB0 protected AND 1 x 125A single phase IP67 CEE Sock outlet, RCB0 protected.						
	Additional output connections		16	6A							
	Solar panels (on board)	4.5kVA / 3.6kW									
	Solar panels (plug & play)	Additional up to 8.75kVA / 7kW (running at 45 to 65 volts)									
	Generator backup power	17.3kVA / 13.8kW	25kVA / 19.8kW	35kVA / 28kW							
	Generator Standard (EU) 2016/1628	N/A		STAGE V (EU) 2016/1628							
ă i	Fuel Types	Alternative fuels from ONLY	Standard Diesel: EN590: recognised/authorised suppliers: Bio Die	0:96 BS 2869 - A1 or A2 esel B5 EN14212 / HVO EN15940 / GTL EN15940 / BTL EN15940							
INPUT POWER		Fuel is only used when the generator is active.  Generator is constantly in AUTO and only activates when required; battery charging and/or high load spikes.  NOTE: Using alternative fuels can reduce generator power rating by 4-8%									
	Fuel Consumption	100% load: 5.6 Litres per hour 75% load: 4.6 Litres per hour 50% load: 2.8 Litres per hour 25% load: 1.4 Litres per hour	100% load: 6.2 Litres per hour 75% load: 5.0 Litres per hour 50% load: 3.1 Litres per hour 25% load: 1.6 Litres per hour	75% load: 6. 50% load: 4.	8 Litres per hour 1 Litres per hour 2 Litres per hour 5 Litres per hour						
	Fuel tank capacity	400L									
	Grid Connection (optional)	20kW	20kW	60kW 3 Phase							
	Туре		AGM (Absorbe	ent Glass Matt)							
	Capacity @ 25°C	20.5kW	20.5kW	41kW							
SIUKAGE	Charge Time (hours approx)	3	3	4							
	Service life (years)	> 5	> 5	>	<b>&gt;</b> 5						
CONTROL	System Controls (All models)										
3	Soft start timer	24/7 manually operated timer with soft start functionality to prevent overloading									
	Generator telemetry (optional)										
Z	Operating Temperature Range (°C)	-20°C to +55°C Humidity (non-condensing): max 95%									
ENVIRONMENT	Solar panels - Max physical load	Wind: 4000 Pa, 408 kg/m² front & back Snow: 6000 Pa, 611 kg/m² front									
N N	Solar panels - Impact Resistance	25 mm diameter hail at 23 m/s									
	Static Model Dimensions (mm)	Length – 3200mm Width closed – 2250mm Width open – 5298mm Height – 2518mm									
ļ	Mobile Model Dimensions (mm)	Total Length Inc. Draw Bar & Steps – 5220mm Box Length – 3200mm Width closed – 2250mm Width open – 5298mm Height – 3080mm									
MECHANICAL	Static Model Weight (kg)	3800kg	4050kg 4650kg								
	Mobile Model Weight (kg)	350	Okg								
	Static Model Lift Points		Forklift pockets / botto	om lift + lifting guides							
	Mobile Model Lift Points	OPTI	IONAL								



### **Fuel Efficiency Comparison**

To illustrate the fuel & emissions saving potential of our welfare units see below data for a 24FT static welfare unit.

A full, individual data presentation for each combination of size / layout / system is available on request.

28 1 Year energy use*	Gen Run Hours	Litres Used	Diesel Cost £	Diesel CO <sup>2</sup> e KG	HVO CO <sup>2</sup> e KG	Litres Fuel Reduced by %	Fuel Cost Savings £
Non-hybrid 6kVA Welfare Unit	2600	2600	£ 4,420	7083	708		
Autosmart	1115	1640	£ 2,789	4469	447	36.9%	£ 1,631
Autosmart 🌼 Solar	754	1135	£ 1,930	3093	309	56.3%	£ 2,490
Ecostatic MAX	362	544	£ 925	1481	148	79.1%	£ 3,495
Ecostatic MAX 'Air' Diesel Heating	182	353	£ 699	962	96	86.4%	£ 3,721
	Fuel Cell Run Hours	Bottles H2 used	H2 Cost £	Local CO2e KG			
Ecostatic ZERO	1087	155	£ 9,321	Zero			- £ 4,901

\*

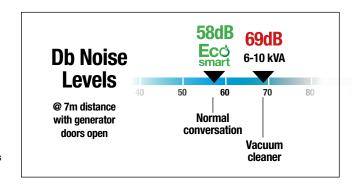
Based on 10 hours per day for 260 days, 80 days in winter mode and 180 days in summer mode. Each day is a typical usage day. 17 Persons accommodated.

£1.70p per litre Diesel / HVO £ 60 per H2 Bottle

Solar panels achieve maximum output in direct sunlight, but they work in normal daylight and cloudy weather too. The amount of power a solar panel or charging kit generates in cloudy weather will be lower compared to direct sunlight. Also the positioning of the cabin will affect the solar charging of the batteries i.e. under trees, etc.

This assessment doesn't take in consideration the usage of the hydraulics

This assessment is guidance only



Award winning welfare 💥 Designed & built in the UK











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**DESIGNED & BUILT IN THE UK** 

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FOOTNOTES

As part of our on-going commitment to improvement we reserve the right to alter specifications, designs or figures, without prior notice. All dimensions and weights are approximate.

A full energy presentation is available on request.

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