POWER FOR TOMORROW

The modular design of the e-PU60 facilitates a flexible application in a variety of configurations both on-grid and off-grid. It is developed to supply emission free and low noise energy in a variety of environments such as events, construction sites and also in a metropolitan or urban environment. It can be used as main power source in case a grid connection is not available but also for peak shaving, emergency power supply or even EV-charging.

The e-PU60 has a proven and robust design and whilst being compact and light it is capable of providing over 12 hours of power with a single charge. An integrated convertor provides a normal 3-phase power output. The e-PU60 can be charged from sustainable energy sources such as solar or wind power.

In an hybrid mode, with a diesel powered generator, significant fuel and emissions savings can be achieved up to 75% while delivering optimal performance.

A 3-phase grid connection is provided as well as a single phase charging connection.

The performance is monitored and controlled using the Victron Remote Energy Management system, providing a user friendly interface to the system from anywhere in the world.



POWER FOR TOMORROW



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A VARIETY OF DIFFERENT MODES **OF OPERATION**

ISLAND MODE

In island mode, the e-PU60 is used as a standalone power solution, not connected to the electricity grid. In this mode the e-PU60 is suitable for temporary application within zero emissions zones. More and more zero emission zones are being defined, especially in populated areas.

The e-PU60 produces almost no noise which makes it perfectly suitable for nighttime operation. A single charge will provide 12 hours of electrical power. Easy transport is facilitated by the e-PU60, compact and light-weight construction.





HYBRID MODE

The e-PU60 can be used in combination with a diesel generator in a smart load management configuration, whereby the combined power of batteries and diesel is used for period of demand peaks. The diesel can and will be switched of during periods of low demand. The e-PU60 can be charged by the diesel generator or from the grid or other sources such as PV panels.

Compared to a traditional configuration, with only a diesel generator, this configuration reduces fuel consumption, noise, emission and results in a lower total costs of ownership (TCO). It may allow the power rating of the diesel generator to be reduced by 40%. Hybrid mode may be ideal for example for events or construction sites.



FULL ELECTRIC MODE

In the full electric mode the e-PU60 functions as an "Intelligent Peak Shaver". The e-PU60 is charged by electric power from renewable sources like PV solar panels, wind power or from hydrogen fuel cells. The e-PU60 is equipped with connections to allow a direct input from a PV system. It's output power is used to compensate for temporary shortage of available power from the grid connection.

The typical rating of a grid connection on a construction site there is often insufficiently sized for the power demand of the heavy duty machines, required during the construction. The procedures, associated with an increase of the rating of the grid-connection, have a significant effect on cost and schedule. Applying e-PU60 as a peak shaver may remove the need for a rating increase of the grid connection.



NEWABLES





X

SHAVER





REDUCE GRID CON-NECTION





e-PU60 IN DETAILS

Specifications

Remote monitoring and control Remote management GPS positioning + Geo fencing Safety switch Generator start / stop

3G/4G Modem VRM (to current and historical data) enabled enabled Internal & external

Inverter/charger

Continuous output power at 25°C* 45 kVA Continuous output power at 25°C* 36 kW Continuous output power at 40°C 30 kW Peak power 0.5s (W) 75 kW Power assist (gen or grid + inverter) 78 kW Norminal rated current 63A 100A Max passtrough current *The 25°C has been considered for the average temperature use.

Battery

Nominal energy storage 25°C* Charging time 20% > 100% (80%DOD) Lifecycle @ 80% DOD (1C) Cell type

57.6 kWh 1 hour 40 min > 3500 cycles LiFeP04 Lithium iron phosphate

Solar

Max connectable PV power Max open terminal voltage (VDC)

External power

3 Phase generator sizes Single phase Shore current

15-120kVA 6 kVA

5800Wp

250VDC

Connections

Charging / forwarding Outgoing power Start / stop and fuel measurement 230C 16A CEE PV input (<250VDC)

400V 63A 5-pin CEE-Form 400V 63A 5-pin CEE-Form

Housing

Dimensions ($L \times W \times H$) Weight IP rating

4P-Harting connector MC4

2000 x 900 x 1800mm 1250 kg IP 33