YOUR
zero emission energy solution

ePowerunit
Powered by NST

EPU 45/60
EPU 45/120

Your zero emission energy solution

A 100% electric ePowerunit that can be widely used as a mobile electrical power supply for infrastructure or construction work, events, temporary charging station, emergency power supply. The unit can be charged in various ways using the grid, charging station, solar energy, generator or a combination of these.

In hybrid mode with a generator, fuel and emissions savings of up to 80% can be achieved. The lithium batteries are recharged with intelligent start/stop in a very short time, whereby the generator works in its ideal range. This saves even more fuel and emissions and the generator produces less soot, requires less maintenance and lasts longer. Intelligent Peak Shaving allows a smaller generator to be used.

SAVE LIFEPO4 LITHIUM TECHNOLOGY

100% CO^2 REDUCTION IN STANDALONE MODE

NOISE LESS

SMART GENERATOR START & STOP

75.000H BATTERY LIFE

PV READY AC DC

GPS TRACKING

REMOTE OPERATE AND MONITORING

- Up to 80% CO_2 reduction in hybrid mode
- Lightweight and compact design
- Easy transportation
- Lifting eye
- Robust stainless steel housing
- Proven solid design and appearance
- Also 1 phase in - 3 phase out
- EV charging point compatible
- Power assist mode
- 60 years of E-enginering experience
- Victron energy inside
- Easy accessibility

Optimize with ePowerunit

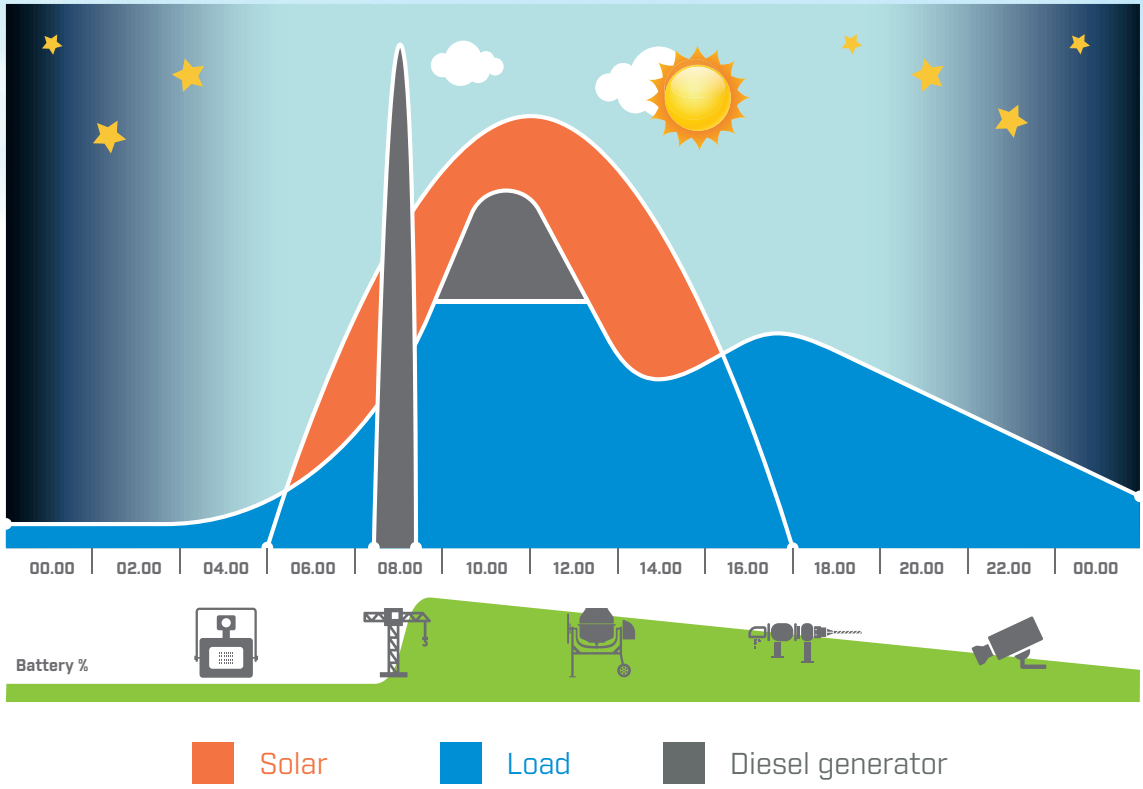
The ePowerunit has countless applications, in short wherever a diesel generator is normally used, but without the high emissions, diesel consumption and noise pollution.

Due to the nitrogen crisis, the demand for CO_2-reduced solutions is increasing rapidly. There are more and more zero and low emission construction projects and events and scoring on the CO_2 performance ladder gives you an advantage in tenders.

The ePowerunit has been developed and manufactured in a collaboration between NST and VDL Energy Systems.

ePower around the clock

The built-in power assist functionality makes it possible to supplement the capacity of the energy source (grid or generator). Where peak current often is only needed for a short time, the ePowerunit ensures that insufficient mains or aggregate current is immediately compensated with energy from the battery. When the load decreases, the backup power is used to recharge the battery.



226 kg of CO_2 daily savings

3437 trees absorbing Co_2 in one day

275.000 liters of fuel savings over lifespan

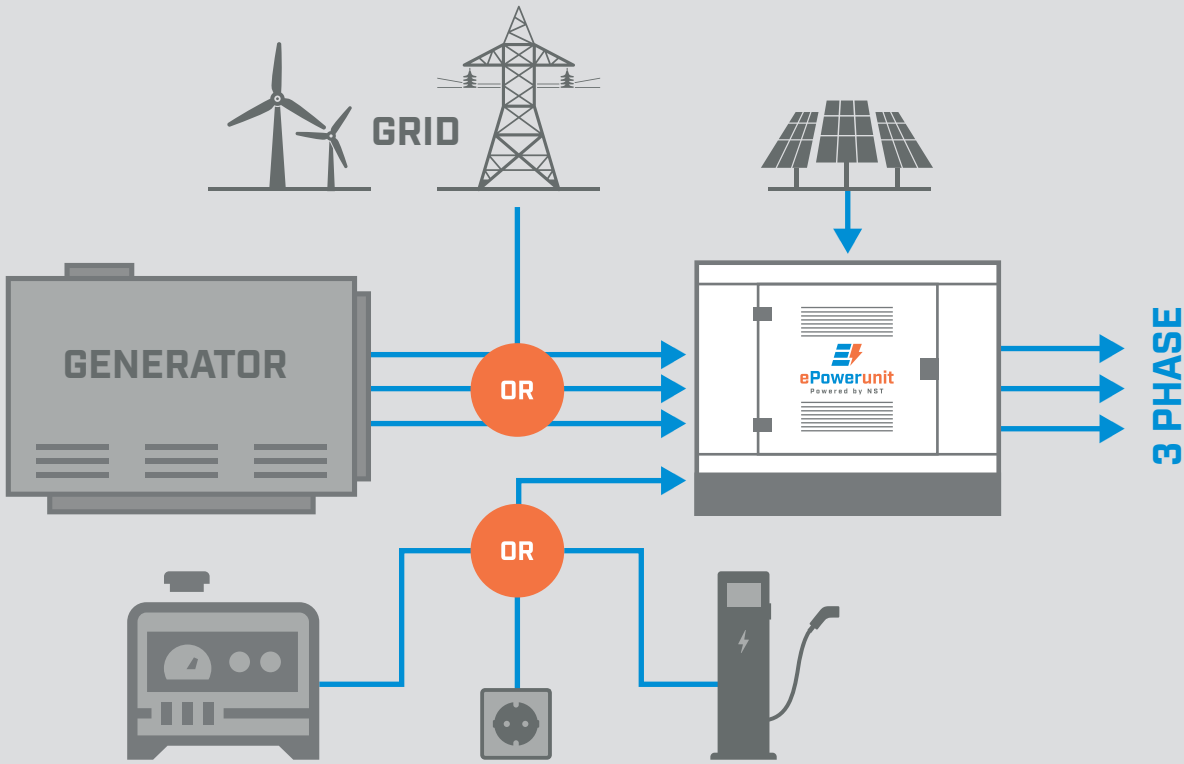
726 tons less CO_2 emissions over life time

200 tons of coal comparable CO_2 reduction over life time

2 year return on investment

In hybrid mode up to 80% fuel and CO_2 reduction

The versatile connections of the ePowerunit



Hybrid mode

The ePowerunit has many hybrid applications. There are multiple connections, for example: 3-phase grid or generator, single-phase grid or generator, on-grid or off-grid solar and wind energy, fuelcell, EV charging station.

100% electric mode

The ePowerunit functions in stand alone or island mode as a 100% green zero emission power solution. It can also be used as an energy storage system (ESS) in an existing PV installation.

Smart connected anytime anywhere

The VRM app. Monitor and manage your Victron Energy system. Login with your VRM account, and see all your sites in a list. Tap a site to see its system diagram, current system status and energy flow.

victron energy
BLUE POWER

By connecting to the internet, it can be used in conjunction with the Victron Remote Management (VRM) portal, which enables:

- Easy remote access to all online statistics and system statuses.
- Remote Console via the VRM: Access and configure your system as if you were right next door.
- External firmware updates of connected solar chargers and other Victron products.
- Using the VRM app for iOS and Android or web application.

Inverter/Charger	45/60	45/120
Continuous output power at 25 °C*	45 kVA	45 kVA
Continuous output power at 25 °C*	36 kW	36 kW
Continuous output power at 40 °C	30 kW	30 kW
Peak power 0.5s (W)	75 kW	75 kW
Power assist (gen or grid + inverter)	78 kW	78 kW
Norminal rated current	63A	63A
Max passtrough current	100A	100A
Battery		
Nominal energy storage 25°C*	57.6 kWh	115.2 kWh
Charging time 20% > 100% (80% DOD)	1 hour 40 min	3 hours 20 min
Lifecycle @ 80% DOD (1C)	> 3500 cycles	> 3500 cycles
Cell type	LiFePO4 Lithium iron phosphate	LiFePO4 Lithium iron phosphate
Solar		
Max connectable PV power	5800Wp	11600Wp
Max open terminal voltage (VOC)	250VDC	250VDC
External power		
3 Phase generator sizes	15-120 kVA	15-120 kVA
Single phase	6 kVA	6 kVA
Shore current	16A	16A
Specifications		
Remote monitoring and control	3G / 4G Modem	3G / 4G Modem
Remote management	VRM (to current and historical data)	VRM (to current and historical data)
GPS positioning + Geo fencing	enabled	enabled
Safety switch	enabled	enabled
Generator start / stop	Internal & external	Internal & external
Connections		
Charging / forwarding	400V 63A 5-pin CEE-Form	400V 63A 5-pin CEE-Form
Outgoing power	400V 63A 5-pin CEE-Form	400V 63A 5-pin CEE-Form
Start/stop and fuel measurement	4P-Harting connector	4P-Harting connector
230V 16A CEE	1	1
PV input (< 250VDC)	MC4	MC4
Housing, dimensions and weight		
RAL Colour	On request	On request
Dimensions (L x W x H)	2000 x 900 x 1800	2000 x 900 x 1800
Weight	1250 kg	1700 kg
IP rating	IP 33	IP 33

*The 25 °C has been considered for the average temperature use.

NST has specialized in electrotechnical equipment for shipping, offshore, industry, automotive and solar for 60 years. We are proud to say that we are the world's first Victron distributor. As a professional partner of Victron Energy, NST has been working together for 45 years in solving energy issues. With NST's energy-pioneering vision, NST was the first in the Netherlands to make generator alternatives based on lithium batteries. Our many years of experience and know-how in battery-based generators makes NST your ideal partner for your renewable and green energy solutions.

www.epowerunit.com

Neho Speciaal Techniek B.V.
Goudstraat 12
2872 ZS Schoonhoven

+31 (0)182 - 38 75 22
info@nstbv.nl
www.nstbv.nl