

## MOBILE SOLAR GENERATOR

### HYBRID SOLAR SYSTEM

Much like new generation Hybrid automobiles Kunz's Mobile Solar Generator include an onboard diesel generator that is automatically activated only when needed.

In solar-only mode, Kunz system can provide continuous clean power from the sun. With our hybrid option you can power on , using one of the most technologically advanced clean generators in the world. Kunz's Mobile solar solution provides the cleanest overall solution to long-term off-grid power needs, while using the least amount of diesel fuel and environment friendly.



<b>UNIQUE DESIGN</b>	<b>EASY TO USE</b>
<b>DURABLE MOBILITY</b> German made trailer-based mobile solar generator can be transported by truck, car and etc.	Rock solid aggregate is easy to set up and start up at any job site. One person can produce pure sine wave easily.
<b>COMPACT DESIGN</b> All components are stored in the canopy and synchronized with each other	<b>CONTINUOUS POWER</b> Solar power combining with 24 unit 48 Volt batteries and two units diesel generators provide continuous power

KUNZ has designed and assembled Mobile Solar Power System which draws 9,234 W solar powers first and followed by 43,68 kWh lead-acid batteries and finally relying on 53 kW back-up diesel generators power as the final fallback for the power.



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## WHEREVER, WHENEVER AND HOWEVER IT IS NEEDED...

This unique design provides innovative solutions for a variety of applications;



### **Off-grid buildings :**

KUNZ Mobile Solar generator has been designed for residential areas where the utility is unavailable. These off-grid house owners are demanding our mobile solar to install and use and it saves their money.



### **Telecommunication industry :**

Telecommunication is a well-developed industry which requires not only continuous but also mobile and remote power stations. At this point, KUNZ's this design exactly suits with our customers which needs power at top of the mountain for their base stations or remote areas without utility power.



### **Disaster areas :**

Natural disasters are inevitable and immediate, power supply has always been requested. This superior technology provides immediate power supply and it is a perfect match for disaster recovery. Because it is mobile and provides constant power.



### **Construction sites :**

Construction areas tend to demand high loads at instant times and our mobile aggregate is capable of providing enough power to sites which need stable Energy.

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## COMBINING DIFFERENT ENERGY SOURCES

### Solar Photovoltaic System

- 28 monocrystalline solar modules each with 333 Wp
- 96 cells / module
- Total system output :9324 Wp
- 28 panels in 3 different strings
- Inverters: 3 battery and and 1 unit PV inverter
- DC Inputs : DC1a-12 panel, DC1b-12 panel and DC2 4 panel
- Voltage/Current : DC1a-656, 4V / 6,09 A  
DC1b-656, 4V / 6,09 A  
DC2-218, 8V / 6,09 A
- 910 Ah battery capacity



### Weather and Sound proof canopy

- Dimensions: L6500 xW6700 xH3600mm
- Total Weight: 5100 kg
- Operating Temperature: -10 C° to 65 C°

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## Diesel Generator

- 2 units Perkins 1103A-33G diesel engine
- 2 units Stamford BC1184G alternator
- Synchronization Control Panel
- Rated Power 66 kVA, 1500 rpm
- Deapsea 7320 AMF control module
- 3 pole protection circuit breaker
- Integrated fuel tank



## Batteries

Due to their closed gel technology, the solar batteries enable maintenance-free operation. The excellent cycle stability provides the greatest reliability for the supply of stand-alone systems or consumers away from the grid. In addition, the closed cycle of potential recyclables within a certified recycling systems protects the environment.

- Solar lead gel battery, each 2.00 V
- Rated voltage:48 V
- Capacity: 910 Ah
- Energy storage capacity: 43,6 kWh



## Battery and PV module Inverters with Remote Control

This unique design is equipped with two different type inverters which are for PV module and battery.

PV inverters are one-way inverters with broad input voltage range and a maximum DC voltage of 1,000 V, as well as an extremely large MPP voltage range of 150 to 800 V.

Battery off-grid inverters are designed to control the most important charging and discharging processes and it increases the electrical endurance of our lead batteries.

KUNZ Mobile Solar unit provides remote control to configure the system remotely.

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## Automatic Load Distribution Panel

This panel allows the formation of off-grid and hybrid system. As the main AC distribution for the connection of generators and for supplying loads of up to 300 kW, between two and 12 three-phase clusters, each consisting of three battery inverters and connected in parallel using this panel. To simplify installation, all panels are completely wired and have a main connector for generators, the load distribution and PV systems.

Technically, KUNZ's Automatic Load Distribution Panel is equipped with three Solar(PV) and two units diesel generator inputs while it allows input and output for battery charger, battery inverters and grid for customers.

- Rated voltage: 230 V (LN), 400 V (L1, L2)
- AC Voltage range: 172,5 V - 265 V, 300 V- 433 V
- AC current: 3 x 80 Amper



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