

GeneralCabins

SPECIALIST MANUFACTURER OF

HYBRID POWER BOX

FOR OFF-GRID APPLICATIONS POWERED BY DIESEL GENERATORS, MOVE TO CYCLIC OPERATION TO SAVE COSTS.

The Hybrid Power Box is ideal for telecom, security, military and pipeline companies who require secure power supply. With low fuel consumption and high reliability the Hybrid Power Box is the only solution for remote applications.

Overview...

In the conventional diesel powered generator system the generator has capacity for running the load and charging the batteries. To give a reasonable recharge time the AC generator must be oversized. However most of the time the generator will run just powering the load, running at anywhere from 30% to 60% of maximum load. Running a generator in this load range is very inefficient.



Roof mounted Photovoltaic Solar Panels charge the batteries during daylight hours reducing any power generation required from the DC generator.

The DC generator only runs to provide supplementary charge for the batteries. The DC generator will run at near to full load and once the batteries are charged it stops.

The Solar Panels mounted on the roof of the Hybrid Power Box not only provide free power but shade the Power Box reducing the operating temperature inside for the generator and batteries.

By generating direct at DC voltage to match site requirements the use of rectifiers normally associated with AC generators is removed. These rectifiers are a large heat source within the site cabin. This elimination along with the shading protection from the PV panels reduces the need for large air conditioning of the cabin.

Savings

Direct fuel costs due to the reduced run time required by the generator.

Reduced service intervals and unit replacement costs.

Refuelling costs, for remote sites the cost of bringing fuel to a site is likely to be higher than the direct fuel cost.



"Built to Last"

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