

Application:

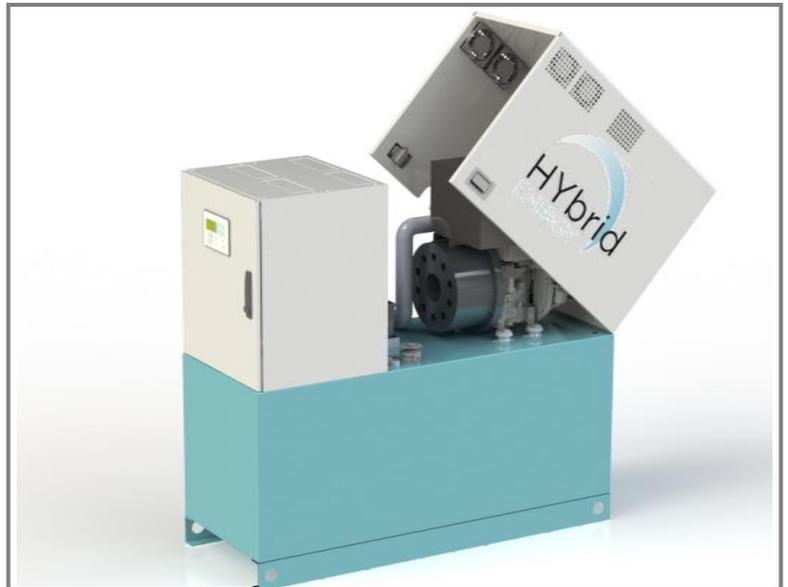
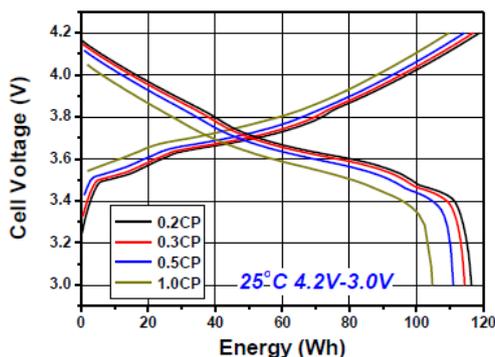
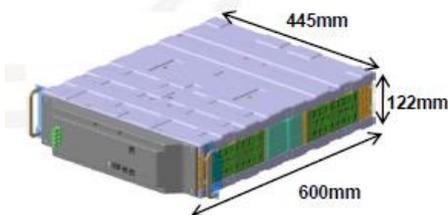
- Ideal power source for low loads
- Low cost, high functionality
- Minimum footprint

Engine:

- Hatz 1B40
- Tier 4 final compliant
- 4 stroke compression ignition
- Diesel Fuel
- Vertical, 1 cylinder
- Air cooled
- Naturally aspirated
- In-direct injection

Battery:

- Lithium Ion
- Light weight and compact
- Built in Battery Management System and safety disconnect
- Low maintenance, sealed for life construction
- 48V DC, 60 Ah Module
- 4 times longer cycle life than lead acid
- Very high charge and discharge capability



Genset Style Enclosure:

- 1460mm x 550mm x 1350mm (w x d x h)
- Folded steel panels
- Painted finish
- Built in fuel tank
- Forced ventilation
- Easy access for maintenance
- Lifting canopy requires less space for maintenance than traditional doors

Alternator:

- Permanent Magnet type
- Operating speed 2,200 – 3,600 RPM
- Rated power up to 5kW
- Thermal protection
- Overcurrent protection
- Overspeed protection
- Simple construction; 1 moving part, no bearings or sliding contacts
- Voltage ripple < 1%



Due to HYbrid Energy's policy of continuous improvement, these specifications are subject to change without notice

*Indicates optional equipment

Control System:

- Microprocessor controlled
- Fully automatic, autonomous operation
- Remote monitoring, diagnosis and control
- Historical data trending
- Monitors and controls all major operating parameters of the HYbrid system
- Expandable to monitor clients equipment or relay signals to client's system*

Remote Monitoring*:

- On-board GPRS modem
- Full remote control and monitoring
- SMS alerts
- Web based interface
- Historical data recording
- Alarm list and fault reset
- Fleet status at-a-glance



System	Feature	Benefit
Fuel	350 litre tank Fuel purifier* Secondary Racor turbine filter* Water in fuel sensor*	-Weeks of backup power between refuelling for typical 1-2 kW load -Removes large particles and water from fuel supply before engine fuel system -Increases fuel filter life where there is heavy fuel contamination -Shuts down engine safely if fuel is contaminated with water
Lube oil	Bypass oil filter with evaporation chamber*	-Removes contaminants and acidic by-products of combustion. Increases oil life. Ideal for areas with poor fuel quality -Service interval up to 1,000 hours
Electrical System	100 A rating* Solar Array*	-Peak loads of 100 A possible -Increase fuel efficiency by using solar energy to charge the battery pack and power the site load during the day
Alternator	100 A rating* PMG	-Max continuous DC load possible, 100 A -Robust, simple and reliable. High efficiency
Enclosure	All steel construction Forklift pockets*/lifting eyes High quality paint finish Good access, lighting*	-Secure and vandal resistant -Easy to handle -Life expectancy >10 years in tough environments -Reduced maintenance cost
Controls	GPRS communication* Flexible Protection functions	-Web based remote monitoring -Remote fault diagnosis and repair -Increased availability -Configurable to client's requirements* -Monitors HES performance and protects the equipment from damage in the case of a malfunction
Battery	LG Module	-Lithium Ion -Low maintenance -Built in Battery Management System -Very high charge and discharge rates
Starter	Electric start Pull start	-For automatic operation -Backup starting method in event of starter battery failure