



28V DC Hybrid Auto-Start Generator (Open Frame 4kW) P/N: 101091-501

Vehicle mountable

*28V DC battery
charging output*

*Digital controller
allows seamless
integration into your
system*

*Saves fuel & reduces
maintenance costs*



Auto Start/Stop

*Self-bleeding
electric fuel pump*

*User defined
parameters*

This open frame, heavy fuel generator set provides 28V DC current limiting, rated military output power over the temperature range of -4° F to 95° F and is suitable for use to charge batteries. The unit has a local control panel that provides voltage and current meters, a current limiting voltage regulator, and NATO slave adapter for electric starting from either a vehicle or a 24V battery pack. This unit allows the user to charge batteries with a small powered generator. Our current limiting regulator can be tailored for AGM, Li-Ion, and other battery chemistries. Based on our 2kW military heritage, this unit provides a simple power source that is lightweight yet highly reliable and easy to maintain.



A simplified control box allows the generator to be placed in auto mode with the flip of a switch. Output voltage and loads are monitored on the analog meters. An engine hour meter is located on the front panel along with LEDs that provide status and fault indications. A digital data connector and battle short switch are located on one side panel and the main circuit breaker. A NATO slave for electric starting and a generator output connector to loads are located on the other side panel.

The Dewey Electronics Corporation
www.deweyelectronics.com

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Hybrid 28V DC Open Frame Generator Specification

| ELECTRICAL RATINGS | |
|---|---|
| Output Voltage | 28V DC +/- 2V DC Adjustable |
| Output Power | 4 kW +/- 0.2 at 28V DC |
| Voltage Regulator | Current limiting |
| SIZE AND WEIGHT | |
| Length | 33.3" |
| Width | 21.5" |
| Height | 33.6" |
| Weight | 265 lb dry with mounting hardware |
| OPERATING ENVIRONMENT | |
| Temperature Range Nominal (Designed to) | -4° F to 95° F |
| Sand/Dust (with Enhanced Air Filter System) | Designed to Mil-Std-810E, TM 510.4 |
| Altitude | Sea level to 4,000 ft |
| Storage Temperatures | -65° F to 160° F |
| Incline Angle | 15° maximum |
| Noise | 85 dBA @ 7 meters (23 ft) |
| ENGINE | |
| Manufacturer | Yanmar |
| Model | L – 100V |
| Engine Type | Air-cooled, 4-cycle, 1 vertical cylinder |
| Starting System | 24 V electric / Manual recoil pull start |
| Type of Fuel | DL-2, JP-5, or JP-8* Contact Dewey for JP-8 derating. |
| Fuel Consumption Rate | 0.58 gal/hr @ 100% rated load (diesel) |
| ALTERNATOR | |
| Type | Brushless with internally rectified |

Auto Start/Shutdown is designed into the digital generator controller. It is programmed to monitor the battery voltage (set point factory set or set by the user) and automatically starts the generator when the battery voltage falls below a pre-set value. The generator will charge the battery to a pre-set battery voltage (also factory set or set by the user) and then automatically shut the generator down. This feature requires a 24V DC source to operate (power can be obtained from the host battery for starting, or a separate battery pack can be added to the generator configuration for starting).

An **electric, self-bleeding, fuel pump** allows the generator fuel system to connect to a remote fuel tank. This feature allows the user to supply a fuel tank remote to the generator for applications such as trailer or vehicle mounted power systems. The fuel pump has a 72-inch lift capacity and is integrally mounted within the open frame, supplying fuel directly to the engine (no generator mounted fuel tank). The fuel system contains a fuel filter and water separator.

The **Enhanced Air Filtering System** enables the generator to operate in high dust and sand environments. The Enhanced Air Filter System consists of a pre-filter assembly and a canister filter that allows the operation of the generator in high dust and sand environments.

500 Hour Service Kit - provides the filters and consumables that are required during the operation of the generator during any 500 hour period. Contact Dewey Electronics by phone for pricing and availability at 201-337-4700 or toll free within the USA at 800-526-5174, or e-mail us at dewey@deweyelectronics.com with "Spares and Repair Parts" in the subject line.