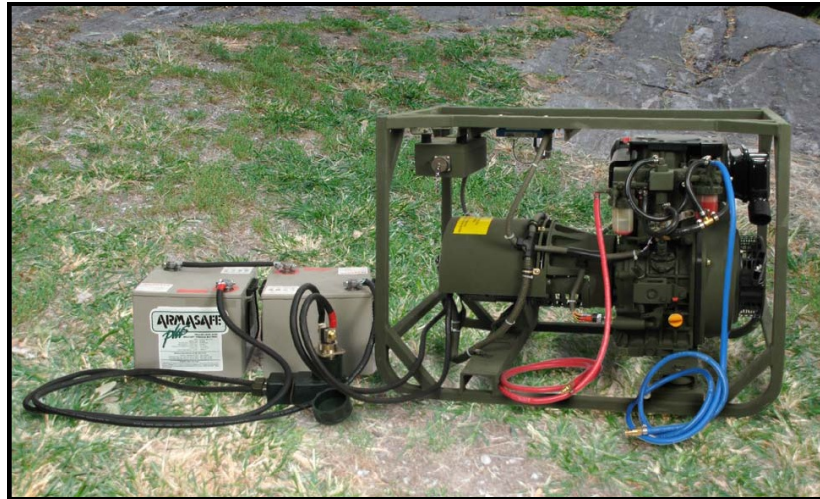




# Battery Charging Auxiliary Power Unit (BAPU)

P/N: 70107-501



## 28V DC 3.5kW Generator

This open frame, heavy fuel generator set provides a full 3.0 kW military rated 28VDC power supply over the temperature range of -25° F to 130° F and is suitable for use to charge batteries under extreme temperatures. The unit has a remote control panel that provides voltage and current meters, a current limiting voltage regulator, and a self-bleeding fuel system for vehicle or remote fuel tank interconnections. Based on our 2.0 kW military heritage, this unit provides a simple power source that is lightweight yet highly reliable and easy to maintain.

ELECTRICAL RATINGS	
Output Voltage	28V DC
Output Power	3500W at 28V DC @ sea level/ 95° F
SIZE AND WEIGHT	
Length	33"
Width	21"
Height	25"
Weight	201 lbs, Dry (plus optional equipment)
OPERATING ENVIRONMENT	
Temperature Range Nominal	-25° F to 130° F
Temperature Range Extreme Cold	-46° F (starting -40° F)
Temperature Power Derating	3%/18° F above 95° F
Altitude	Sea Level to 8000 ft.
Altitude Derating	3.5%/1000 ft. above 4000 ft.
Incline Angle	15° Max.
POWER QUALITY (as tested @ ATC by USMC)	
Regulation	1%
Short Term Stability Mil-Std-705, Test Method 608.1	1% bandwidth
Long Term Stability Mil-Std-705, Test Method 608.2	2% bandwidth
Application of Rated Load - transient	30% dip
Application of Rated Load - recovery	1.0 second
Rejection of Rated Load – transient	40% rise
Rejection of Rated Load	0.5 seconds
DC Ripple	Less than 5%

The Dewey Electronics Corporation

[www.deweyelectronics.com](http://www.deweyelectronics.com)

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ENGINE	
Manufacturer	Yanmar
Model	L 100V
Engine Type	Air-cooled, 4 cycle, Vertical Cylinder
Fuel	Diesel
Number of Cylinders	1
Starting System	24 V Electric
Decompression System	Manual Type with Auto-return Lever
Charging System	24 Volt
Electric Fuel Pump	24 Volts
Electric Stop Device	Fuel Stop Solenoid
Type of Fuel	DL-2, JP-5, or JP-8
Fuel Consumption Rate	4.64 gal/8.0 hrs @ 100% load
Max. Distance for Fuel Lines (Fuel Source to Fuel Pump)	72 inches
ALTERNATOR	
Manufacturer	Balmar
Type	Brush
ELECTRICAL CHARACTERISTICS	
Voltage Connections	28V DC, 2 Wire
Voltage Adjustment	26.6 -32.0 V DC
PROTECTIVE DEVICES	
Circuit Breaker	Overload/Short Circuit trip/engine shutdown
Low Oil Pressure Switch	Less than 15 psi/engine shutdown
INSTRUMENTATION	
Voltmeter on remote control panel	Digital display
Ammeter on remote control panel	Digital display
Fault Indicator on local and remote control panel	Red LED
Hour Meter on local control box	Electro-mechanical

## Tested to the following:

- Mil-Std-1332B Type 1 Tactical, Class 1, Mode IV
- Mil-Std-810E TM 514.4 Transportation/Mission Vibration
  - Road Test (1000 miles) with mounting feet
- Mil-Std-810E TM 510.4 Blowing Sand and Dust

## Accessory Equipment

Also available from Dewey is the **Enhanced Air Filtering System** that enables the generator to operate in high dust and sand environments. The Enhanced Air Filter System consists of a pre-filter assembly, a canister filter, and a 10-foot hose that allows the operator to locate the Enhanced Air Filtering System in the optimum location (user selected) to enhance the operation of the generator in high dust and sand environments. This system is designed for field installation and is packaged and shipped with the generator.

A **500 hour service kit** is available. This kit provides the filters and consumables that are required during the operation of the generator during any 500 hour period. The kit is outfitted for the Enhanced Air Filtering Systems requirements, too.

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