



4.0 kW Generator/Auxiliary Power Unit

P/N: 100970-501



28V DC 4.0 kW Open Frame APU

This open frame, heavy fuel generator set provides a full 4.0 kW military rated 28V DC power supply over the temperature range of -4° F to + 95° F and is suitable for use to charge batteries. The unit has an optional cable connected remote control panel with voltmeter. The generator is equipped with a self-bleeding fuel system for vehicle or remote fuel tank interconnections. Based on our 2 kW military heritage, this unit provides a simple power source that is lightweight yet highly reliable and easy to maintain. The generator can be used as an Auxiliary Power Unit when ordered with the optional mounting feet for vehicle or trailer installations. Specify the color as either Forest Green or Desert Tan when you order. The technical manual is shipped in the overpack.

ELECTRICAL RATINGS	
Output Voltage	28V DC
Output Power	4250W @ sea level/95°F
SIZE AND WEIGHT	
Length	33"
Width	21"
Height	25"
Weight	225 lb dry with mounting hardware
OPERATING ENVIRONMENT	
Temperature Range Nominal	-4° F to + 95° F -20°F to 120°F (-29°C to 49°C) * * System is designed for cold starting at -20°F. Testing yet to be completed.
Temperature Power De-rating	3%/18°F above 95°F
Altitude	Sea level to 8000 ft
Altitude Power De-rating	3.6%/1000 ft above sea level
Inclination	15° maximum
POWER QUALITY	
Regulation	< 5%
Application of Rated Load – Transient	< 15% dip with batteries connected
Application of Rated Load – Recovery	< 3 seconds
Rejection of Rated Load – Transient	< 15% rise with batteries connected
Rejection of Rated Load – Recovery	< 3 seconds
DC Ripple	< 7%



4.0 kW Generator/Auxiliary Power Unit

P/N: 100970-501

ENGINE	
Manufacturer	Yanmar
Model	L100V
Engine	Air-cooled, 4-cycle, vertical cylinder
Number of Cylinders	1
Starting System	24V DC electrical /manual recoil pull starter
Decompression System	Manual type with auto-return lever
Type of Fuel	DL-1, DL-2, or JP-8* <i>*Contact Dewey for de-rating factors on JP-8.</i>
Fuel Consumption Rate	0.58 gal/hr. @ 100% load
Fuel Pump 24V DC	Self-priming with a dry lift capacity of 120 inches
ALTERNATOR	
Manufacturer	C.E. Niehoff (Dewey specified)
Type	Brushless with integrated rectifier
ELECTRICAL CHARACTERISTICS	
Voltage Connections	28V DC, 2-Wire
Voltage Set Point	27.5 / 28.0 / 28.5 / 29.0 V DC
PROTECTIVE DEVICES	
Low Oil Pressure Switch	Less than 15 psi/engine shutdown
Fuel Solenoid Switch	Fault engine shutdown
INSTRUMENTATION & INDICATORS	
Hour Meter	Electro-mechanical
Engine Fault	Red LED
Remote Operation	Blue LED
Local Operation	Yellow LED
Engine Start/Operation	Green LED
PERFORMANCE CHARACTERISTICS	
Noise	85 dBA @ 7 meters (23 ft)
Humidity	Designed to Mil-Std-810E, TM 507.4
Fungus	Designed to Mil-Std-810E, TM 508.4
Salt Spray	Designed to Mil-Std-810E, TM 509.4
Sand/Dust (With Enhanced Air Filter System)	Designed to Mil-Std-810E, TM 510.4
Solar Radiation	Designed to Mil-Std-810E, TM 505.4
Storage Temperatures	-65°F to 160°F
Rain	Designed to Mil-Std-810E, TM 506.4
Transportation/Mission Vibration	Designed to Mil-Std-810E, TM 514.4

Accessory Equipment

Enhanced Air Filtering 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.

Remote Monitoring Control Box is available with a 30-ft cable to allow remote control and monitoring of the generator.

500 Hour Service Kit - provides the filters and consumables that are required during the operation of the generator during any 500 hour period.

Spare and repair parts are available from Dewey Electronics by contacting us by phone at 800-526-5174 within the USA, worldwide at 201-337-4700, or by e-mail at dewey@deweyelectronics.com with "Spare and Repair Parts" in your subject line.

The Dewey Electronics Corporation
www.deweyelectronics.com

4/14/15