



KEY FEATURES:

- 10kW @28VDC
- Low Fuel Consumption
- Low Profile (12.5" Height)
- Compatible with Most Diesel Fuels
- Integrated Starter/Generator
- CANbus Communication
- Integrated Cooling System

GENERAL PRODUCT DESCRIPTION:

Our low-profile water cooled 10kW APU is the world's shortest height APU in its category. The unit is designed to meet the requirements of the Abrams M1A2 main battle tanks. MLS Auxiliary Power Unit is part of the SEPV3 (System Enhanced Package) tank configuration.

The APU has successfully passed all the Army's qualification tests at the Aberdeen Proving Ground (APG), and is now in full rate production at our facility. MLS has successfully delivered the

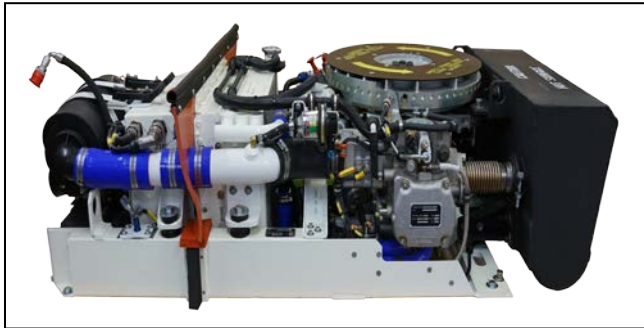
LRIP APUs to its customer, and is now on its way to support the Full Rate Production of delivering over 350 units.

The APU provides 10kW output power at 28VDC. It consists of a customized water-cooled Hatz single cylinder direct injection engine, and a 28 Volt DC brushless permanent magnet generator. The magnets are directly mounted on the flywheel and stator is embedded inside the flywheel. The generator system output and engine power are

controlled by a variable speed governor which maintains the system voltage according to the system load. The system gross weight is less than 190 kilogram.

The APU is controlled by Electronic Control Module (ECM) which communicates with the vehicle via CANbus protocol. The ECM contains various software functionalities, including the functions of Built-In Tests (BIT) diagnostics, prognostics and fault prevention, protection, handling and recovery.

Auxiliary Power Unit 10 kW



Overall APU Specifications:

Exterior Dimensions (L x W x H).....	53.5" x 24" x 12.5"
Gross Dry Weight (including control box).....	420 lb
Electrical Output.....	10 kW @ 28 VDC
Current Flow.....	335 Amp
Engine Type (water-cooled).....	Hatz Single Cylinder
Horsepower	17.4 HP
Fuel Type (Diesel).....	JP8, DF-1, DF -2 and DF-A (Including NATO fuel: F-76)
Fuel Consumption.....	0.96 Gallons per hour

Operating Parameters:

Temperature	-25 °F to +125 °F
Altitude.....	Sea level to 10,000 ft
Slope Angle.....	0° to 25°

Generator System:

Type Alternator.....	Brushless, Permanent Magnet
Alternator Speed.....	1,800 to 3,000 RPM
Output Voltage (Nominal).....	28 VDC
Output Rated Current.....	370 Amps
Output Power.....	10 kW
Electrical Power Output.....	Per MIL-STD-1275
Electromagnetic Compatibility.....	Per MIL-STD-461