

# GPU-28V

## GROUND POWER UNIT 28.5 VDC DIESEL



### ELECTRONIC CONTROL with DIGITAL DISPLAY

The **GPU-28V** Ground Power Unit is a very rugged, compact and quiet unit that provides 800 amps continuous and 2000 amps peak for aircraft engine starting. Its powerful engine ensures good performance in the worst overload applications. The GPU-28V features a brushless revolving field DC generator, a rubber torsion axle-mounted chassis of rugged galvanized steel construction with fifth wheel steering, powder-coated aluminum doors and fiberglass enclosures. The GPU-28V meets U.S. and EURO latest emissions standards. Other engines are available for all emissions-regulated locations.

### GENERATOR SPECIFICATIONS

The TLD generator is a 400 HZ AC generator with 2 sets of WYE-connected main stator windings that produce a low voltage AC output, which is then rectified to generate 28.5 VDC. This self-cooling, brushless generator has a revolving field and a single bearing with a rotating rectifier.

### ENGINE SPECIFICATIONS

- 24 volt starting motor
- Heavy-duty spark arrestor / silencer
- Pusher type fan
- Full-flow lubricating oil filter
- Dry-type air cleaner
- (2) 12-volt batteries
- Full-flow fuel filter
- Low coolant shutdown

### GENERATOR CONTROLS

Unit is controlled by a digital generator control module (GCM2) with a LED back lit LCD color display and can power aircraft with 3 operation steps.

### The Generator Control Module features:

- Digital display for voltage and current
- Voltage Adjustment
- Current Limiting adjustment
- Line Drop Compensation
- Timer for engine warm up and cool down
- Voltage & Current display calibration
- Data logging – downloadable via USB stick
- Any language is available

### Standard fault protections include:

- Over and under voltage
- Overload

The Generator Control Module displays and latches fault messages and keeps records of operation data.

### ENGINE CONTROLS

An electronic engine governor provides precise speed regulation and fast transient response. Engine protections such as low oil pressure, high coolant temperature, and over speed protection are programmed into the engine electronic control module (ECM). An engine diagnostic connector is also provided for communication with the engine.

All engine parameters can be displayed digitally on the Generator Control Module's back lit LCD color display:

- Engine hours and speed
- System Voltage
- Oil Pressure and coolant temperature
- Real time % load
- Active and stored service codes
- Fuel level %
- Various languages
- US and Metric unit



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### ELECTRICAL CHARACTERISTICS

- **Voltage regulation:**  $\pm 0.5V$  over full range of generator loading.
- **Voltage transient:** 26.3V ~32V from 5% to 85% load
- **Voltage transient recovery time:** Within 250 milliseconds, no load to full load.
- **Voltage pulsation:** 1.5V at steady state.

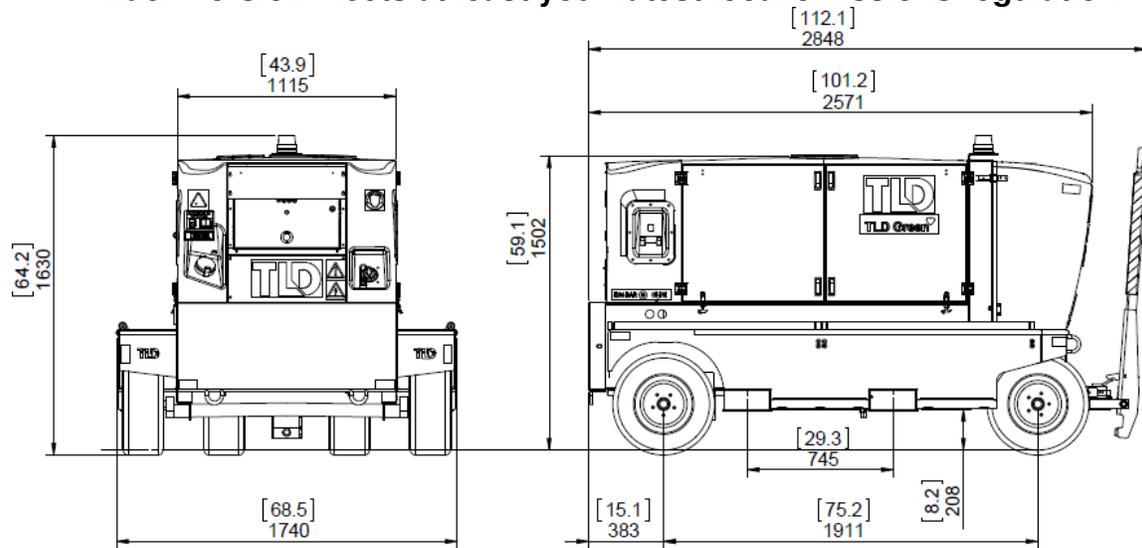
### CHASSIS CHARACTERISTICS

- **Easy access** to all components
- **Side mounted cable trays** with integral rollers
- **Fuel tank** – 46 gallons for operation over 8 hrs
- **5th wheel steering** with no-drop towbar brake
- **Forklift pockets and tie down rings**
- **Cable plug holders**
- **Low fuel warning and shutdown**
- **Low load rampdown / shutdown**
- **Externally-mounted, lockable, battery switch**

### OPTIONAL EQUIPMENT

- **Cable plug stowage / towbar brake interlock**
- **Beacon:** Amber or red, flashing or rotating
- **Low fuel warning and shutdown beacons**
- **Engine block heater**
- **Fuel filter/water separator with Heater**
- **Side Protection Rub rails**

Our GPUs are available in several engine configurations.  
Each version meets at least your latest local emissions regulation



4210 LBS (1867 KG)



LOCAL SUPPORT, TOTAL COMMITMENT

Released on 5JAN2015 CY



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