

## LOW VOLTAGE POWER SUPPLY (LVPS)

### SWITCHED MODE CONVERTER



Espey developed this power supply for a major locomotive manufacturer. The high reliability power supply was designed and tested for extreme locomotive environmental conditions. This Power Converter operates from a very wide input ranging from 25 to 85 Vdc. There are six outputs (+5, +15, -15, +19, +24, -24 Vdc) with a total load power of 1000 W continuous and 1620 W for one-minute transients. All outputs are fully regulated with 115% current limiting and 125% OVP.

### Features:

- Output current limit protection
- 20% design margin on power and current ratings
- Power enable control signal
- Soft-start with battery voltage application or enable control signal
- Qualified to locomotive environment extremes
- Qualified for EMI
- High Reliability Design

### Specifications:

#### *ELECTRICAL SPECIFICATIONS*

- Input Voltage: 25 - 85 Vdc
- Output Voltage: +5,+15,-15,+19,+24,-24 Vdc
- Output Power: 1000 watts continuous/channel
- Regulation, Line & Load:  $\pm 5\%$
- Efficiency: 75 % minimum

#### *MECHANICAL SPECIFICATIONS*

- Weight: 40 lbs. max
- Size: 10"x10"x15"
- Aluminum extrusion with integral heat-sink