



SKU: 0101-0082

Category:

## RST Power Supply Unit (R-PSU)

The Tellabs 1000 Remote Power Supply Unit (R-PSU) plug-in card converts standard -48 V DC from batteries or a UPA into the voltages required by the common control equipment and plug-in cards located at the Tellabs 1000 MSAP Series. The R-PSU card also generates sine wave ringing voltage for use by the subscriber interfaces. The card employs a DC-to-DC switching converter for high efficiency and low thermal dissipation. The R-PSU features input fusing for redundant source coordination.

## Features

- High-efficiency switching DC-DC converter
- Reverse input polarity protection
- Output over-voltage and over-current shutdown
- Low output voltage alarm
- Low thermal dissipation
- Programmable ringing generator

## Highlights

### High Reliability

Only one R-PSU is required to power an RST shelf; however, a card slot is provided for an additional redundant R-PSU. And, the R-PSU features input fusing for redundant source coordination

### Efficient Power

The R-PSU uses a DC-to-DC switching converter for high efficiency power generations in a compact form-factor.

### Low Thermal

The R-PSU uses a DC-to-DC switching converter for high efficiency and low thermal dissipation to minimize impact on surroundings

## Specifications

### Physical

- Height:5.125 in (13.018 cm)
- Width:1.0 in (2.54 cm)
- Depth:10.5 in (26.67 cm)
- Weight:1.0 lb (0.45 kg)

### Power Consumption

- The R-PSU features two GMT fuses for redundant source coordination
- The first fuse protects the DC-DC converter
- The second fuse protects the -48 V DC output

### Alarm / Monitor / Test

- The unit also provides alarm and status indications to the CPU.
- Test jacks on the front panel can be used to monitor the system voltages.

### Environmentals

- Temperature:-40° to +149° F (-40° to +65° C)
- Relative Humidity:5-95% noncondensing
- Altitude:Up to 10,000 feet

### Compliance

- GR-1089-CORE

### General

- DC-DC Converter Input:-42.0 to -60.0 V DC
- DC-DC Converter Output:+5.15 V  $\pm$  1.5%; -5.15 V  $\pm$  0.0%, -52.0 V  $\pm$  9/-3% (long line talk)

- battery), 32.0 V  $\pm$  3 10% (short line talk battery)
- Low voltage disconnect:-38 V DC
- Low voltage alarm:-44 V DC
- Regulation:+5.15V  $\pm$  1.5% load;  $\pm$  1.5% line;  $\pm$  0.2% per specified temperature range
- Ripple and Noise:(DC 20 MHz) 35 V 1.0% pk-pk; -52 V, -32V  $\pm$  100 mV pk-pk
- Output Current:+5 V @ 15 Amp; -5 V @ 2 Amp; -52 V @ 2 Amp; -32 V @ 3 Amp
- Total power:150 W (any loading combination)
- Isolation internal converter:500 V input to output
- Isolation output ground:Referenced to input battery ground
- Ringing Generator Pedestal voltage:-48.0 V
- Output voltage range:60 V AC, 65 V AC, 85 V AC, 95 V AC
- Voltage tolerance: $\pm$  5%
- Output frequencies in Hz (provisionable):6.7, 17.7, 18.7, 20.0, 21.0, 22.3, 23.5, 25.0, 26.4, 28.0, 29.8, 31.6, 33.3, 35.4, 37.6, 40.0, 42.2, 44.4, 47.4, 50.0 Hz
- Frequency tolerance: $\pm$  2.5%

#### LED Indicators

- ACTV (green)
- FUSE (red)
- FAIL (red)

#### Management

- Craft User Interface (CUI)
- Tellabs Panorama Element Management System (EMS)

#### Software Support

- Minimum base software FP16 and higher

#### Installations

- Supported in Tellabs 1000 CBA

#### Ordering Information

- R-PSU: 0101-0082