



## AMPLITUDE/SLOPE EQUALIZER SYSTEMS 1.0 WATT OUTPUT



### "HOT SWAPPABLE" RF TRAYS, 1:1 REDUNDANT MODELS

These Amplitude/Slope Equalizer Systems offer independent gain and slope adjustment in the L-band frequencies. These systems are designed to compensate for long cable run loss and to provide system redundancy. The 1:1 Redundant System provides automatic and manual switchover modes of operation. Independent Amplitude/Slope Equalizers are “hot swappable” through the rear of the chassis.

#### STANDARD FEATURES

- RS422, RS485 and 10/100 Base-T Ethernet
- Fault tolerant design
- Fully redundant, hot swappable RF trays with power supplies, 1:1 redundant models
- Remote status
- Module current fault detection
- Front panel module current alarm
- Auto/manual mode
- Offline input/output access  
(1:1 redundant units)

#### OPTIONS

- Input/output signal monitors
- Increased output power

Frequency (MHz)	Dual Channel Model Number	1:1 Redundant Model Number
950-1450	EDR-950145-1W	E1R-950145-1W
950-1750	EDR-950175-1W	E1R-950175-1W
950-2000	EDR-950200-1W	E1R-950200-1W
950-2150	EDR-950215-1W	E1R-950215-1W

## SPECIFICATIONS

Gain	$38 \pm 3$ dB (at center frequency and 0 dB slope)
Gain Adjust	20 dB minimum
Amplitude Slope Adjust	0 to 6 dB (see Figure 1)
Amplitude Flatness	1.5 dB peak-to-peak maximum (at 0 dB slope)
Power Output (1 dB Compression)	+30 dBm minimum (at maximum gain and 0 dB slope)
Third Order Intercept Point	+40 dBm minimum (at maximum gain and 0 dB slope)
Channel-to-channel Match	0.5 dB maximum
Noise Figure	20 dB maximum (at maximum gain and 0 dB slope)
Spurious (Signal Independent)	Below thermal noise
Isolation	60 dB minimum
Input Return Loss	18 dB minimum
Output Return Loss	15 dB minimum
Input/Output Impedance	50 ohms
Input Level (Non-damage)	+10 dBm maximum
Temperature Stability	$\pm 0.25$ dB over any 20°C $\pm 0.75$ dB over 0°C to 50°C

## OPTIONS

- |       |   |  |
|-------|---|--|
| 18-1. | Input Monitor .....   | -20 dBc nominal level                            |
| 18-2. | Output Monitor .....  | -20 dBc nominal level                            |
| 18-3. | Increased Output Power (950-1750 MHz Frequency Band Only) - |  |
|       | Power Output (1 dB Compression) .....                       | +33 dBm minimum (at maximum gain and 0 dB slope) |
|       | Third Order Intercept Point .....                           | +43 dBm minimum (at maximum gain and 0 dB slope) |
|       | Output Return Loss .....                                    | 14 dB minimum                                    |

## PRIMARY POWER REQUIREMENTS

Voltage..... 90-250 VAC  
Frequency..... 47-63 Hz  
Power Consumption ..... 40W typical  
Fuses..... T1.5A

## SUMMARY ALARM

Contact closure/open for DC voltage and/or amplifier alarm. Status alarm readout on remote control bus.

## **PHYSICAL**

Weight .....	10 pounds (4.5 kg), nominal without rack slides
	14 pounds (6.4 kg), nominal with rack slides
Chassis Dimensions .....	19" x 1.75" panel height x 20" maximum
Connectors -	
RF.....	SMA female
Summary Alarm .....	DE-9P
Remote Interface.....	DE-9S for RS422, RS485 RJ-45 female for Ethernet
Primary Power.....	IEC-320

## ENVIRONMENTAL

Operating -  
Ambient Temperature ..... 0 to 50°C  
Relative Humidity ..... Up to 95% at 30°C  
Altitude ..... Up to 10,000 feet

Non-operating –

Ambient Temperature .....	-50 to +70°C
Relative Humidity .....	Up to 95% at 40°C
Altitude.....	Up to 40,000 feet
Shock and Vibration .....	Normal handling by commercial carriers

