

## RF-11000E Microwave RF Repeater

### General

Frequency Range	10.7 ~ 11.7 GHz
Linear Amplifier Gain <sup>1</sup>	63 dB typ., 61 dB min.
AGC/ALC	15 dB down fade 5 dB up fade min.
Noise Figure <sup>1</sup>	3.5 dB at max gain
Antenna Ports	WR90 waveguide
W/G Flange	CPR90G Gasket
Return Loss	≥ 26 dB

### Nominal Transmit Power<sup>1,2</sup>

FM/FSK/MSK	32.0 dBm
4QAM/QPSK/OQPSK	30.0
16QAM	26.0
32QAM	24.0
64QAM/64TCM	22.0
128QAM/128TCM	20.0
256QAM	19.0
512QAM	18.0
1024QAM	17.0
256TCM	18.0

### Frequency Plan

Channel Bandwidth	40 MHz, Std. 80 MHz, Dbl.
T-R Spacing, Std.	130 MHz, min.
T-T Spacing, Std.*	80 MHz, min.

\* on common feeders

<sup>1</sup> : Not including branching losses, see Operations Manual.

<sup>2</sup> : See Operations Manual for more details. Modulations listed are a sample only, contact PESi for more.

### Channel Response: 40 MHz, Equalized

Amplitude	± 0.5 dB, $f_0 \pm 20$ MHz
Group Delay	5 nsec P-P, $f_0 \pm 20$ MHz

### Channel Response: 40 MHz, Un-Equalized

Amplitude	± 1.0 dB, $f_0 \pm 20$ MHz
Group Delay	10 nsec P-P, $f_0 \pm 20$ MHz

### Channel Response: 80 MHz, Equalized

Amplitude	± 0.5 dB, $f_0 \pm 40$ MHz
Group Delay	5 nsec P-P, $f_0 \pm 40$ MHz

### Power Requirements: Duplex, 2 Amplifiers

Nominal Voltage	+24 VDC
Voltage Range	+19 ~ +30 VDC
Power Consumption	65 W, Solar Rated
Polarity	Negative Ground

### Dimensions: 1+0, 1+1 and 2+0 Configurations

Height	37.31 in, 948 mm
Width	23.25 in, 591 mm
Depth	22.82 in, 580 mm
Weight	112 lb, 51 kg – 1+0 124 lb, 56.5 kg – 1+1, 2+0 130 lb, 59 kg – 2+0 4-Port

### Reliability

MTBF	175,000 hours
MTTR	30 minutes, on-site

### Environmental

Ambient Temperature	-40° C ~ +60° C
Relative Humidity	90% - Housing Internal

Altitude	15,000 feet, 4600 meters
Enclosure Housing	Weathertight Aluminum

### Telephone

+1 925 837 2243

### Facsimile

+1 925 837 2298

Peninsula Engineering Solutions, inc. may change specifications as necessary to meet industry requirements.

