

RF-1500E Repeater

General

Frequency Range	1.390—1.535 GHz
Nominal Gain	45 dB (15 dB ALC)
Maximum Gain	60 dB (0 dB ALC)
AGC/ALC	15 dB down fade 5 dB up fade

Gain Adjust*	0-20 dB
Noise Figure	7 dB
3rd Order Intercept	+34 dBm
Antenna Ports	Type N coaxial
Return Loss	>20 dB

Nominal Signal Levels

FM/FSK/MSK	+24 dBm
4PSK	+22
16 QAM	+18
QPR9	+17

Frequency Plan

Channel	
Bandwidth	16 MHz, 1 dB
T-R Spacing	49 MHz, min.
T-T Spacing	28 MHz, min.
(on common feeders)	

Channel Response

Amplitude	1.0 dB P-P, fo ± 4 MHz
Group Delay	4 ns, fo ± 4 MHz

Power Requirements

Nominal Voltage	+13.5 VDC
Voltage Range	+11 to +16.5 VDC
Current	2.0 A
Polarity	Neg. Ground

Environmental

Housing	Weathertight Aluminum
Ambient Temp.	-40°C to +60°C
Relative Humidity	90% (housing internal) 100% (housing external)
Altitude	15,000 feet (4600 meters)

Dimensions

Height	27 inches (690 mm)
Width	27.5 inches (700 mm), with vent hoods
Depth	11.2 inches (285 mm)
Weight	50 lbs. (23 kg)

Reliability

MTBF	85,000 hours
MTTR	30 minutes

Typical Configurations

- 1+0 Single Channel Duplex
- 1+1 Frequency Diversity Duplex

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

* AGC/ALC range will be reduced by the amount equal to the reduction of maximum gain due to additional branch loss.

