

## RMAS-120 Repeater Monitor and Alarm System

### General

Data Rate	32 baud (16b/s)
Encoding	Manchester
Wave shaping	Butterworth response
Modulation	AM (amplitude modulation) with 6% depth of modulation, 1 +/- 0.3 dB peak to peak
Digital alarms	Battery A Major Battery B Major Cabinet Door Waveguide Pressure 2-8 Power Failure 2-8 Amplifier Failure 7 Uncommitted/user
Analog alarms	Battery A Voltage Battery B Voltage Battery bank temperature 1 Uncommitted/user

### Transmitter Unit

Power Requirements:	
Voltage	12 V DC (10.5 to 20 V DC) 24 V DC (20 to 40 V DC)
Current @ 12 VDC	66 mA (LEDs off) 166 mA (all LEDs on) 430 mA max. (all LEDs & Opto-Couplers on)
Environmental:	
Ambient Temperature	-40 C to +60 C
Humidity	90%
Altitude	4600 m (15,000 ft) max.
Mechanical:	
Dimensions	197mm (7.75 inches) Height 266mm (10.5 inches) Width 94 mm (3.7 inches) Depth
Weight	0.9kg (2 pounds)
(Mounts inside the Microwave Repeater Enclosure)	

### Receiver Unit

Power Requirements:	
Voltage	21 to 72 V DC (positive or negative ground)
Current	300 mA, maximum (at 24 V DC)
Environmental:	
Ambient temperature	0°C to +60°C
Humidity	90%
Altitude	4600 m (15,000 ft) max.
Mechanical:	
Mounting	One rack mounting space with 5 inch front projection, 19 inch equipment rack
Weight	0.9 (2 pounds)
Interface:	
Input source	Radio AGC Voltage output
AGC Loading	100k Ohms, AC coupled
AGC Sense	Balanced differential input

Alarm Outputs:	
27 Opto-couplers	Maximum: 10 mA current and 24 V DC voltage

### Terminal Radio Requirements

AGC Sensitivity	20 mV minimum for 1 dB change in RF level
AGC Tracking	1 dB/10 mSec (100 dB/Sec) Fade rate, minimum

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

Peninsula Engineering Solutions, inc. is a leading manufacturer of equipment designed to enhance the performance of radio communications systems. Microwave Repeaters are available at 1.5, 2, 2.5, 4, 4.5, 6, 7, 8, 11, 13 and 15 GHz. Peninsula Engineering equipment is installed around the world from Alaska to Saudi Arabia with organizations including Ameritech, AT&T, Verizon, Bell South Mobility, Cellular One, GTE, Cingular, U.S. West, the U.S. Government and PTT's around the world.