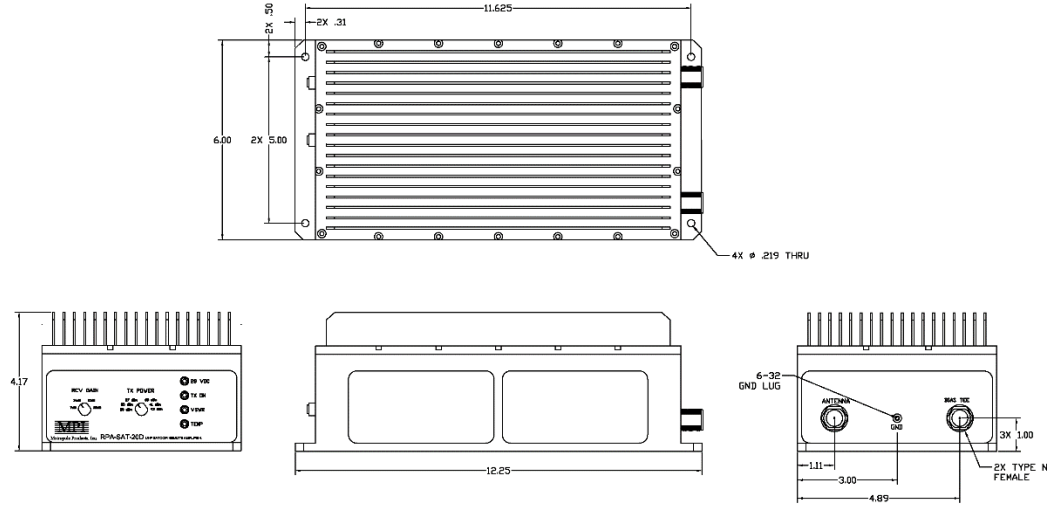




# RPA-SAT-20D

# Remote Amplifier System



## ELECTRICAL SPECIFICATIONS

### RECEIVE CHARACTERISTICS

Frequency Range	243-270 MHz
Gain, Operator Selectable, nominal	7, 14, 21, 28 dB
Out of Band Rejection	
0-230 MHz	> 50 dB min.
292-2000 MHz	> 50 dB min.
Noise Figure	
7 dB gain	3.5 dB max.
14, 21, or 28 dB gain	2.5 dB max.

### TRANSMIT CHARACTERISTICS

Frequency Range	291-318.3 MHz
Out of Band Rejection, 243-270 MHz	70 dB min.
Transmit Power, ± 1.0 dB at each setting*	
33 dBm setting	2.0 W
35 dBm setting	3.2 W
37 dBm setting	5.0 W
39 dBm setting	7.9 W
41 dBm setting	12.6 W
43 dBm setting	20.0 W
Radio Input Power, Operational	0.5 to 5.0 W
Radio Input Power, Protection (30 seconds max.)	25 W max.
Harmonics	60 dBc
VSWR	
Typical	1.5:1
Maximum	2.1:1**
<b>BY PASS MODE (DC power off)</b>	0.5 dB max.

## GENERAL CHARACTERISTICS

Remote Distance	Up to 300 ft. with RG-214/U
Supply Voltage	+24 to +32 VDC
Supply Current	
Receive	600 mA typ.
Transmit, at 20 W	5 A max.
Protection modes	VSWR and Temperature
Operating Temperature	-20°C to +55°C
Environment	Weatherproof
Size (inches) and Weight	
Amplifier (base unit)	4.25H x 6.0W x 12.25D, 11 lbs.
Bias Tee	1.7H x 3.0W x 4.75D, 15 oz.

\*nominal, 2dB increment steps

\*\* higher with transmitter off

REV: 10/19/16