POTTER
The Symbol of Protection

GUARDIAN-UHF

UHF Public Safety BDA

Features

- Improves coverage for Public Safety UHF Network Frequencies:
  UL:450-512 MHz & DL:450-512MHz
- 90 dB, 2.5-Watt system and 5 W system
- FCC Class A and Class B options available
- Meets the code for NFPA 72/1221 and IFC 510
- UL 2524 Certified and Labeled
- Ethernet port with built-in TowerIQ Sentry remote monitoring web server for browser-based configuration and monitoring
- Integrated dry contact 9-pin alarming
- Automatic gain control (AGC) and Oscillation Detection with automatic remediation
- 24VDC Operation
- Independently adjustable frequency attenuation for uplink and downlink (Reduce gain in -1 dB increments)

UL LISTED

Technical Specifications

Certifications	• FCC: ID 2AXVJGUARD-UHFA • FCC: ID 2AXVJGUARD-UHFB Part 90 • UL: 2524
Dimensions	21.2 x 17.2 x 8.0 in
Enclosure Cooling	Convection
Environmental Class	Type 4
Operating Humidity	95%
Operating Temperature	-4 to +122°F (-20 to +50°C)
Typical Power Consumption	90W
Power Supply	DC: 24-30 V
RF Connections	N Female
Weight	45.9 lbs (53 lbs shipped)

⚠ WARNING

THIS IS NOT A CONSUMER DEVICE. IT IS DESIGNED FOR INSTALLATION BY FCC LICENSEES AND QUALIFIED INSTALLERS. USERS MUST HAVE AN FCC LICENSE OR THE EXPRESS CONSENT OF AN FCC LICENSEE TO OPERATE THIS DEVICE.

UNAUTHORIZED USE MAY RESULT IN SIGNIFICANT FORFEITURE PENALTIES, INCLUDING PENALTIES IN EXCESS OF $100,000 FOR EACH CONTINUING VIOLATION.

Part 90 Signal Boosters. THIS IS A 90.219 CLASS B DEVICE.

Guardian UHF Electrical Specifications

Electrical		
Frequency Range, Uplink		450-512Mhz
Frequency Range, Downlink		450-512Mhz
Total Maximum Output Power, Uplink		27dBm
Total Maximum Output Power, Downlink		34/37dBm
Maximum System Gain		90dB for Downlink; 85dB for Uplink
Gain Adjustment Range (1 dB step)		0-30 dB
AGC Dynamic Range		>60 dB
Sub-Channel Gain Adjustment Range		30dB
Pass Band Ripple, p-p		≤10 dB
Noise Figure @ Max Gain		≤7 dB
Squelch Adjustment Range		-80 to -90dBm
Intermodulation		≤-13 dBm
Impedance		50 Ω
AC Power Input		100-240 VAC, 50/60 Hz, 2.0 A
DC Input Range		24 - 30 VDC
Sub-Channel Bandwidth	Class A	12.5/25/75KHz
	Class B	0.7/2/3.5/5/24MHz
Number of Sub-Channel	Class A	32
	Class B	5
System Group Delay (@25KHz BW)	Class A	≤60μsec @12.5KHz; ≤36μsec @25KHz; ≤15μsec @75KHz
	Class B	≤6μsec
Out-of-Band Suppression	Class A	≥60dB@ filter band edge +30 kHz; ≥60dB@ filter band edge +50 kHz; ≥60dB@ filter band edge +210 kHz;
	Class B	≥60dB@ filter band edge +1 MHz;
Absolute Maximum RF Input Power	Uplink	-10dBm
	Downlink	0dBm