

assured communications ®

RF-5800V-PA

FALCON II® VHF 50-WATT POWER AMPLIFIER

High performance and reliability for the most demanding applications

The RF-5800V-PA is a high-performance VHF power amplifier for use in vehicle or base-station radio systems. The power amplifier complements a FALCON II® VHF manpack transceiver by supplying additional RF power for increased range and link reliability.

The RF-5800V-PA covers the entire 30 to 108 MHz frequency band, and can supply a full 50 watts of forward power under demanding VSWR conditions. The unit contains frequency agile RF filters to provide excellent collocation performance in both fixed frequency and fast frequency-hopping modes.

The RF-5800V-PA provides "jerk and run" operation: the manpack transceiver can be quickly removed and used as a stand-alone radio. An audio speaker interface and an Ethernet interface for connection to Local Area Networks (when used with an RF-5800V-MP) are also included.

RF-5800V 50-watt systems support all modes and features of the FALCON II VHF radios, including fast frequency hopping and packet data mode. The radio systems are designed for easy installation in tactical vehicles or operation centers to provide secure voice services and complement information systems such as e-mail, situational awareness, image/video transmission, and file transfer.



Radio must be purchased separately



Specifications for the RF-5800V-PA

General		
Frequency Range	30-108 MHz	
Input Power	20-32 VDC MIL-STD-1275 compliant	
Dimensions	22 H x 25 W x 36 D cm	
Weight	8.5 kg (without shock tray) 11.7 kg (with shock tray)	
RF Output Impedence	50 ohms, unbalanced	
Collocation	9% frequency and 1.5 M antenna separation	
Finish/Color	CARC/Green	

Transmit		
Output Power	50 W: 30-108 MHz 10 W: to 60 W (user selectable)	
Output Power (bypass)	1 W, 4 W, 10 W	
Harmonic Suppression	> 50 dBc typical	
Spurious Suppression	> 80 dBc typical	

Receive		
FM Sensitivity	-115 dBm @ 12dB SINAD -110 dBm @ 12dB SINAD with collocation filters enabled	
IF Rejection	> 80 dB	

Environmental		
Operating Temperature	-40° to 70°C	
Humidity	90% per MIL-STD-810	
Shock/Vibration	Ground/Mobile per MIL-STD-810	
Sand/Dust	MIL-STD-810	

Compatibility		
VHF Manpacks	RF-5800V-MP205 RF-5800V-MP206	
	RF-5800V-MP207 RF-5800V-MP208	
External Speaker	Power and audio connectors available	

Accessories		
DC Power Cable	Various	
Handheld Remote Cable (up to 7.5M)	KDU Remote Kit	
Fan Kit	12023-1100-01	
Shock Isolator Tray	12023-1200-01	



