

RF-300M-V150

**50-WATT MULTIBAND VEHICULAR
AMPLIFIER ADAPTER (VAA)
(INCLUDING AN/PRC-117G(V)1(C))**

*A high-efficiency VAA for the
FALCON III® Manpack radio in a
low-profile, compact package*

The FALCON III® RF-300M-V150 is a 50-watt vehicular amplifier adapter (VAA) that includes the FALCON III AN/PRC-117G(V)1(C) manpack radio. Designed for long-range applications and increased communications reliability, the RF-300M-V150 provides 50 watts from 30 to 450 MHz and 20 watts from 450 MHz to 2 GHz, supporting both narrowband and wideband waveforms up to 5 MHz bandwidth.

The single-unit VAA is extremely low-profile and can be deployed in multiple configurations, including as a single unit, alongside a single channel AN/VRC-110, or in a dual-unit configuration mounted in the Universal SINCGARS Interface Module (USIM).

The VAA features separate VHF, UHF, SATCOM, and wideband antenna ports with automatic port switching, providing the radio system with true multimission capability. The operator only needs to select the required preset on the radio to switch among ground, ground-to-air, SATCOM, and wideband networking communications.

Other features provided by the RF-300M-V150 include: VHF (30 to 90 Mhz) and UHF (200 to 400 MHz) collocation filters, internal LNA, VIC-1 and VIC-3 interface, wideband PA control interface, and external power output to power accessories such as a loudspeaker or battery charger. The VAA provides a mechanism to lock the manpack radio for physical security.



Specifications for the RF-300M-V150

General	
Frequency Range	30 MHz-2 GHz
Output Power	VHF Low (30-90 MHz): 50 watts PEP
	VHF High/UHF (90-450 MHz): 50 watts PEP
	UHF (450-512 MHz): Greater than 20 watts PEP
	Wideband (225-450 MHz): 50 watts PEP and Average
	Wideband (450 MHz-2 GHz): 20 watts PEP
Power Input	18-34 VDC
Channel Bandwidth	5 kHz to 5 MHz

Physical (including shock tray)	
Height	9.25 in. (23.5 cm)
Depth	14.5 in. (37 cm)
Width	10.5 in. (27 cm)
Weight	37 lbs. (16.8 kg) with radio
Color	CARC Green 383

Environmental	
Shock/Vibe	MIL-STD-810F, ground mobile
Sand/Dust	MIL-STD-810F
Immersion	1 meter
Temperature	-40° to +70°C
Altitude	Operational to 15,000 ft.

Interfaces	
Data Ethernet	RS-232, EIA-422, PPP
Remote Control	USB, Ethernet, RS-232
Audio	VIC-1, VIC-3, LS-671 compatible
Accessory Power	28 VDC @ 0.2A, 5.6 W
Antenna Ports	VHF Low: 50 Ohm BNC
	VHF High/UHF: 50 Ohm BNC
	UHF SATCOM: 50 Ohm BNC
	Wideband: 50 Ohm N-Type

Accessories	
RF-3183-AT013	30-512 MHz Vehicular Antenna
RF-3184-AT320	225-450 MHz Vehicular Antenna (Wideband)
RF-3071-AT230	GPS Antenna, L1 and L2 bands
12006-9001-01	SATCOM Antenna
RF-292-01	Antenna Mount

Model Number	System Configuration	Mounting System
RF-300M-V150	Single VAA system including one AN/PRC-117G(V)1(C)	Vehicular Interface Mount (VIM)
RF-300M-V250	Dual VAA system including two AN/PRC-117G(V)1(C)	Universal SINGGARS Interface Module (USIM) and MT-6352 shock mount
RF-300M-V255	Dual VAA system including one AN/PRC-117G(V)1(C) and one AN/PRC-152	Universal SINGGARS Interface Module (USIM) and MT-6352 shock mount



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RF-300M-V250



RF-300M-V255

