

RF-300M-V150
50-WATT MULTIBAND
VEHICULAR AMPLIFIER
ADAPTER (VAA)
(INCLUDING RF-300M-MP)

*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 the Falcon III RF-300M-MP manpack radio. Designed for long-range applications and increased communications reliability, the RF-300M-V150 provides 50 watts from 30 MHz to 450 MHz, 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 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 multi-mission 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 (30-90 MHz) and UHF (200 - 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 to 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 to 34 VDC
Channel Bandwidth	5 kHz to 5 MHz

Physical (including shock tray)

Height	9.25 inches (23.5 cm)
Depth	14.5 inches (37 cm)
Width	10.5 inches (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°C 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, 5.6W
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)
10511-0400-01	GPS Antenna Kit (L1 Band)
12006-9001-01	SATCOM Antenna
RF-292-01	Antenna Mount