

RF-300W-TV

Wideband Trimline Vehicular Amplifier

GENERAL	
Frequency Range	Narrowband: 30-520 MHz Wideband: 225-450 MHz
Transmission Modes	FM, AM (90-512 MHz)
Presets	99 (standard); unlimited using multiple mission plan files
Power Input	21-32 VDC MIL-STD-1275 protection
Tuning Resolution	10 Hz

TRANSMITTER	
Output Power	30-90 MHz: 5, 20, or 50 W PEP 90-512 MHz: 5, 10, or 20 W SATCOM bands: 50 W Wideband: 20 W PEP
Harmonic Suppression	>60 dBc (50 W) >56 dBc (20 W) >50 dBc (5 W)
Spurious Suppression	VHF: >60 dBc typical UHF: 50 W: >60 dBc 20 W: >56 dBc 5 W: >50 dBc

RECEIVER	
Sensitivity	-112@12 dB SINAD (VHF-FM) -110 dBm (UHF-FM)
Image Rejection	>80 dB
IF Rejection	>70 dB in narrowband >100 dB in wideband

ENVIRONMENTAL	
Temperature	-22°F to 140°F (-30°C to +60°C)
Shock/Vibe	MIL-STD-810G
Sand/Dust/Salt/Fog	MIL-STD-810G

INTERFACES	
Data	RS-232
Remote Control	RS-232
VHF Antenna Port	50 Ohm BNC
UHF Antenna Port	50 Ohm BNC
SATCOM Port	50 Ohm BNC
Audio	VIC-1,VIC-3



The L3Harris RF-300W-TV is a space-saving, single-channel power amplifier designed for use with the L3Harris AN/PRC-152A and RF-7800M-HH handheld radios. The Trimline Vehicular Amplifier supports a range of waveforms from traditional narrowband to SATCOM and wideband, including M-TNW and ANW2®C. This wideband amplifier features full remote control and built-in co-site filtering, allowing installation into multi-radio systems. The RF-300W-TV's jerk-and-run capabilities keep radios powered on and networked during dismount operations.

MODES AND WAVEFORMS	
AN/PRC-152A Type 1 Wideband Networking Handheld	
Narrowband Waveforms	AM/FM Line-Of-Sight, SINCGARS, HAVEQUICK I/II, HPW and HPW IP (optional), APCO P25 (optional)
Wideband Waveforms	ANW2°C 30 node, SRW (future)
UHF SATCOM Waveforms	MIL-STD-188-181B dedicated channel MIL-STD-188-181C, 183B IW Phase 1 (optional), HPW (optional), MIL-STD-188-182A, 183A DAMA (optional), NATO DAMA (optional)
RF-7800M-HH Wideband Networking Handheld	
Narrowband Waveforms	AM/FM Line-Of-Sight, Quicklook 1A, 2
Wideband Waveforms	M-TNW, ANW2°C 30 node
UHF SATCOM Waveforms	STC
AN/PRC-152 Type 1 Multiband Handheld	
Narrowband Waveforms	AM/FM Line-Of-Sight, SINCGARS, HAVEQUICK I/II, HPW and HPW IP (optional), APCO P25 (optional)
UHF SATCOM Waveforms	MIL-STD-188-181B Dedicated Channel MIL-STD-188-182A, 183A DAMA (optional), MIL-STD-188-181C, 183B IW Phase 1 (optional), DAMA NATO, HPW (optional), STC
RF-310M-HH Suite-B Multiband Handheld	
Narrowband Waveforms	AM/FM Line-Of-Sight, APCO P25 (optional)

PHYSICAL	
Amplifier Dimensions	3.5 H x 15.2 W x 10.5 D in (8.9 H x 38.6 W x 26.7 D cm)
Amplifier Weight	28 lbs (12.7 kg)
HHRCU Dimensions	10.34 H x 5.75 W in (26.3 H x 14.6 W cm)
HHRCU Weight	10 lbs (4.5 kg)



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