

RF-410D

Next Generation Power Amplifier

The L3Harris RF-410D Next Generation Power Amplifier (NGPA) maximizes mission flexibility through radio-agnostic capabilities and multiband support. This lightweight solution enhances tactical agility by eliminating the need for multiple PAs.



Engineered to meet changing needs of missions on the move, the RF-410D supports vehicular or fixed-mount radio systems, which does not require a shock mount.

The RF-410D is compatible with all L3Harris tactical radios, supporting a

variety of interfaces and modes. The RF-410D features an RF sensing mode, requiring limited manual interaction, and a radio control mode, which uses the radio's software to maximize PA performance with no user interaction.

The RF-410D provides seamless access to networked voice and data, over the frequency range of 30-2600 MHz. Waveform coverage includes wideband and legacy narrowband communications.

Unlike most existing PA solutions, the RF-410D has a software-defined architecture for fast upgrades to emerging and future waveforms.



HIGH-PERFORMANCE, LOW-SWAP POWER AMPLIFIER FOR MISSIONS ON THE MOVE

KEY BENEFITS

- > Up to 50-Watt power amplification in low-band frequencies; legacy narrowband and wideband waveform support
- > Smaller and lighter than its predecessors allowing for greater flexibility in space constrained applications
- > Reliable range extension in congested or contested environments
- > Software-defined architecture facilitates updates for future capabilities
- > Radio-agnostic, multi-interface operation



GENERAL	
PA Nomenclature	RF-410D Power Amplifier
Frequency Range/Power Out	30-520 MHz up to 50 W 764-2000 MHz up to 35 W Above 2000 MHz up to 20 W
Channel Spacing/Bandwidth	25 kHz-20 MHz

POWER	
Voltage Input	13-34.5 VDC (28 V, MIL-STD-1275E)
Power Consumption	400 W Max

MODES AND WAVEFORMS SUPPORTED	
Narrowband Waveforms	FM/FSK, AM/ASK, SINCGARS, HAVEQUICK I/II, ASCM, SATURN, P25
Wideband Waveforms	ANW2®C; SRW, TSM-X™, MIL-STD-188-181B
UHF SATCOM Waveforms	HPW, IW Phase II

PHYSICAL	
Dimensions	3.7 H x 5.6 W x 10.5 D in (9.4 H x 14.3 W x 26.7 D cm)
Volume	166 in³ (272.0 cL)
Weight	9.5 lbs (4.3 kg)
Color	Green Other colors available upon request

ENVIRONMENTAL	
Operating Temperature	-40°F to +140°F (-40°C to +60°C)
Storage Temperature	-40°F to +159.8°F (-40°C to +71°C)
Immersion	2 meters
Shock and Vibration	MIL-STD-810G compliant Shock, per 516.6: Operational through functional shock; storage/transit for transit drop and crash hazard Vibration, per 514.6: Operational through ground mobile; storage/transit for minimum integrity and loose cargo
Sand/Dust/Salt Fog/Rain	MIL-STD-810G compliant Sand/dust, per 510.5: Operational Salt fog, per 509.5: Storage/transit Rain, per 506.5: Operational
Humidity	Humidity, per 507.5: Operational/storage/transit

INTERFACES	
Radio	<ul style="list-style-type: none"> • LVDS, RS-485 • PA On/Off • Test/programming serial interface • Status via radio interface, control mode
Antenna Port (TNC)	VHF, UHF, L-S Band, SATCOM
Manual Control	<ul style="list-style-type: none"> • Knob for legacy mode waveform selection • Push button for power setting/blackout mode
Fan Port	Fan power and control for optional fan with additional cooling for the RF-410D

STANDARD KIT	
RF-410D-PA050	Power Amplifier (includes 12242-0700-01 and 12242-0720-01)
10515-0570-4200	Operation Manual

OPTIONAL ACCESSORIES	
12242-0800-01	Fan Kit
12242-1500-01	Shock Tray required for tracked vehicles and ballistic shock profiles

Contact your L3Harris sales representative for more information.

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