

L3HARRIS RF300M-DL (C)

Small Secure Data Link (SSDL)

The L3Harris RF300M-DL (C) Small Secure Data Link (SSDL) is a single-channel, easily embedded solution featuring multiband and multi-mode capabilities, with a user interface optimized for remote control operation in the most challenging environments.



The Small Secure Data Link is based on AN/PRC-152/152A Falcon III® technology, which powers the world's most widely deployed software-defined tactical radios. It delivers mission-critical, ground-to-ground, air-to-ground and air-to-air communications—with reliable voice, data and video. SATCOM and Line-Of-Sight waveforms are supported,

as well as IP-based ad-hoc networking through the Soldier Radio Waveform (SRW) and the industry-leading L3Harris Adaptive Networking Wideband Waveform (ANW2®C).

The L3Harris SSDL is JTRS approved, with an SCA-compliant architecture that accommodates changing mission needs and emerging waveforms with simple software upgrades. It is also interoperable with all Falcon III radios, legacy VHF/UHF radio systems, UHF SATCOM waveforms, public safety radios, and Soldier Radio Waveform systems.



WORLD'S SMALLEST TYPE 1 WIDEBAND AIRBORNE RADIO

KEY BENEFITS

- > **Optimized SWaP for reliable communications from disadvantaged platforms**
- > **Networked waveforms extend battlespace networks Beyond-Line-Of-Sight without consuming satellite bandwidth**
- > **Easily embedded and ruggedized for a high degree of versatility**
- > **Interoperable with all predominant tactical radios**

GENERAL	
Frequency Range	30-520 MHz, 762-870 MHz (narrowband) 225-450 MHz (wideband)
Channel Spacing/Bandwidth	Narrowband: 8.33 kHz, 12.5 kHz, 25 kHz SATCOM: 5 kHz, 25 kHz Wideband: 1.2 MHz FM Deviation: 5 kHz, 6.5 kHz, 8 kHz
Net Presets	99 fully programmable system presets
External GPS Compatibility	PLGR, DAGR, NMEA
Management Tool	Windows Communications Planning Application (CPA); JENM Compatible
Software Environment	SCA v2.2.2 (JTEL Certified); SCA (compatible)
Frequency Stability	1x10 ⁻⁶ (drift ±0.5 ppm over one year)

TRANSMITTER	
Power Output	250 mW to 5 W, 10 W SATCOM, High (burst)
Harmonic Suppression	40 dB
Audio Input	Intercom or handset/headset

RECEIVER	
Sensitivity	LOS FM: 30-512 MHz; -116 dBm @ 12 dB SINAD LOS AM: 90-512 MHz; -103.5 dBm @ 10 dB SINAD with 30% modulation TACSAT FM: 243-270 MHz; -120 dBm @ 10 dB SINAD
Squelch	Selectable tone, noise, digital (CDCSS, CTCSS), none
Audio Output	Intercom and handset/headphone outputs
Adjacent Channel Rejection	≥ -40 dB
Overload Protection	+34 dBm w/50 Ohm source for up to 1 minute duration

POWER	
Power Input	10 to 13 VDC

SECURITY	
Encryption	Sierra™ II-based Type 1 Encryption (Suite A/B) NSA-certified Secret and Below
Encryption Modes	KY-57, ANDVT/KYV-5, KG-84C, FED-STD-1023, AES, KY-99 and KGV-8
Key Fill Device Compatibility	DS-101, DS-102, and Mode 2/3; SKL (AN/PYQ-10), DTD2000 (SDS, KIK-20), DTD (AN/CYZ-10) KYX-15, KYK-13 KIK-11 (TKL)
Key Storage	25 Keys per waveform and per crypto mode
Modes	DS-101, DS-102, Mode 2/3, USB

MODES AND WAVEFORMS	
Narrowband Waveforms	AM/FM, VULOS, SINGGARS and HAVEQUICK I/II (standard); HPW, HPW IP, APCO P25 (optional); DAMA
Wideband Waveforms	ANW2 [®] C (optional), SRW (optional)

MODES AND WAVEFORMS	
UHF SATCOM Waveforms	MIL-STD-188-181B dedicated channel (standard) MIL-STD-188-182A, 183A DAMA (optional) MIL-STD-188-181C, 183B IW Phase 1 (optional) High Performance Waveform (HPW) & HPW IP (optional)
Voice and Data Modes	Simplex or half-duplex and plain text analog voice SINGGARS ECCM (30.0-87.975 MHz) HAVEQUICK ECCM (225.0-399.975 MHz) Wideband CT Digital Voice (16 kbps; CVSD; KY-57) Narrowband CT Digital Voice (2.4 kbps; LPC-10, ANDVT) MELP for Adaptive Networking Wideband Waveform (ANW2C)
Transmission Modes	AM, ASK, FM, FSK, PSK, CPM, GMSK

PHYSICAL	
Dimensions	3.2 H x 5.3 W x 1.6 D in (8.13 H x 13.46 W x 4.06 D cm)
Volume	27.14 in ³ (444.28 cm ³)
Weight	17.25 oz (489 grams)
Color	Epoxy paint (Color no. 34083—olive drab green)

ENVIRONMENTAL	
Shock and Vibration	Tailored MIL-STD-810F for fixed- and rotary-wing aircraft
Temperature	Operating: -23.4°F to +140°F (-31°C to +60°C) Storage: -40.0°F to +194°F (-40°C to +90°C)
EMI/RFI	MIL-STD-461F (tailored)
Environmental Report	Full environmental test report available upon request

INTERFACES	
Data	USB, USB RNDIS host and device, Ethernet [®] , RS-232
Audio	Handset and intercom interfaces
Antenna Port	SSMA
Programming	USB or Ethernet
Remote Control	USB, RS-232, Ethernet, Remote Keypad Display Unit (RKDU), various software Keypad Display Units

STANDARD KIT INCLUDES	
RF-SSDL-CD001	CPA for SSDL (includes SSDL user manual)

OPTIONAL ACCESSORIES	
3189967-102	Spare Hold Up Battery
12219-0060-01	Cable Adapter Kit for Bench-top Programming

L3Harris RF300M-DL (C) Small Secure Data Link (SSDL)

© 2021 L3Harris Technologies, Inc. | 05/2021 DS603F

Non-Export Controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



L3HARRIS™
FAST. FORWARD.

1025 W. NASA Boulevard
Melbourne, FL 32919