

DTCS MISSION MODULE

Beyond line-of-sight (BLOS) channel expansion versatility for dismounted warfighters

The L3Harris Distributed Tactical Communications System (DTCS) mission module is an advanced capability providing an immediate and seamless extension of RF tactical communications to global SATCOM.

INTEGRATED SATCOM CONNECTIVITY

The DTCS mission module, part of the AssuredReach™ family of products, is a small form factor channel expansion solution that provides critical SATCOM over a global network. Utilizing the DTCS and L3Harris' enhanced short burst data (eSBD) capability, this solution provides beyond line-of-sight (BLOS) voice and data while on the move from anywhere in the world.

Users of the L3Harris AN/PRC-163 multi-channel handheld radio combined with the DTCS mission module, are able to communicate utilizing any combination of SATCOM, mobile ad hoc network (MANET) or ultra-high frequency (UHF) and very-high frequency (VHF) line-of-sight, including retransmission and cross banding.

IMPROVED SWaP

Providing voice and data SATCOM in a small form factor reduces the size, weight and power (SwAP) burden on the warfighter.

Eliminating the need for two radios, secure satellite communications on-the-move are enabled by tethering or mounting the DTCS mission module on the AN/PRC-163 radio. Control is accomplished by utilizing the radio's existing control panel.

In addition, existing RO® BLOS radio users can now carry just one radio to enable both SATCOM and secure UHF/VHF line-of-sight communications. The DTCS mission module receives its power from the existing AN/PRC-163 battery eliminating the need for two types of batteries.



BENEFITS

- > Simultaneous multi-channel operation provides any combination of SATCOM, UHF/VHF line-of-sight and MANET
- > AN/PRC-163 high assurance encryption provides the most secure radio link available
- > Utilization of the US DoD's Enhanced Mobile Satellite Services (EMSS) gateway provides instant communication
- > The DTCS mission module enables users the ability to carry one radio versus two for BLOS and high assurance UHF/VHF line-of-sight communications



GENERAL	
Frequency range	1616.5 to 1626.5 MHz (L Band) 1575 MHz (GPS)
Channel spacing/bandwidth	41.667 kHz
Net presets	Programmable
GPS	Via host radio – SAASM L1/L2 or commercial L1
Frequency stability	0.5 ppm
TRANSMITTER	
Power output	Up to 38 dBm
RECEIVER	
Sensitivity	-119 dBm
Adjacent channel rejection	-33 dBc
POWER	
Power input	7.8 to 34.6 VDC (via host radio)
SECURITY	
Encryption	Denali™ based high assurance suite A/B TSAB (via host radio)
AVAILABLE MODES/WAVEFORMS	
Services	Distributed Tactical Communication System-Global Services (DTCS-GS) Enhanced short burst data (eSBD)
PHYSICAL	
Dimensions	6.0 cm H x 2.7 cm W x 1.7cm D 15.2 cm H x 6.9 cm W x 4.3 cm D
Volume	17 cu in (278 cu centimeters)
Weight	17 oz (480 gm)
Color/finish	Chemical Agent Resistant Coating (CARC) green
ENVIRONMENTAL	
Temperature	Operating: -22° F to 140° F (-30° C to +55° C) Storage: -40° F to 185° F (-40° C to +85° C)
Immersion	20 m
Mechanical	MIL-STD-810G
INTERFACES	
Antenna port	50-ohm TNC
External mission module	Power, data, control/status via Ethernet over USB
STANDARD KIT	
PN: 8963050G2	DTCS mission module kit (mission module, antenna, user's guide)
PN: 8963054G2	DTCS mission module
OPTIONAL ACCESSORIES	
PN: 8960263-1	DTCS mission module antenna (0.76" diameter x 5.8" tall with integral gooseneck with TNC connector)
PN: 8962261-1	DTCS mission module tether cable
RADIO COMPATIBILITY	
L3Harris	AN/PRC-163, AN/PRC-167 (future)



- > Channel expansion versatility for the dismounted warfighter
- > Interoperable with fielded RO® tactical radios
- > Tactical push-to-talk (PTT) over Distributed Tactical Communications System (DTCS)
- > Secure globally available position location information (PLI)
- > High assurance encryption via host radio
- > Dismount and vehicle-mount compatible



AN/PRC-163 tactical radio with tethered DTCS mission module

DTCS Mission Module

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Nonexport-controlled Information

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