

DTCS LEO MISSION MODULE

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

The L3Harris Distributed Tactical Communications System, Low Earth Orbit, Mission Module (DTCS MM) is an advanced capability providing an immediate and seamless extension of RF tactical communications to global satellite communication (SATCOM).

INTEGRATED LEO SATCOM CONNECTIVITY

DTCS MM, 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.

The DTCS MM enables users of the L3Harris AN/PRC-163 multi-channel handheld radio the advantage of communications in any combination of SATCOM, mobile ad hoc network (MANET) or UHF/VHF line of sight. This added capability delivers high assurance voice and data SATCOM on the move (SOTM) in a combined, small form

factor solution that reduces the size, weight and power (SWaP) burden on the warfighter.

IMPROVED SWaP

The DTCS MM can be tethered to or mounted on the AN/PRC-163 to enable secure SOTM and eliminate the need for two radios. Control of the DTCS MM is accomplished using the AN/PRC-163 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 by utilizing the AN/PRC-163 and the DTCS MM. The DTCS MM 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 mobile ad hoc networking applications
- > AN/PRC-163 high assurance encryption provides most secure radio link available
- > Instant communication capability via the EMSS SATCOM gateway provides secure backhaul and on the move communications
- > The DTCS MM enables users the ability to carry one radio versus two for BLOS and high assurance UHF/VHF LOS 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 optional ANS for use in GPS denied areas
Frequency stability	0.5 ppm
TRANSMITTER	
Power output	Up to 38 dBm
RECIEVER	
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	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 LEO mission module kit
PN: 8963054G2	DTCS LEO mission module
PN: 8960263-1	DTCS LEO mission module antenna
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 PTT over Distributed Tactical Communications System (DTCS)
- > Secure globally available position location information (PLI)
- > High assurance encryption via host radio
- > Dismounted and vehicle-mounted compatible



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