Ultra ORION DLRS

Fast and Easy Setup for Critical Long Relay Links

Features & Benefits

- Compact and lightweight dual line-of-sight radio system
- Fast and easy setup for critical long relay links
- Automatic alignment
- Reduces burden on the operator/warfighter
- Intuitive system
- Easy to use graphical user interface
- Can be remotely managed and monitored
- MIL-STD-810 system

The Ultra ORION Dual Link Radio System (DLRS) enables fast and easy setup for critical long relay links. It is the smallest system of its type on the market. It combines the X500-G radio and a double electric rotator, controlled by a tightly integrated web user interface.

DLRS greatly reduces the burden on the operator/warfighter so he can focus on its primary mission by automating the link alignment for maximal signal strength. The system is highly intuitive, thus greatly reducing training requirements for radio system configuration and link alignment.

Radio System

Ultra ORION X500-G is a multiband, point-to-point (PTP), point-to-multipoint (PMP) and mesh radio system. It provides at-the-quick-halt (ATQH) communications across multiple echelons and on-the-move (OTM) access capability. The system offers up to 1 Gbps throughput and operational flexibility within a small mast-mounted form factor.

Double Electric Rotator

The dual electric antenna rotator included in ORION DLRS enables independent 360 degree rotation of both antennas mounted on the mast. The closed loop mode lets the radio control the alignment system in order to optimize received signal strength or minimize bit error rate. Feedback from the radio optimize the alignment within a fraction of a degree. In open loop, the alignment system is controlled by a computer using an optional GPS antenna.

Options

A mission planning tool can be supplied with the system. ORION DLRS can be powered by external power or by TCS' network interface unit (N1000 series).

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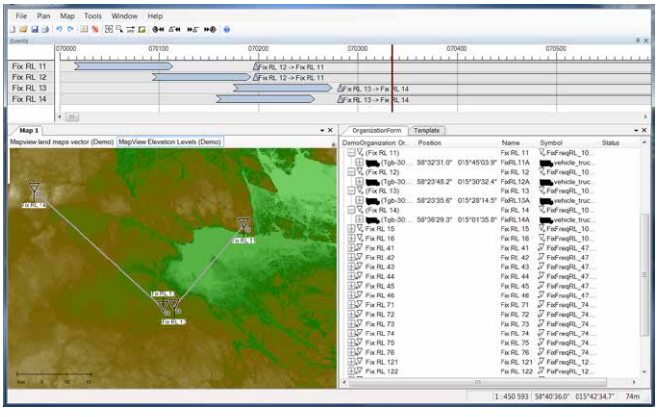
Specifications

Parameter	Specification
Channels	2 SDR channels + 1 secure access channel
Frequency	Band 3 (1350-1850 MHz), Band 3+ (1350-2690 MHz), Band 4 (4400-5000 MHz), 2.4 GHz ISM and 5.x GHz NII/ISM
Throughput	Up to 400 Mbps per SDR channel, 1 Gbps for system
Spectrum Efficiency	Up to 5.4 bits/s/Hz
Traffic Security	Data traffic AES-256 FIPS-140-2
Transmit Power	+6 to +36 dBm
Sensitivity	Threshold -100 dBm
Channel Size	0.75 - 40 MHz
Waveforms	Library of over 50 LOS and NLOS waveforms including PTP, PMP, Mesh, OTM and interoperability
Management	Intuitive User Interface (HTTPS, SNMPv3)
Interoperability	AN/GRC-245 A/B HCLOS, WIN-T Inc. 1 & 2, Patriot, USMC
Antennas	Omnidirectional, sectorial, flat panel and directional
Radio Size (HxWxD)	4 x 11.8 x 12" (102 x 304 x 300 mm)
Rotator Size (HxWxD)	31.5 x 16.5 x 12'' (800 x 420 x 300 mm)
Radio Weight	Up to 21 lbs (9.5 kg)
Potator Weight	33 lbs (15 kg)
Power	28-48 VDC, optional 115/220 VAC
Temperature	-40 to +60°C (operating), -40 to +70°C (storage)
Environmental	MIL-STD-810G & 461F, IP67
Wind Rating (Max)	150 km/h (94 mph)
Pointing Accuracy	≤ 1.5 degrees
Alignment Mode	Closed loop mode with transceiver control Open loop mode with GPS control



making a difference

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