

SkyLink AON ST

Next Generation Single Transceiver All Outdoor PTP Radio System

Delivering Scalable Bandwidth Licensed Microwave Solutions

Features

- Up to 2.75 Gbps per radio using two sub-carriers without compression
- Single carrier or dual sub-carrier operation to efficiently increase capacity without adding more equipment
- QPSK to 4096QAM
- Licensed band PTP digital microwave system for all FCC bands at 6/11/18/23 GHz and ETSI bands from 6 to 42 GHz
- Ultra wide bandwidth operation to 160MHz ANSI and 112MHz ETSI
- Built-in Advanced Digital Pre-Distortion to drive higher transmission performance
- 1+0, 1+1 HSB, and 2+0 operation
- Customer replaceable diplexers to ease operational logistics and improve system flexibility
- AES256 encryption



Applications

- 4G/5G backhaul
- Fixed Wireless Access & Fiber Network Extension
- Cellular, WiMAX, and WISP Backhaul
- Enterprise and Private Networks
- Government, Defense, and Public Safety Networks
- Critical Infrastructure Communications Redundancy
- Disaster Recovery

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Technical Specifications

SkyLink AON ST

Features	
Data Throughput Rate	Up to 2.75Gbps per radio using two sub-carriers without compression or 1.5Gbps per radio using a single carrier
Configurations	1+0, 2+0 ACAP/ACCP, 1+1 HSB, 1+0 SD, 1+0 FD
Frequency Range	6-42GHz
Modulation	QPSK to 4096QAM
Air Interface	Full Duplex FDD
Channel Bandwidths per Carrier	10-160MHz ANSI and 7-112MHz ETSI
Diplexer	Customer replaceable
Tx Power (diplexer output)	Up to 27dBm with Built-In Advanced Digital Pre-Distortion
Interfaces	
Ethernet	1 x 1/2.5G RJ45 (POE), 2 x 1/2.5G SFP or 1 x 1/2.5G RJ45 (POE), 2 x 1/10G SFP+
Console	<ul style="list-style-type: none"> • USB serial port • WiFi for no-touch maintenance (optional)
Ethernet	
Max Packet Size	16000 bytes (Jumbo Frame)
Ethernet Timing and Synchronization	SyncE (G.8261), IEEE 1588V2 Transparent, Boundary, and Ordinary Clock support
Ethernet Features	<ul style="list-style-type: none"> • IPv6, IPv4 • L2- 16K MAC Addresses • 4096 VLAN (IEEE 802.1Q) with 1024 VLANs supported concurrently • VLAN tag translation on ingress or egress • Provider Bridging (IEEE 802.1ad, Q-in-Q) • RSTP / MSTP
Ethernet Compression	Interface Gap and Pre-Amble Suppression, Header Compression, Payload Compression
QoS Packet Classification	<ul style="list-style-type: none"> • DiffServ (RFC 2475) • VLAN PRI (IEEE 802.1Q-2003) • MAC PRI • Port Priority • Port Number, Protocol • MPLS PRI
QoS Packet Scheduling	<ul style="list-style-type: none"> • Port – Weighted Round Robin (WRR) • Logic Port (cluster) – Weighted Fair Queuing (WFQ) or Strict Priority (SP) • Priority Queue – WFQ, Strict Priority • 8 priority queues per logical port/queue
QoS Congestion Avoidance	Two-rate / three color marking, WRED, Policing, Flow-Control (PAUSE packets, back-pressure)
QoS Traffic Shaping	Configurable
Ethernet Protection	ITU-T G.8032 Ring
Encryption	AES256
OAM	ITU-T Y.1731, IEEE 802.1ag, 802.3ah, Radius, Syslog
MEF Compliance	MEF9 Services Test Suite, MEF14 Traffic Management Test Suite
Mechanical and Environmental	
Input Power Requirements	-48 VDC direct DC or PoE (-36 VDC to -60 VDC range)
Weight	6.1kg (13.4lbs)
Size	22.6 cm x 22.1 cm x 11.6 cm (8.92" x 8.72" x 4.55")
Operating Temperature	-33 °C to +55 °C (-27 °F to +131 °F) per ETS 300 019-2-4 Class 4M5
Humidity	5%-100%
Weather	IP67 / All Weather
Safety	IEC 60950-1, -22
Regulatory	US FCC Part 101, FCC Part 15B; ETSI EN 302 217