E-Link Eagle

Gigabit Wireless Ethernet Link

- 70/80 GHz system with spectrum efficient 64QAM modulation
- E-Band's exclusive MMIC technology
- Frequency agile
- Integrated carrier-grade L2 switch

Spectrum Efficient 64QAM Links

The E-Link Eagle is an all outdoor, IP, millimeterwave radio operating in the 71-86 GHz frequency band using only 250 MHz of bandwidth conserving valuable spectrum resources. The radio is available in both long and extended long range configurations and includes a carrier grade L2 Ethernet switch.

The E-Link Eagle provides the operator a "future-proof" hardware solution for the exponentially increasing data backhaul requirements faced by network operators. The E-Link Eagle can initially be configured for 1000Mbps operation and expanded to either 2000 or 3000Mbps by a simple license upgrade reducing costly network equipment replacement.

Applications

- 4G/LTE/WiMAX backhaul for access and aggregation
- "Last Mile" fiber extension for enterprises
- Temporary high capacity links for disaster recovery
- Local Area Network (LAN) Extensions

Features & Performance

- Spectrum Efficient using 64QAM in 250 MHz wide channel
- Full Duplex providing 1000Mbps upstream and downstream
- Hitless Adaptive Rate and Modulation
- Adaptive Modulation QPSK/8PSK/16/32/64QAM
- Link distances up to 5 miles/8 km at 99.995% availability
- Internal Carrier Grade L2 switch
- SyncE and IEEE1588v2 compliant
- Power over Ethernet

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Connecting a Digital World®

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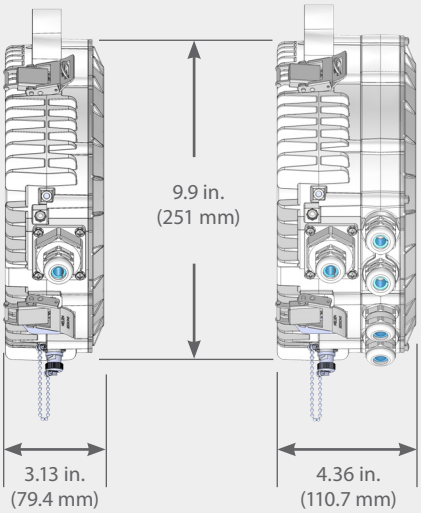
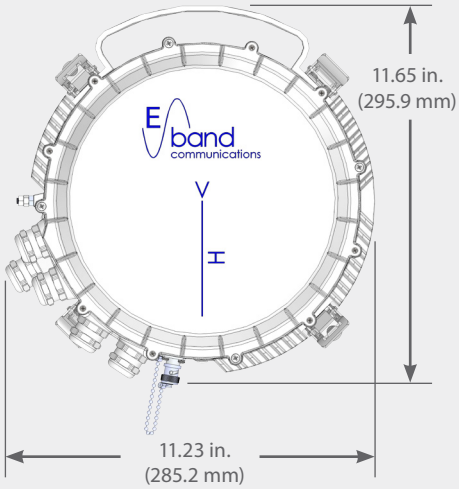
E-Link Eagle Technical Specifications

Dimensions

Eagle SP Eagle EP



Eagle EP



Data Throughput Rate	83 Mbps to 3000 Mbps		
Frequency Range	71-76 GHz / 81-86 GHz		
Air Interface	FDD		
RF Channel Tuning	Frequency Agile in 250 MHz steps		
Channel Bandwidth	250 MHz @ 64QAM modulation		
Emission Designator	250M00G1D @ 64QAM		
ATPC Range	20 dB		
Management	In-Band		
Latency	<50µs		
Modulation	QPSK/8PSK/32QAM/64QAM Hitless Adaptive Code and Modulation		
Channel Bandwidths Available	250 / 500* / 750* MHz		
System Performance	**Modulation**	**Throughput**	**System Gain**
@ 250 MHz Channel BW	64QAM	1000 Mbps	74 dB
	32QAM	835 Mbps	78 dB
	16QAM	667 Mbps	83 dB
	8PSK	500 Mbps	87 dB
	QPSK	334 Mbps	93dB
	QPSK	166 / 83 Mbps	96 / 103 dB
Ethernet Interfaces			
Standard	Single GE, Cu		
Enhanced	7xGE ports, including 2xSFP ports		
Ethernet			
Max Packet Size	9600 bytes (Jumbo Frame Compatible)		
Ethernet Timing and Synchronization	SyncE, IEEE 1588v2		
Features	• IPv6 • L2- 8192 MAC Address • 4096 VLAN (IEEE 802.1Q) • VLAN tag translation on ingress or egress • Provider Bridging (IEEE 802.1ad, Q-in-Q) • RSTP / MSTP		
Ethernet QoS			
Classification	• 8 QoS queues per port with SP or DWRR scheduling • TCAM classification and remarking • DSCP translation, ingress and egress • Per Queues and Per Port policing and shaping • Full Duplex Flow control		
Protection	ITU-T G.8032 Ring		
OAM	ITU-T Y.1731		
Mechanical and Environmental			
Input Power Requirements	-48VDC, PoE, @ 55W		
Size	SP: 286 mm x 295 mm x 79.4 mm / 11.2 in x 11.6 in x 3.1 in EP: 286 mm x 295 mm x 110.7 mm / 11.2 in x 11.6 in x 4.4 in		
Weight	SP: 3.9 kg / 8.6 lbs; EP: 4.2 kg / 9.2 lbs		
Temperature Range	-45°C to +60°C (-49° to +140° F)		
Weather	IP67 / All Weather		
Safety	IEC 60950-1, -22		
Regulatory RF Certification	US FCC Part 101, FCC Part 15B; CE - ETSI EN 302 217-3		

РАДИО-2
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