

# E-Link 2500 Solution

## 4G Evolution™ Series

- Industry's first commercially available 70/80 GHz backhaul solution capable of up to 2.5 Gbps
- OMT coupler connects two radios to one antenna
- Flexible 2+0 and 1+1 configurations
- Available with long range (1' / 0.3m) or extended long range (2' / 0.6m) antennas



### Industry leading technology

The E-Link 2500 takes millimeter-wave performance to a new level. An advanced OMT coupler connects two E-Link 1000 Series radios to one antenna for up to 2.5 Gbps capability. Available with either a long range or extended long range antenna, this solution can be deployed in 2+0 and 1+1 configurations. With flexibility and added performance, the 2500 is the perfect future-proof backhaul for networks with high subscriber/data usage growth.

### Applications

LTE/4G/WiMAX backhaul

Mobile backhaul

Remote Storage Access

Disaster Recovery

Redundant Access/Network Diversity

Local Area Network Extension

Metropolitan Area Networks (MAN)

Homeland Security

### Features & performance

- Innovative OMT Coupler connects two radios to one antenna, with each radio at a different polarization (horizontal and vertical)
- Increase the capacity of your existing E-Band network, while protecting your investment (backward compatible with E-Band 1000 Series radios)
- 2+0 and 1+1 capabilities
- Full duplex wire speed Gigabit Ethernet
- Highly secure transmission (FIPS 140-2 gov. security capable)
- Low Latency for multimedia applications (<5μs)
- Simple all outdoor installation & maintenance using PC
- Supports multiple network architectures including
  - Point-to-Point, Mesh/Ring, Repeater
- Transparent Support of all Ethernet clock sync techniques
  - Sync-E, IEEE 1588v2, Adaptive Clock recovery



E-Band Communications is the #1/fastest growing manufacturer of 60, 70 & 80 GHz point-to-point backhaul solutions in the world, with sales more than quadrupling in 2010.

**E**band  
communications

Connecting a digital world.™

### Specifications

Frequency Range	71-86 GHz
Antenna Port to "V" or "H" Radio Port	Maximum - 1dB max Typical - 0.8 dB
Port-to-Port Isolation	> 30 dB
Return Loss (each port)	> 20 dB
Polarization Adjustment Range	±5°
Weight (Coupler only)	4.7 lbs / 2.1 kg

### Sample Link Calculation for 1+1 and 2+0 Configurations

E-Link System Gain	189 dB
Free Space Loss (2.1 mi/3.2 km)	-141 dB
Coupler Loss (Tx+Rx)	2 dB
Rain Rate (ITU-R Region E: Denver, Stockholm, Moscow, Beijing)	22 mm/hr (0.86 in/hr)
Link Availability (Vertical)	99.996%
Link Availability (Horizontal)	99.995%



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