



Multi-Gigabit Wireless Solutions

E-Band Communications Corporation provides ultra-high capacity wireless communications systems for the 70/80 GHz e-band spectrum. Our *E-Link* family of products delivers gigabit per second and higher full duplex wireless bandwidth over distances of several miles. We use leading-edge RF MMIC technology, provided through an exclusive joint-development agreement with Northrop Grumman, to provide best-in-class link performance. **The *E-Link* family of products provides 10x improvements in transmission data rate at the same cost as competing lower capacity point-to-point microwave radios.**

E-Link



- multi-gigabit
- ultra-fast
- secure
- cost-efficient
- quick deployment

Applications

E-Band Communications' multi-gigabit capacity products address the requirements of enterprises, carriers, cable, government, and internet service providers building cost-efficient wireless multi-gigabit IP networks.

Enterprise



- High speed enterprise IP networks
- LAN extensions
- Secure campus and off-site location connectivity
- Remote data center storage access networks
- Real-time high speed data transfers and backups

Education



- Campus and remote building connectivity
- High speed large file transfers and backups
- High performance WiFi network backhaul
- Secure security camera connectivity

Hospital



- Hospital building connectivity
- Secure off-site medical record and image access
- Real time HD imaging applications
- High speed data storage and backups

Service Providers



- Fiber backbone extensions
- Broadband telecom, internet and cable services 3G / 4G / WiMAX backhaul
- Metropolitan area fiber alternative access
- Distributed Antenna systems or Remote Radio Heads fronthaul

Gov't/Military



- LPD/LPI homeland security connectivity
- Backhaul of public safety and municipal wireless networks
- Real-time high definition military surveillance and control
- Hostile environment temporary connectivity

Disaster Recovery 911

- Redundant fiber overlays
- Network diversity / alternative access
- Redeployable connections

Features and Benefits

Fastest data speed and performance	1.25 Gbps full duplex Gigabit Ethernet transport gives significant capacity increase over copper wireline and lower frequency microwave alternatives
Cost-effective high data rate solution	Wireless capex is a fraction of the cost of trenching fiber Rapid deployment avoids construction and fiber-leasing delays Ownership of infrastructure eliminates recurring leased-line charges.
Interference-free secure data communications	Licensed frequency band protection Narrow transmission beams give interference immunity Secure network management
Scalable future-proof connectivity	Built-in capacity for future applications Radio supports multiple network architectures including point-to-point, repeater and mesh
Rapid deployment	Single all-outdoor architecture, simple to install and maintain using PC or PDA Simple and fast "light" radio licensing scheme
Long distance wireless transmissions	High power transmitter and advanced receiver techniques yield typical link distances in excess of 2 miles (3 km) for 99.99% weather availability



Key Specifications

E-Link 1000 G1

System Parameters	
Frequency band	71-76 GHz / 81-86 GHz FDD
Modulation	DBPSK
Frequency source	Synthesized
Configurations	Non-protected, hot standby, repeater, mesh
Latency	<5 μ s
Forward error correction	Reed Solomon
Data	
Data rate	1,250 Mbps full duplex (IEEE 802.3z Gigabit Ethernet)
Interface	Fiber, LC connector or Copper, RJ-45
Optional data rates	768 Mbps, 1536 Mbps (OBSAI); 1228.8 Mbps (CPRI)
Physical	
Configuration	All weather, all outdoor unit
Weight	11.5 lbs (5.2 kg)
Dimensions	10.5 in (26.7 cm) diameter, 5.6 in (14.2 cm) height
Antenna	1 ft (0.3 m) / 44 dBi gain or 2 ft (0.6 m) / 51 dBi gain Fine adjust pole mount fitting 2.5 to 4.5 in. OD
Environmental	
Input voltage	Input voltage -48 VDC; 120 VAC 60 Hz
Temperature range	-33 °C to +55 °C (-27 °F to +131 °F)
Management	
Craft Interface	Embedded web based (HTML) server
EMS	SNMP v1
Regulatory	
US	FCC Part 101
Europe	TS 102 524, CE-Mark