

E-Link 1000Q

4G Evolution™ Series

- 70/80 GHz Long & Extended Long Range links with spectrum efficient QPSK modulation
- E-Band's exclusive MMIC technology
- Frequency agile
- Layer 1 GigE throughput



Spectrum efficient QPSK links

The E-Link 1000Q, available with either a Long Range or Extended Long Range antenna, includes QPSK modulation for enhanced spectrum efficiency. The 1000Q offers the highest 70/80 GHz performance available, due to E-Band's exclusive Microwave Monolithic Integrated Circuit (MMIC) technology. This industry leading technology provides higher throughput, longer distances, superior reliability & faster ROI.

Applications

- LTE/4G/WiMAX backhaul
- Remote Storage Access
- Disaster Recovery
- Redundant Access/Network Diversity
- Mobile backhaul
- Local Area Network Extension
- Metropolitan Area Networks (MAN)
- Homeland Security

Features & performance

- Spectrum efficient QPSK modulation
- Full duplex wire speed Gigabit Ethernet
- Field changeable GigE interface (patent pending)
- Rapid Field Replaceable unit with direct slip-fit antenna
- Frequency agile
- Highest available E-Band Link Budget @ 192dB
- Rapid Port Shutdown
- Typical link distances exceed 3 mi / 5 km for 99.99% availability
- Low Latency for multimedia applications (<5µs)
- Lightweight, small footprint, all outdoor design
- Transparently handles multi-media jumbo packets
- Transparent to Ethernet timing protocols (SyncE, IEEE 1588v2)
- Supports multiple network architectures including
 - Point-to-Point, Mesh/Ring, Repeater



Connecting a digital world.™



System Parameters

Frequency Band	71-76 GHz / 81-86 GHz
RF Interface	FDD / frequency agile (tunable channels)
Modulation	QPSK
Transmit Power Output	+22 dBm
Channel Bandwidth	1000 MHz
ATPC Range	0-30 dB
Low Signal Receiver Threshold (BER @ 1x10 ⁻⁶)	-66 dBm
Configurations	Non-Protected, Hot Standby, Repeater, Mesh
Latency	<5µs
Forward Error Correction	Reed Solomon

Tributary

Data Rate	1.25 Gbps full duplex (Ethernet)
Standards Compliance	IEEE 802.3z, 802.3ab
Interface Options	1000BaseT - Copper RJ-45 (100m) 1000BaseSX - MM Fiber LC connector (550m) 1000BaseLX - SM Fiber LC connector (5000m)

Electrical / Environmental

Input Voltage - Power	-48 VDC / PoE @ 44 W
Temperature Range	-49°F to +140°F / -45°C to +60°C
Altitude	15000 ft / 4500 m
Humidity	All Weather Outdoor Unit

Management

Physical Interface	10/100BaseTX - Copper RJ-45 (100m)
Craft Interface	Embedded web based server
EMS	SNMPv1

Physical

Weight	8.5 lbs (3.9 kg)
Dimensions	Diameter 9.99 in (25.4 cm) x Height 3.12 in (7.9 cm)
Antenna	1 ft (0.3 m) / 45 dBi gain or 2 ft (0.6 m) / 52 dBi gain Fine adjust pole mount fitting 2.3 - 4.5 in. OD masts

Regulatory

US	FCC 1.1310 RF MPE limits, FCC Part 101 IEC 60950-1
Europe	EN 302 217-3

