TrangoLINK-10™
5.8 / 5.3 GHz

Dual-Band Outdoor Wireless Ethernet Bridge

The TrangoLINK-10™ point-to-point wireless Ethernet bridge offers long range and dual band flexibility in an easy to install, ruggedized package. Delivering up to 10 Mbps, the TrangoLINK-10 can be deployed as a backhaul system or as a wireless alternative to leased line and multiple T1 circuits.

Product Highlights

- **FLEXIBILITY**

  The TrangoLINK-10 provides channels of operation in both the license-exempt 5.8 GHz ISM and the 5.3 GHz U-NII bands. Dual polarized antennas, combined with 11 non-overlapping channels provide 22 channel/polarity combinations for maximum frequency agility. Antenna polarity and channel selections are remotely switchable, and selectable receiver threshold provides additional interference mitigation.

- **LONG RANGE**

  The TrangoLINK-10 offers a range of 10 miles using internal antennas and up to 20 or 40 miles using optional external antennas on the TrangoLINK-10-EXT.

- **SPEED**

  The TrangoLINK-10 efficiently delivers 10 Mbps of real throughput for high-bandwidth backhaul applications.

- **MANAGEABILITY**

  The TrangoLINK-10 provides users with powerful remote management tools via telnet and web-browser interfaces as well as SNMP. TrangoLINK-10's SmartSEEK™ redundancy feature provides continuous search and reassociation functionality.

- **SECURITY**

  The TrangoLINK-10 utilizes direct sequence spread spectrum technology, providing excellent range and immunity to interference. MAC authentication, coupled with transmission scrambling provides a high degree of over-the-air security.

- **DURABILITY, EASE OF INSTALLATION**

  The TrangoLINK-10 is designed for harsh outdoor environments and operates from -40° to +140° F. Additionally, the system's Power-over-Ethernet capability ensures easy installation and quick deployment.

- **AFFORDABILITY**

  The TrangoLINK-10 offers carrier-class features and performance at an attractive price.

TrangoLINK-10™ Specifications

KIT INCLUDES

- 1 P5830S-M Master Radio
- 1 P5830S-R Remote Radio
- 4 Mounting U-Brackets
- 2 24VDC Power Supplies
- 2 PoE J-Boxes
- 1 Serial Programming Cable
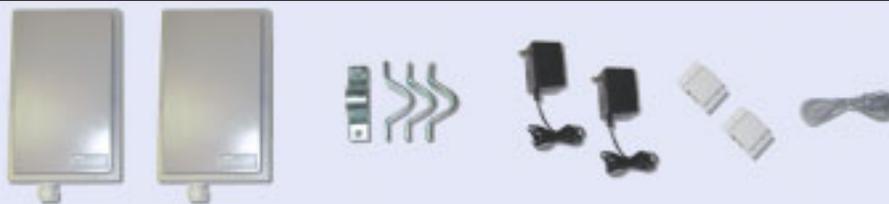
RADIO PARAMETERS

Frequency of Operation	High Band (ISM Band): 5725 MHz to 5850 MHz Low Band (U-NII Band): 5250 MHz to 5350 MHz		
Channels	High Band (ISM Band): 6 non-overlapping channels Low Band (U-NII Band): 5 non-overlapping channels		
Antenna Type	Internal Antenna	AD5830-23-DP (15" Panel)	SPD3-5.2T (36" Dish)*
Antenna Gain	18/17 dBi ISM/U-NII band	24 dBi	31 dBi
Range (5.8 GHz ISM Band)	10 miles	20 miles	40 miles**
Range (5.3 GHz U-NII Band)	3 miles	5 miles	10 miles
Beamwidth (azimuth/elevation)	18°/18°	9°/9°	4°/4°
Antenna Polarity	Horizontal/vertical (software switchable)		

DATA AND OPERATIONAL PARAMETERS

Modulation Format	Direct Sequence Spread Spectrum (DSSS) with RAKE
Certification/Compliance	FCC Part 15.247
Receiver Sensitivity	(1E10-6 BER) 1600 byte packets: -83 dBm, 64 byte packets: -87 dBm
User Data Throughout	Up to 10 Mbps
Latency	<2mSec (10 miles or less)
Network Protocols	All IEEE 802.3/802.3u compliant protocols
Configuration and Management	Telnet, SNMP, TFTP, HTTP, Serial
Up/Downstream Throughput	Dynamic, automatically adjusts to suit demand with upstream and downstream MIR
Ethernet Packet Size	Up to 1600 byte long packets (supports VLAN/VPN pass through)

PHYSICAL INTERFACES

Ethernet (via shielded RJ45)	10/100 BaseT, auto-sense, auto-negotiate
Serial (via RJ11)	9600 baud 8-N-1

POWER PARAMETERS

Power Method	Power-over-Ethernet (PoE) via DC voltage injected at PoE J-box
Voltage Input Limits into Radio	10.5 VDC – 24 VDC
Standard Power Supply	120 VAC to 24 VDC adapter
PoE Cat-5 Max Cable Length	300 feet on 24 AWG STP Cat-5 cable
Power	13.4 W

PHYSICAL AND ENVIRONMENTAL

Radio Enclosure	All-weather, powder coated, cast aluminum with polycarbonate radome
Temperature Range	-40° to 60° C (-40° to 140° F)
NEMA Rating	NEMA 4
Radio Dimensions	12.5" x 8" x 2.75"
Radio Weight	4 lbs.
Shipping Weight	20 lbs. (without external antennas)
User Interfaces	RJ45 (shielded) and RJ11

* Available from Radiowaves (www.radiowavesinc.com) and Radiowaves distributors
** User throughput 7.2Mbps max at 40 miles
Specifications are typical and subject to change without notice.