



# 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. Polarity and channel selections are remotely switchable.

- **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.

- **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
- External Antennas (optional for TrangoLINK-10-EXT only)



## RADIO PARAMETERS

|                               |   |                         |                       |
|-------------------------------|---|-------------------------|-----------------------|
| Frequency of Operation        | High Band (ISM Band): 5725 MHz to 5850 MHz<br>Low Band (U-NII Band): 5250 MHz to 5350 MHz             |                         |                       |
| Channels                      | High Band (ISM Band): 6 non-overlapping channels<br>Low Band (U-NII Band): 5 non-overlapping channels |                         |                       |
| Antenna Type                  | Internal Antenna  | AD5830-23-D (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 Throughput         | 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](http://www.radiowavesinc.com)) and Radiowaves distributors

\*\* User throughput 7.2Mbps max at 40 miles

Specifications are typical and subject to change without notice.