

# MicroScan: Wireless Data Links with Tel-Link Radio Modems

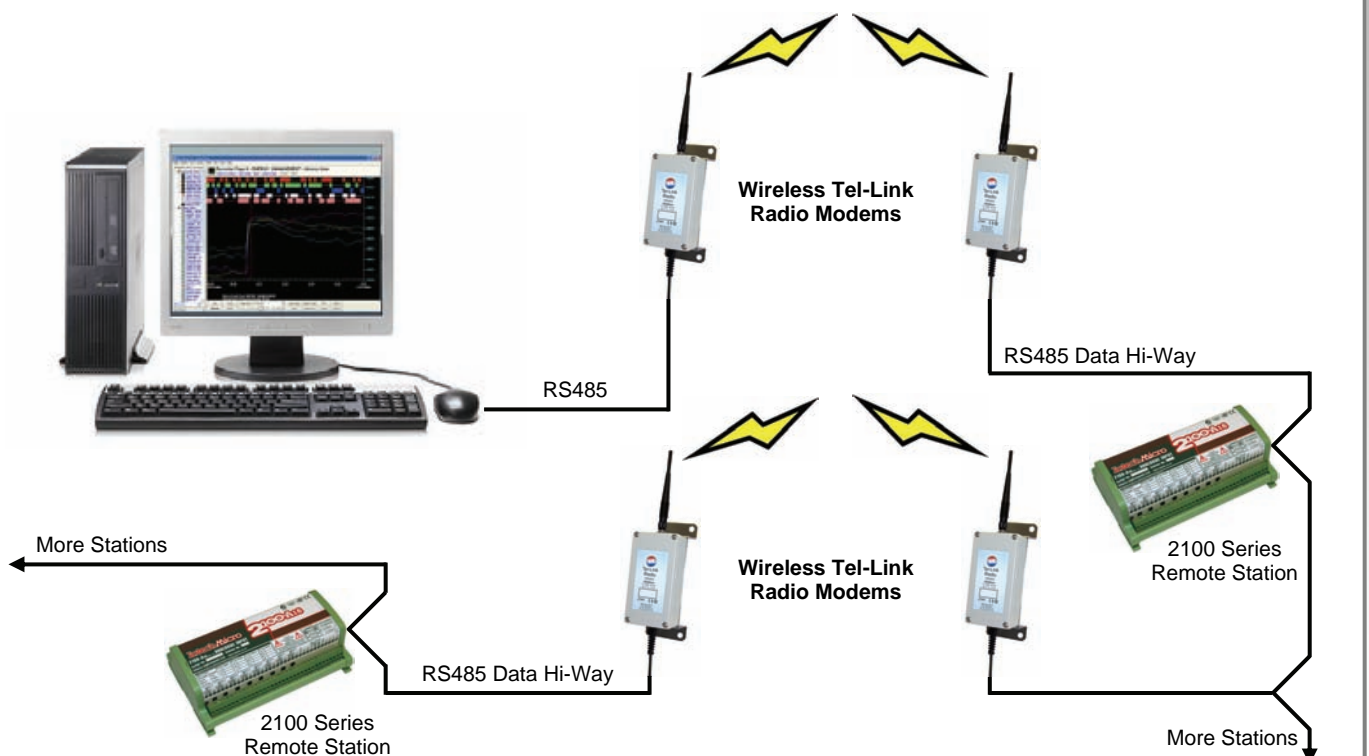
The **Tel-Link Radio Modems** are used for long-range, high speed wireless communications. Powered by FCC and ETSI approved **MaxStream** radio modules with frequency hopping spread spectrum capability, the Tel-Link Radio Modems operate in the 2.4GHz license-free ISM band (Industrial, Scientific and Medical bands). Up to 15km range can be achieved with a High Gain Antenna (Line of Sight).

## Features:

- ◆ MicroScan can now collect data from areas previously uneconomic.
- ◆ True peer-to-peer networking (no Master radio needed).
- ◆ Networking features allow up to 7 independent pairs (networks) to operate in close proximity.
- ◆ Supports all MicroScan Interface baud rates.
- ◆ 2.4GHz license-free ISM band (Industrial, Scientific and Medical).
- ◆ 19.2kbps over-the air data rates.
- ◆ Up to 65,000 network addresses available.
- ◆ Signal strength reporting for link quality monitoring and debugging.
- ◆ Outdoor units are supplied with a stainless steel mounting bracket and U bolts.
- ◆ Certified for use in New Zealand, Australia, USA, Canada and Europe.



[www.intech.co.nz/tel-link](http://www.intech.co.nz/tel-link)



# Tel-Link Radio Specification

**General:**

**Frequency**  
2.4GHz ISM Band 2.4000 - 2.4835GHz

**Spread Spectrum Type**  
Frequency Hopping  
Direct FM

**Network Topology**  
Point to MultiPoint  
Point to Point

**Multi-Drop Transparent Channel Capacity**  
Share 25 Frequencies 7 Hop Sequences

**I/O Data Rate**  
1200 to 57600 Baud

**Input Power Supply**  
12Vdc, 300mA

**Supplied Antenna:**  
**Impedance** 50 ohms unbalanced  
**Outdoor Connector** Reverse Polarity TNC

**Certification:**

**FCC Part 15.247**  
2.4GHz ISM Band OUR-24XSTREAM

**NZ/Australia**  
2.4GHz ISM Band EN 300 328

**Performance**

**Serial Data Throughput** 19.2 Baud  
**RF Baud Rate** 20,000 Baud  
**Transmit Power Output** 50mW  
**Receiver Sensitivity** -102dBm

**Order Codes**

**Tel-Link Radio RS485 Outdoor**  
*supplied with 3dBi whip antenna.*  
- Order Code **TL-4850-24**

**2.4GHz 8dbi Omni Directional Monopole Antenna**  
*supplied with 3m low loss coax cable.*  
- Order Code **TL-OD24-8**

**2.4GHz 15dBi Directional Parabolic Grid Antenna**  
*supplied with 3m low loss coax cable.*  
- Order Code **TL-PG24-15**

**PSW Power Supply**  
*If your require a 12Vdc, 300mA power supply.*  
- Order Code **PSW-2-12-H**

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**Performance under normal conditions:**

**Outdoor Urban**  
With Supplied Antenna Up to 180m

**Performance under ideal conditions:**

**Outdoor Line of Sight**  
With TL-OD24-8 Up to 5km  
With TL-PG24-15 Up to 15km

Note \* ideal conditions = on 2 meter pole with line of sight, and no surrounding trees and buildings; using supplied coax cable only.

Intech Wireless Communication Types							
MODEL	BENEFITS					COMMUNICATIONS	
	EASY EXPANSION	LOW COST	REDUNDANCY	LONG RANGE	HIGH SPEED	MICROSCAN	MODBUS RTU
ZigBee Z-2400 Series	✓	✓	✓			✓	
Tel-Link Radio Modems				✓	✓	✓	✓

