

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

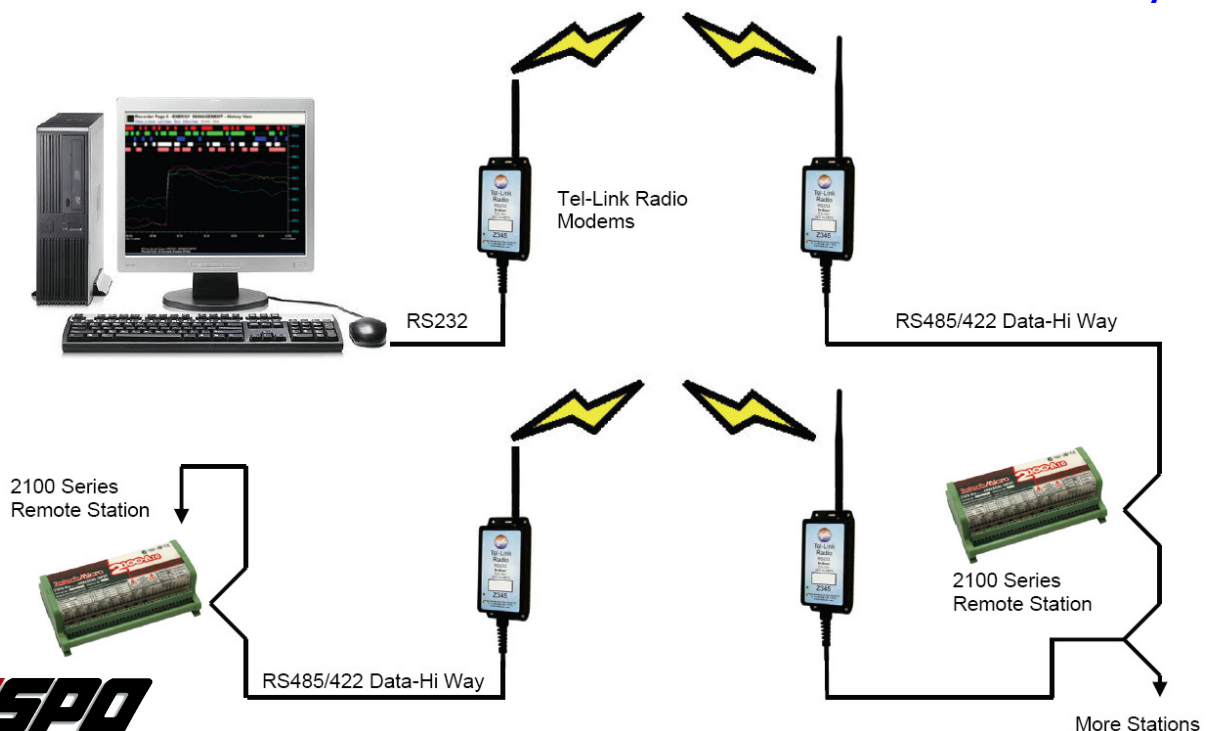
The **Tel-Link Radio Modems** are powered by FCC and ETSI approved **MaxStream** radio modules with frequency hopping spread spectrum capability. Radio Modems are available for either the 2.4GHz or 900MHz license-free ISM bands (Industrial, Scientific and Medical bands). Up to 30km Range (Line of Sight) can be achieved on 900MHz with a High Gain Antenna. There is a full range of RS232, RS485, RS422 and USB interface options available allowing incredible flexibility.

## 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.
- ◆ 900MHz license-free ISM bands (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.
- ◆ 900MHz modules certified for use in USA, Canada, New Zealand and Australia.



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



# Tel-Link Radio Specification

**General:**

<b>Frequency</b>	900MHz ISM Band	902-928 MHz
<b>Spread Spectrum Type</b>		Frequency Hopping Direct FM
<b>Network Topology</b>		Point to MultiPoint Point to Point
<b>Multi-Drop Transparent Channel Capacity</b>		7 Hop Sequences
<b>Share 25 Frequencies</b>		
<b>I/O Data Rate</b>		1200 to 57600 Baud
<b>Antenna:</b>		
<b>Connector Indoor</b>		Reverse Polarity SMA
<b>Connector Outdoor</b>		Reverse Polarity TNC
<b>Impedance</b>		50 ohms unbalanced

**Certification:**

<b>FCC Part 15.247</b>	900MHz ISM Band	OUR9XSTREAM
<b>NZ/Australia</b>	900MHz ISM Band 2.4GHz ISM Band	FCC Part 15.247 EN 300 328

**Performance under normal conditions\*:**

<b>Indoor Urban</b>	900MHz ISM Band	Up to 450m
<b>Outdoor Line of Sight with Dipole</b>	900MHz ISM Band	Up to 3km
<b>with High Gain Antenna</b>	900MHz ISM Band	Up to 6km

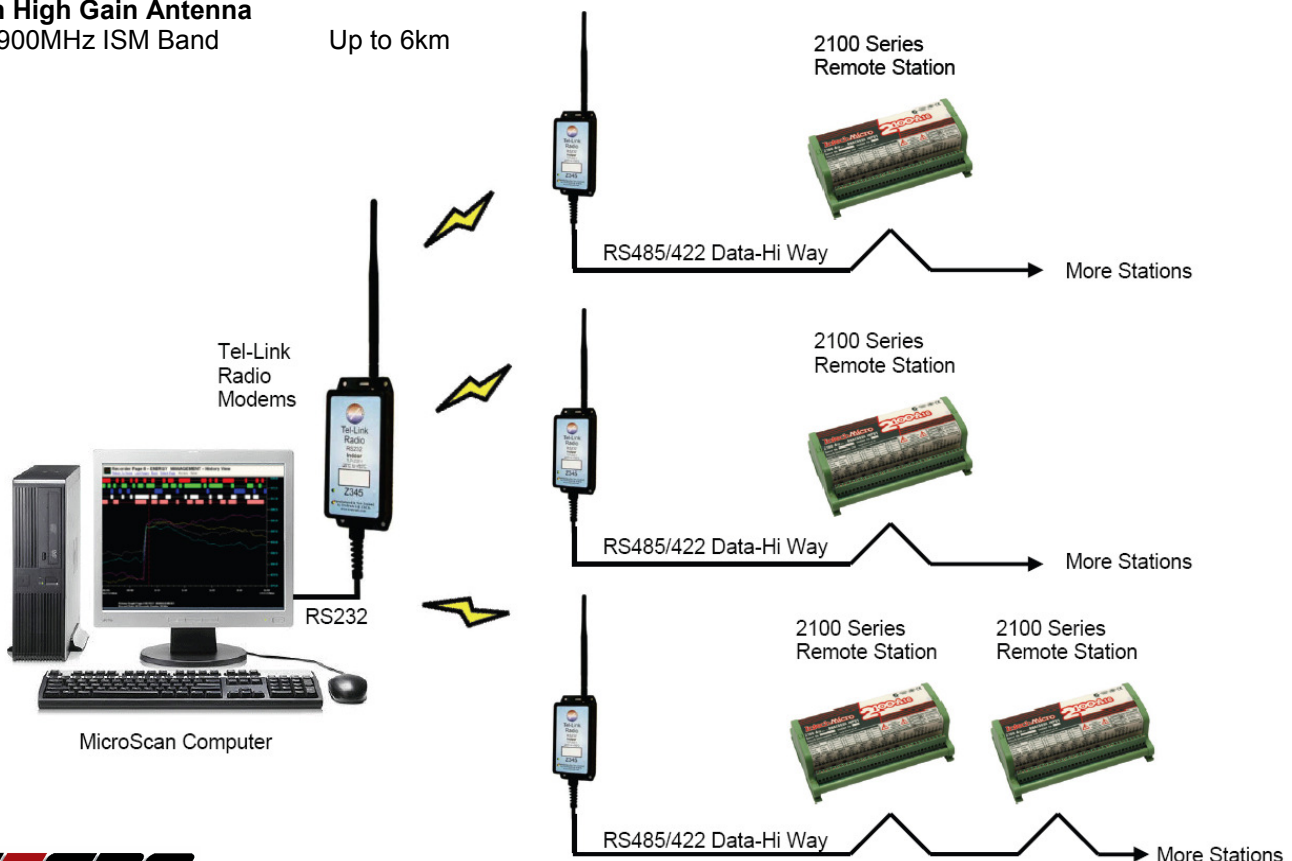
**Order Codes**

- Tel-Link Radio RS232 Outdoor**  
- Order Code TL-232O-9 for 900MHz
- Tel-Link Radio RS232 Indoor**  
- Order Code TL-232I-9 for 900MHz
- Tel-Link Radio RS485 Outdoor**  
- Order Code TL-485-O-9 for 900MHz
- Tel-Link Radio RS485/422 Indoor**  
- Order Code TL-485-I-9 for 900MHz

Note \* Normal conditions = on 3 meter pole with line of sight and no surrounding trees and buildings.

<b>Serial Data Throughput</b>	19.2 Baud
<b>RF Baud Rate</b>	20,000 Baud
<b>Transmit Power Output</b>	
900MHz ISM Band	140mW
<b>Receiver Sensitivity</b>	
900MHz ISM Band	-107dBm

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