The SpectraNT 920 is a plug and play, high performance wireless Ethernet bridge for attaching remote Ethernet devices to LAN networks. The SpectraNT 920 is the ideal solution for general Ethernet applications that require performance of 276kbps up to 60 miles.



## Applications:

- Homeland Security, Video Surveillance
- Industrial Automation, Wireless Networking
- Wireless Telemetry
- Remote Monitoring and Control
- Wireless Ethernet PLC's
- Intelligent Traffic Systems
- Voice Over IP (VoIP)

Proprietary FH spread spectrum radio technology provides superior performance in the most demanding RF and physical environments

The fastest, longest distance industrial wireless modem uses intelligent transparent MAC filtering and MAC switching on the RF channel. Low latency packets allow for seamless integration of any Ethernet device with a LAN network. Unlike our competitors' products, the SpectraNT 920 does not suffer half rate degradation over distance!

## Features of the SpectraNT 920

- Extremely robust long range (up to 60 miles), intelligent frequency-hopping radio
- Excellent interference and noise rejection allowing reliable communication in high power cellular and paging environments
- Superior sensitivity and throughput
- License-free operation in the 902-928 MHz ISM bands, 1W (30 dBm in 1dBm steps)
- Custom frequencies and up to 2W output power (Military Sales and Export Only)
- Industrial grade performance and temperature specification -40°C to +85°C
- Point-to-Point, Point-to-Multipoint, Peer-to-Peer, Unlimited Repeater and Remote Diagnostics Modes
- Internal 32bit CRC and auto re-transmission ensures reliable data link
- Secure, Simple, Plug and Play and IEEE 802.3 compliant
- Online diagnostics and firmware upgrade capability

| Specifica                                    | tions  | SpectraNT 9 |  |
|--|--|-------------|--|
| Frequency                                    | 902 - 928 MHz, Other frequencies are also available  |             |  |
| Spreading Method                             | Frequency Hopping  |             |  |
| Band Segments                                | User selectable  |             |  |
| Hopping Patterns                             | Based on 32 bit network address  |             |  |
| Hopping Channels                             | minimum 50   |             |  |
| Error Detection                              | 32bit CRC, ARQ   |             |  |
| Data Encryption                              | 256 bit encryption key   |             |  |
| Range  | +60 miles (line of sight)  |             |  |
| Sensitivity                                  | -108 dBm   |             |  |
| Output Power                                 | 20 to 30dBm, 1dBm step<br>(2W for military and export only)  |             |  |
| System Gain                                  | 140dB  |             |  |
| Ethernet                                     | 10 BaseT<br>IEEE 802.3   |             |  |
| Serial Port                                  | RS232: RxD, TxD, RTS, CTS,<br>DCD, DSR, DTR<br>Baudrate: 115.2kbps   |             |  |
| Operating Modes                              | Point-to-Point, Point-to-Multipoint, Store&Forward Repeater, Peer to Peer  |             |  |
| Diagnostics                                  | Forward & Reflected Power,<br>VSWR, Current, Battery voltage,<br>Temperature, RSSI, Real-time<br>event logging and remote diag-<br>nostics |             |  |
| Connectors Antenna Serial Port Ethernet Port | Reverse gender TNC<br>Female DB9<br>RJ-45  |             |  |
| Indicators<br>Radio<br>LAN                   | WANTX, WANRX,RSSI<br>LANTX, LANRX, LINK  |             |  |

| Power Supply                         | 9VDC to 30VDC                               |
|--------------------------------------|---|
| Current (12VDC)                      |   |
| Transmit<br>Receive<br>Idle<br>Sleep | 600 mA<br>95 mA<br>20 mA<br>1mA             |
| Environment                          | -40 °C to +85 °C<br>5-95% non-condensing    |
| Weight                               | Approx. 420 grams (0.92 lbs)                |
| Dimensions                           | 4.375" x 3.75" x 1.75"                      |
| Enclosure                            | Extruded aluminium                          |
| Mount                                | Panel mount                                 |
| Approvals                            | FCC Part 15.247 approved IC RSS210 approved |
|                                      |   |

| $\cap$ | r | ٨ | $\wedge$ | r | $\cap$ | n | 4 | _ | n | ۸ |
|--------|---|---|----------|---|--------|---|---|---|---|---|
| 0      |   | u | U        | I | U      | μ | U | U | Ш | ১ |
|        |   |   |          |   |        |   |   |   |   |   |

20

| Option 100    | DIN rail mount Kit                                |
|---------------|---|
| Option 200    | Class 1 Div 2 (for use in hazardous environments) |
|               |   |
|               |   |
|               |   |
|               |   |
|               |   |
|               |   |
| Specification | ns subject to change without notice.              |

## Contact Information

AIRLINX Communications, Inc.

Box 253

Greenville, NH 03048 E-mail: sales@airlinx.com Tel: (888) 224-6814

Fax: (603) 878-0530