

## 4 Appendix A – Technical Specifications

### GENERAL SPECIFICATIONS

Enclosure	Ruggedized extruded aluminum
Size	H: 56.6 mm x W: 74.4 mm x L: 165.1 mm
Weight	463g.
Operating Temperature	-40° C to +60° C
Connectors/Signals	
External Antenna	TNC Type Female(Data) SMA Type Female (GPS)
Data	RJ-45 (Ethernet 10/100BaseT), DB-9 (RS-232/422/485)
Power (@ 12 VDC)	<140 mA Receive; <550 mA Transmit
Input Voltage	6-30 VDC
Operating Modes	
System Configurations	Point-to-Point, Point-to-Multipoint
Unit Operating Modes	Access Point, Repeater, End Point

### WIRELESS TRANSCEIVER

Frequency Range	902 - 928 MHz
Transmitter	
Output Power	100 mW to 1 W (+30 dBm) ; Programmable
Range, Line of Sight	60+ Miles at 115 Kbps
Modulation	Spread Spectrum, GFSK
Occupied Bandwidth	230 KHz – Narrow Band
Spreading Method	Frequency Hopping / FCC DTS
Hopping Patterns	15 per band, 105 total, user selectable
Hopping Channels	112, user selectable - Narrow Band
Hopping Bands	7, user selectable
Receiver	@12 VDC
Sensitivity	-110 dBm at 10 <sup>-4</sup> BER at 115 Kbps -106 dBm at 10 <sup>-4</sup> BER at 154 Kbps
Data Transmission	
Error Detection	32 Bit CRC, retransmit on error
Data Encryption	128-bit AES, Substitution, dynamic key
Authentication	Central Authentication and RADIUS compliant
Data bit Rate	154 Kbps or 115 Kbps
Data Interface	10/100 BaseT; Serial: RS-232/422/485

**NOTE: Specifications subject to change without notice**