

TAC 920

Spread Spectrum Radio



Features

- Frequency Hopping
- Up to 57,600 bps Full Duplex
- Store & Forward Data Repeating
- 30 Selectable Hop Tables
- RS232 Standard Data Interface

Applications

- SCADA Systems
- AMR/Utility Data
- Oil and Gas Pipeline Monitoring
- Water/Waste Water Systems
- Distribution Automation

General Description

Alligator's 902-928 MHz ISM Band license free spread spectrum radio employs the latest wireless data transfer technology to provide the most reliable and secure performance. With over 30 user selectable hop tables and access to over 50 frequencies, the Model 920 overcomes the interference problem experienced by other spread spectrum radios. The radios can be rapidly configured for utilization in Point-to-Point or Broadcast Mode Point-to-Multipoint applications with the use of a terminal or a personal computer.

The radio can also be configured as a repeater via a Store and Forward data configuration and effectively extend the coverage of the radio network. To assure the integrity and security of the data, Error Detection techniques are inherent in the design of the radio's performance. The radio's standby or sleep mode help conserve power where power consumption would be a concern. Alligator's spread spectrum radios are technically sophisticated yet easy to setup and can be deployed quickly to save time and money.



Alligator
Communications, Inc.

TAC 920

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Specifications

RADIO

Frequency:	902 – 928 MHz
Radio Type:	Frequency Hopping Spread Spectrum
Radio Configuration: (user configurable)	Point-to-Point Point-to-Multipoint, (Broadcast Mode) Store & Forward Repeater
Channels:	50 non-interfering frequencies
Radio Address:	239 user selectable
Hop Patterns:	30 user selectable
Radio Range (line of sight):	Up to 35 kilometers with outdoor directional antennae
Error Detection and Correction:	Error Detection & Retransmit
Data Rate:	600 to 57.6 kbps full duplex
Hardware Interface:	RS232, (Optional RS485)
Bit Error Rate:	BER (1×10^{-6} at -102 dBm)
RF Power:	50 mW Low Power, to 970mW (+29.6 dBm), High Power
Data Format:	8/9 bits, 1 stop bit, Asynchronous Data
Certifications:	US FCC Part 15.247, Industry Canada RSS-210

GENERAL

Input Voltage:	12 Vdc
Current Consumption:	
Transmit Mode:	< 500 ma High Power, < 200 ma Low Power
Receive Mode:	< 100 ma
Doze Mode:	< 10 ma
Over Current Protection:	Internal Self Resetting Solid State Fuse
Connectors:	
Antenna:	Type "N" Female
Power:	¼ Turn Locking
Data:	DB-9 Female
Environment:	
Temperature:	-40°C to +60°C
Humidity:	0% to 95% (Non-condensing)
Dimensions:	1.4" (3.6cm)H x 5.25" (13.3 cm)W x 6.75" (17.2cm)L
Material:	Aluminum Alloy Enclosure
Weight:	1.75 pounds, 0.8 kg

Specifications are subject to change without notice.



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