



Model SS900FH Series Spread Spectrum Radios

Description

The GDI Frequency Hopper line of spread spectrum radios provides an off-the-shelf, ready-to-install solution to a number of long-range communication applications. The product was designed from the ground up with emphasis on performance, reliability, and flexibility and has been qualified under the most stringent temperature, shock, and vibration.

Interference Blocking

Through the use of a proprietary hardware and software technology, The GDI frequency hopping radios are virtually immune to most RF interference (cell phones, pagers, other wireless systems, etc.).

Fast Synchronization

The GDI frequency hopping radios are able to synchronize with each other in less than 35 milliseconds. The GDI frequency hopping radios are inherently peer-to-peer instead of Master/Slave. This means that the radios communicate with NO configuration and support very flexible networking topologies. In the default mode of operation, the radios synchronize the transmitter and receiver before each communication. Re-synchronization with each transmission allows the system to recover quickly from interference. A radio can communicate immediately after power up without waiting for any synchronization. Also, there is no need to stay synchronized during sleep or low power modes allowing the radio to have power down modes as low as 1.6 milliamps. Configurable low latency operating modes reduce the synchronization time as little as 8 ms.

Network Configurations

The GDI products can be set up for a wide variety of network configurations. These configurations include point-to-point, multi-point-to-point, "star" networks, and point-to-multipoint links.

FEATURES

- Multiple Protocols
- No user license required, 900 MHz
- Multiple network configurations
- Software configurable with built-in link diagnostics
- US FCC and Canada IC certified
- Transparent operation supports existing software and systems
- Low Power Modes
- XON / XOFF or hardware flow control
- Support for multiple data formats (7/8 bits, Even/Odd/No Parity)
- Signal Strength reporting for link quality monitoring & debugging
- Simple configuration using software & standard AT commands
- Retries & acknowledgements for guaranteed packet delivery
- 256-bit AES Encryption
- FSK Option



Model SS900FH Series Spread Spectrum Radios Specifications

GENERAL	SS900FH-5
Frequency	902-928 MHz
Spread Spectrum Type	Frequency hopping, direct FM
Network Topology	Point-to-point. Peer-to-peer (no master /slave dependencies), point-to-multipoint, multi-drop transparent
Hop Patterns	10 hop sequences
Serial Data Interface	RS-232/422/485
I/O Data Rate	Software Selectable 10-115200 bps
FSK Data Rates (Optional)	1200, 2400, 9600, & 19,200 bps
Power Requirements	
Supply Voltage	12VDC or 115VAC
Transmit Power Consumption	15 watt
Receive Current	80 mA
Standby Mode	8.7 μ A
Physical Properties	
Size	6.15" H x 2.306" W x 8" D
Weight	30 oz
Environmental	-40°C to 85°C
Antenna Connector	RSMA
Data Connector	DB9F
RF Specifications	
Transmit Power	30 dB
Receive Sensitivity	-100 dBm
RF Data Rate	125 Kbps
Ordering Guide	
SS900FH-SA	Standalone Modem
SS900FH-170	Internal 170 Modem
SS900FH-Input	Input file Plug-in Modem

Specifications subject to change without notice

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