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DCB-115 Spread Spectrum Frequency Hopping Wireless Transceiver



- Frequency Hopping
- Spread Spectrum
- Range to 20 Miles
- 900 MHz and 2.4 GHz
- Asynchronous to 115.2 Kbps
- Point to Point and Point to Multipoint
- RS-232 Interface

DESCRIPTION

The DCB-115 spread spectrum transceivers provide reliable long range data communications. Using frequency hopping spread technology, the transceivers are capable of uncompressed data rates of 115.2 Kbps over distances of 20 miles or more. As well as providing long range reliable data links, The DCB-115 transceivers set up quickly and incur no ongoing fees, unlike cellular and land line communications. Monthly telephone company costs are eliminated.

The DCB-115 transceivers operate point to point or point to multipoint, selectable using any async terminal program. Repeaters may be used to extend the range by programming the DCB-115 to operate as a store and forward unit. With up to two repeaters in a link and external antennas, links of 60 miles and beyond are possible.

Transceivers are assigned unique electronic serial numbers at the factory, providing control of who does and who does not have access to the data. An optional mode allows the transceiver to respond to a set of AT commands.

Applications for the DCB series include data links for emergency back up, campus buildings, manufacturing plants, offices, home to office, computer to computer, terminal or multiplexer; and with DCB's EtherBridge, lan to lan bridged links. The DCB SR-VM voice/data multiplexer enables the DCB-115 to transmit four channels of digitized voice as well as data.

DCB-115 Spread Spectrum Frequency Hopping Wireless Transceiver

SPECIFICATIONS

General

902-928 MHz or 2.400-2.475 GHz, sequence spread spectrum
Frequency hopping
Speeds from 1.2 Kbps to 57.6 kbps full duplex, to 115.2 kbps half duplex
RS-232 interface, DE-9S composite connector
Point to point, point to multipoint
Directional and omni-directional external antenna options
Setup through data port or independent port (RJ-45 front panel RS-232)

Transmitter/Receiver

Output power = 1 Watt (+30 dBm), 135 dB system gain
15 KHz carrier frequency stability
Receiver: -110 dBm @ 10⁻⁴ raw BER, -108 dBm @ 10⁻⁶ raw BER

Physical/Electrical

Carrier Detect, Transmit and Clear To Send indicators
120 VAC wall transformer, 10 Watts, 10.5 to 18.0 VDC
100 ma receive, 600 ma transmit, 180 ma average power consumption
Other power supplies available
Weight 1 lb.
-40 to +75 degrees C operation
5 1/2" x 6" x 1 1/2"
Optional waterproof enclosures for harsh environments

Omni mag mount and bracket mount antennas shown below
10 dB and 6 dB yagi antennas in the right hand picture

