

SERIAL/FSK

WIRELESS INTERCONNECT 5100



MODEL 5100 SHELF MOUNT



MODEL 5100 RACK MOUNT



MODEL 5100 WIRELESS INTERCONNECT RADIOS DELIVER

The Model 5100 has been specifically designed to provide robust, reliable performance in traffic interconnect applications. Exceptional throughput, extended range and enhanced interference avoidance methods, coupled with ease of setup and installation provide unequalled performance in point-to-point or point-to multipoint networks.

The Model 5100 may be operated as a Master, Remote or Repeater. Configuration of the Model 5100 is simple and straightforward, using the provided Windows™ based ControlPAK™ software. For standard traffic interconnect applications, a wide range of prebuilt and pretested application files are included, allowing "plug-and-play" setup for your specific controllers. Most major controller manufacturer's products and third party applications are represented.

The Model 5100 provides a Dip Switch selectable RS232 serial port, 2 or 4 wire FSK interface. Store and Forward Repeater capabilities for extending range beyond Line-of-Sight are standard in the Model 5100.

The Model 5100 is available as a standalone shelf mount unit, or as a card designed to plug into, and draw power from a 170/TS1/TS2 detector rack. Field installation could not be simpler!

With ENCOM™, Wireless is Simple!

FEATURES

- License-Free, Frequency-Hopping Spread Spectrum Technology
- Up to 115 kbps Sustained Data Throughput
- End-to-end Delays of less than 8 milliseconds
- 2 and 4 wire FSK interface (Bell 202 / 1200 baud only)
- Available as a Standalone Shelf Unit or 170/TS1/TS2 Detector Rack Card
- Up to 20 Mile Range (with L.O.S.)
- Store and Forward Repeater Standard
- Full Duplex Capability
- Transparent Operation with Asynchronous Traffic Applications
- High Performance Receiver
- Built-in Setup and Diagnostics Capabilities
- Variable Output Power Capability – Maximum 1 Watt
- Completely Configurable with Windows™ Based ControlPAK™ Software (included)
- Compatible with all 5000 Series products



SERIAL/FSK

WIRELESS INTERCONNECT 5100

SPECIFICATIONS

RADIO SPECIFICATIONS

TECHNOLOGY:

FREQUENCY RANGE:

OUTPUT POWER:

SOFTWARE PROGRAMMABLE:

AVAILABLE HOP PATTERNS:

NUMBER OF RF CHANNELS:

RF CHANNEL SPACING:

ERROR CHECKING:

ERROR CORRECTION:

ENCRYPTION:

RECEIVER SENSITIVITY / BER:

SYSTEM GAIN:

ANTENNA PORT: 5100S

5100R

CERTIFICATION:

OPERATING MODES:

SYSTEM CONFIGURATIONS:

900MHZ

FREQUENCY HOPPING SPREAD SPECTRUM
TECHNOLOGY (FHSS)

902-928 MHz

1MW, 10mW, 100mW, 1000mW

YES

62

139

200KHz

16 BIT-CRC

FORWARD ERROR CORRECTION

32 BIT

-110 DBM @10-6 BER

152 DBM

RP TNC-F

RP SMA-F

FCC, INDUSTRY CANADA

TRANSCIVER

POINT TO POINT, POINT TO MULTIPOINT,

MULTIPOINT TO POINT, MULTIPOINT TO MULTIPOINT.

2.4GHZ

FREQUENCY HOPPING SPREAD SPECTRUM
TECHNOLOGY (FHSS)

2.400-2.4835 GHz

10, 50, 100, 250, 500, 750, 1000mW

YES

44

202

400KHz

16 BIT-CRC

FORWARD ERROR CORRECTION

32 BIT

-110 DBM @10-6 BER

152 DBM

RP TNC-F

RP SMA-F

FCC, INDUSTRY CANADA

TRANSCIVER

POINT TO POINT, POINT TO MULTIPOINT,

MULTIPOINT TO POINT, MULTIPOINT TO MULTIPOINT.

GENERAL SPECIFICATIONS

INPUT POWER: 5100S

5100R

POWER CONSUMPTION: TYPICAL

OPERATING ENVIRONMENT:

HUMIDITY:

PHYSICAL DIMENSIONS: SHELF MOUNT (5100S)

RACK MOUNT (5100R)

ENCLOSURE TYPE: SHELF MOUNT (5100S)

RACK MOUNT (5100R)

900MHZ

6-30 VDC

POWERED BY THE DETECTOR RACK

VIA THE EDGE CONNECTOR

<100mA (STANDBY),

-40°C TO +80°C (-40°F TO 176°F)

95% NON-CONDENSING

2.0"W X 5.0"H X 6.5"D

1.125"W X 4.5"H X 7.0"D

MILLED ALUMINUM BLACK POWDER COAT

2X22 PIN EDGE CARD WITH 0.156" CTR.

2.4GHZ

6-30 VDC

POWERED BY THE DETECTOR RACK

VIA THE EDGE CONNECTOR

<125mA (100mW TX)

-40°C TO +80°C (-40°F TO 176°F)

95% NON-CONDENSING

2.0"W X 5.0"H X 6.5"D

1.125"W X 4.5"H X 7.0"D

MILLED ALUMINUM BLACK POWDER COAT

2X22 PIN EDGE CARD WITH 0.156" CTR.

SOFTWARE SPECIFICATIONS

RADIO CONFIGURATION:

SPECTRUM ANALYZER:

REMOTE DIAGNOSTICS & CONFIGURATION

900MHZ

YES

YES

YES

2.4GHZ

YES

YES

YES

INTERFACE SPECIFICATIONS

PROGRAMMING:

DATA INTERFACE:

DATA FORMAT: PARITY

DATA BITS

DATA RATE: RS232

FSK

DATA TRANSMISSION:

900MHZ

DB9-F

DIP SWITCH SELECTABLE

RS232, 2 OR 4 WIRE FSK

NONE, ODD OR EVEN

7 OR 8

1200 BPS - 115.2 KBPS

1200 BPS

KEY-BY-DATA OR RTS DATA INPUT FRAMING WITH KEY-BY-DATA OR RTS DATA INPUT FRAMING WITH

PROGRAMMABLE RTS/CTS TIME DELAY PROGRAMMABLE RTS/CTS TIME DELAY

2.4GHZ

DB9-F

DIP SWITCH SELECTABLE

RS232, 2 OR 4 WIRE FSK

NONE, ODD OR EVEN

7 OR 8

1200 BPS - 115.2 KBPS

1200 BPS

INDICATORS

TX DATA, RX DATA, PWR:

DATA PORT INDICATOR:

RSSI:

900MHZ

YES

YES

YES

2.4GHZ

YES

YES

YES



**ENCOM reserves the right to make changes to specifications of products described in this data sheet at any time without notice.

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ENCOM™

Wireless Data Solutions

LEADING THE WAY IN WIRELESS COMMUNICATION FOR TRAFFIC APPLICATIONS