5100 & 5200 Interconnects

These radios are designed to provide a reliable wireless interconnect solution for all closed loop traffic controller designs. All radios include ControlPAK™ software; which provides compatibility with all major traffic controllers. Radios connect directly to the traffic controllers and provide a transparent and reliable wireless closed loop connection.

In addition, these radios are designed to extend existing copper/ hardwire systems and provide a wireless interconnect solution for all traffic controllers. Radios include multiple data interfaces, such as RS232 and 2 or 4 Wire FSK copper.

These unique data interfaces allow radio to establish a hybrid system consisting of FSK copper and wireless communications. The master radio is connected directly to the existing FSK copper line.
5100S shipped with lightning arrestor, RF cable and AC power supply adaptor. **5100R** shipped with RF cable, lightning arrestor and data cable.

5100S

5100R

ADVANTAGES
- Saves you time and money.
- Overcomes distance, disturbance and topography.
- Expands existing systems with wireless solutions.
- Accommodates multiple data interfaces into systems.
- Expands existing hardwire systems.

Part No. 2444-1 5100R
Part No. 2444-5 5100S 2 Wire
Part No. 2444-6 5100S 4 Wire
Part No. 2444-4 5200
Part No. 2444-3 1018A Cable

5200

1018A

Wireless Interconnect

Contact Closure

Designed specifically for ON/OFF control and detection applications. These radios feature bi-directional or single directional communications and the ability to confirm switch closure at a remote site. Using the I/O is extremely simple with flexible software giving I/O routing infinite possibilities. This comprehensive software package includes a Configuration Utility, Remote Maintenance capabilities and Wireless Link Diagnostic features. A Spectrum Analyzer is also included, allowing end user to determine exact noise levels and select optimal operating frequencies.

All typical system designs are supported including multi-point to multipoint, point to multipoint and point to point operations.

The COMMPAK I/O features innovative timer outputs that can be pre-programmed for up to two hours, eliminating the need for timer relays and considerably reducing the cost of the installation process.

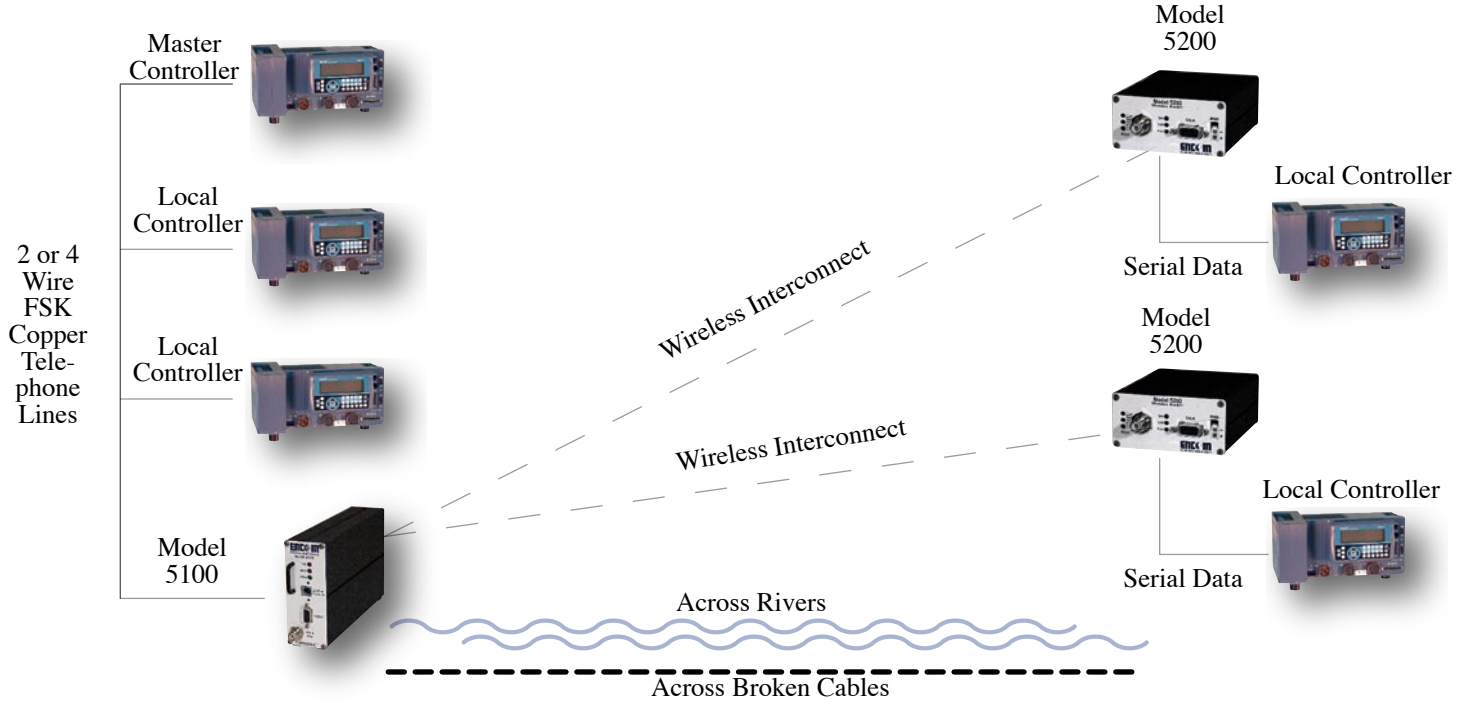
The radio employs license-Free Frequency Hopping Spread Spectrum Technology. This technology has been designed to provide reliable, long-range, wireless communications (up to 60 miles with L.O.S.). Eliminate the cost and time constraints associated with traditional hardwired systems by using an COMMPAK I/O.

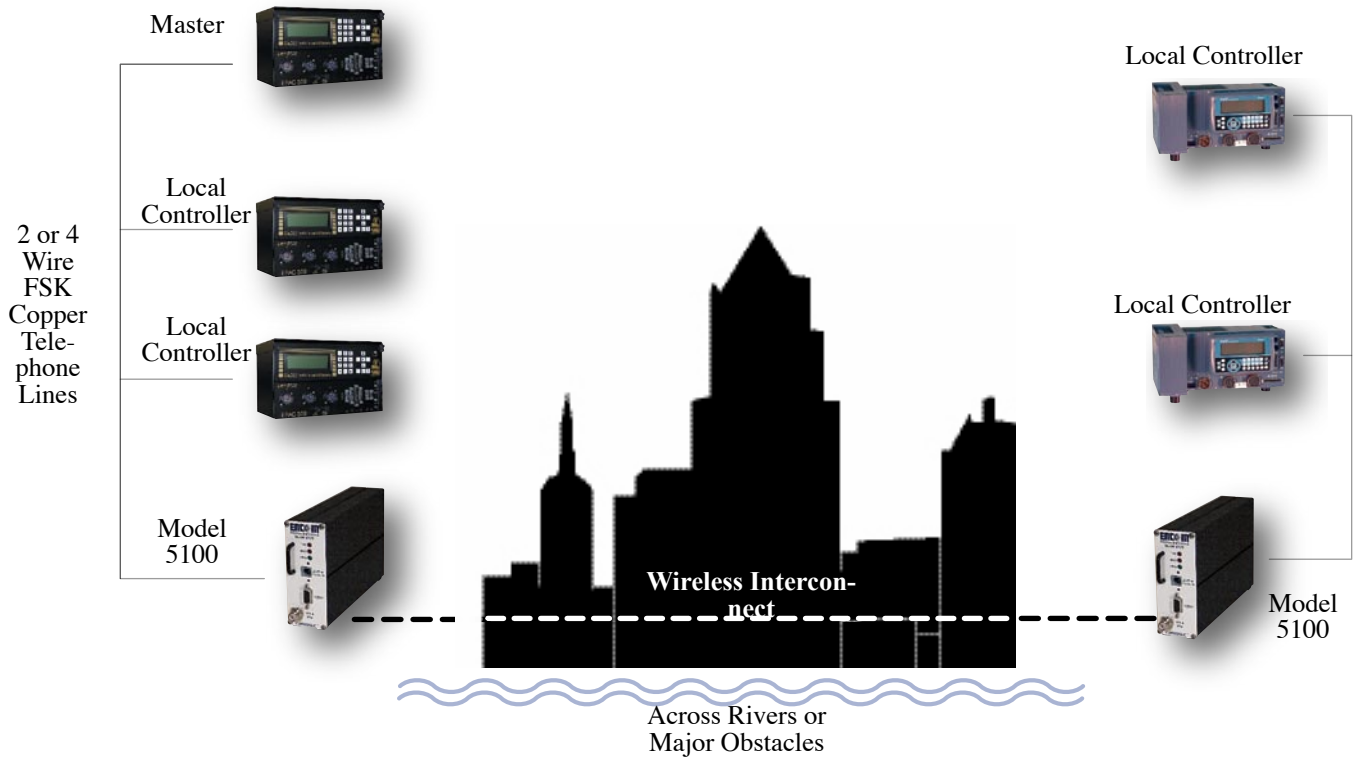
Part No. 2444- I/08 Bi-directional
Part No. 2444-4528 Single directional transmitter (not shown)
Part No. 2444-4028 Single directional receiver (not shown)

SPECIFICATIONS

- Frequency Range: 902-928 MHz
- Output Power: 1mW, 10mW, 100mW, 1000mW
- Software Programability: Yes
- Available Hop Patterns: 64
- Number of RF Channels: 128
- Antenna Port: RP TNC-F
- Operating Environment: -40°C to +80°C (-40°F to +176°C)
- Physical Dimensions: 4.75"W x 1.73"H x 3.75"D

Wireless Applications





Wireless Interconnect

Commpak Broadband 5.8GHz

Also Available in 900MHz, 24 & 49 GHz

With usable bandwidth up to 108 Mbps, the COMMPAK Broadband 5.8 GHz system is designed for long range outdoor broadband backhaul applications. Point-to-point and point-to-multipoint topologies are supported.

These hardened outdoor units are available with an integrated 23dB panel antenna or a connectorized version for external antennas. The COMMPAK Broadband 5.8 system allows you to extend your network, add video surveillance at remote sites and create MESH networks in the most challenging urban environments.

APPLICATIONS:

- Video Surveillance.
- High Speed Backhaul links.
- Building to Building Connectivity.
- T1/E1 Replacement.
- Mobile Networking.
- Eliminate Fiber Optic lines.
- Wi-Fi Support.
- MESH Networking.

SUPERIOR WIRELESS PERFORMANCE:
A high powered 400Mw transmitter combined with a highly selective receiver (-97dB RX Sens.) provides carrier class wireless performance with a range of up to 20 miles (LOS).

DYNAMIC FREQUENCY SELECTION:
Broadband access points continually scan the band for spectrum usage and seamlessly switch to the 'clearest' RF channel to maintain maximum throughput and reliability.

SECURITY:

Wireless network security is critical to network reliability. These broadband systems are equipped with the most advanced security features available. This includes: WPA2 (256 AES), WPA, WEP, MAC Authentication, Radius Server Authentication.

ADAPTIVE MODULATION:

These broadband wireless systems continually monitor the RF link quality and automatically adjust the modulation and date rate to maximize link performance.

ENVIRONMENTALLY HARDENED OUTDOOR RADIOS:

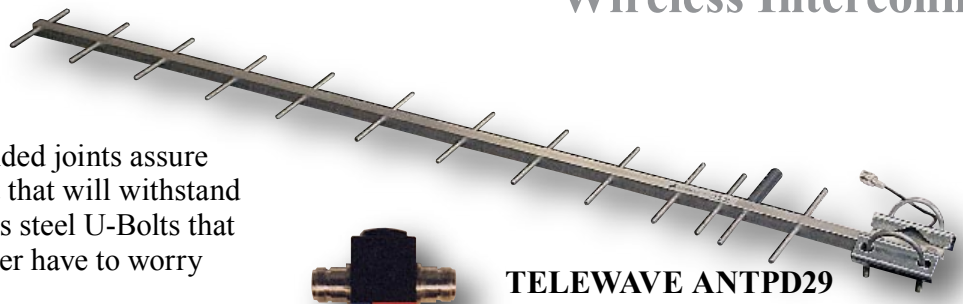
All COMMPAK Broadband products are designed specifically for long range outdoor wireless applications. These products meet the NEMA operating temperature specs of -40°C to 80°C.

SIMPLE INSTALLATION:

ENCON broadband radios are available with integrated panel antennas or as connectorized units for use with external antennas. Simple and accurate antenna alignment tools ensure rapid deployment.

Part Number 2444-BROADBAND

Directional Aluminum Yagi Antenna



Complete weatherproofing and all welded joints assure long trouble free life. With pigtail feet that will withstand a 50 pound pull and two large stainless steel U-Bolts that guarantee sure mounting you will never have to worry about adjustments or loose parts.

Frequency, MHz : 902-928
Length in.: 53.5
Weight, lb. : 2.31
Number of Elements: 13
Gain dBd: 13

Part Number 1343-3

TELEWAVE ANTPD29

Power Splitter - 900-1100MHz
2-way Power Divider, max input 500 Watts, 3dB output loss to each port, 22dB insertion loss.
Part Number 1343-5

Specifications
RF Connector Type: N.
Frequency Band: 900 Mhz.
Connector Gender: Female

800/900 MHz. Omnidirectional Antennas for Data Communication

Standard Data Transmission Omnis are fully decoupled antennas built on a copper laminate and housed in 0.100 inch wall fiberglass housings. They may be mounted right side-up or tipped upside down depending upon the desired pattern. They also feature a very versatile clamp mounting system that will fit most every situation you will encounter.

Frequency, MHz: 896-960
Type (Female): N
Height in. (cm): 30¾ (78)
Weight lb. (kg): 1.19 (0.53)
W/sur Area ft² (m²): 1.76 (0.016)
W/survival mph (kph): 125 (200)
Pigtail in. (cm): 23 (0.016)

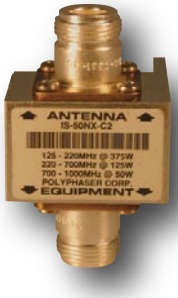
Part Number 1343-4

LDF4-50A Cable

1/2" Standard Cable, Standard jacket
1/2" Foam Dielectric - 50ohm

Part Number 1343-1

ANTENNA CONNECTION



Frequency Range:
125MHZ to 1 GHZ.
VSWR:
≤ 1.1:1 over frequency range.
Insertion Loss:
≤ 0.1dB over frequency range.
Max Power:
375W @ 125MHz decreasing to 50W @ 1GHz.
Turn On:
600Vdc ± 20%.

THROUGHPUT ENERGY:
≤ 220µJ for 8/20µs waveform. Part Number 2444-2

COAXIAL CONNECTOR

This RingFlare N Male connector has a silver plated body with gold plated pins. The maximum length of the connector is 3.0 inches and the maximum diameter is .86 inches. The inner contact attachment is captivated.
Part Number 1343-2