



COMMPAK BROADBAND 900 MHz/2.4/4.9/5.8 GHz



BROADBAND ADVANTAGES

ENCOM has created the most powerful outdoor WiFi solution on the market. Created specifically for outdoor WiFi applications our 400 mW transmitter and highly selective receiver provide unmatched range and bandwidth. This is a carrier class 802.11 a/b/g system full of features like QoS, Bandwidth shaping, and a complete suite of security features. Combine 2.4/5.8 GHz hotspot with any 900 MHz and 4.9 GHz backhaul link for mobile or MESH networking.

APPLICATIONS

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

ENCOM ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING (E-OFDM)

ENCOM has made significant improvements on a widely accepted technology (OFDM) to create the most powerful and reliable broadband solutions on the market. With E-OFDM, we resist interference, maximize bandwidth, and offer unsurpassed reliability.

SUPERIOR WIRELESS PERFORMANCE

A high powered 400 mW transmitter is combined with a highly selective receiver (-97 dB RX Sens.) to provide carrier class wireless performance with range up to 20 Miles (LOS). Penetrate trees, buildings, overcome obstructions and deliver broadband speed wireless connectivity with our 2.4/5.8 GHz radios.

DYNAMIC FREQUENCY SELECTION

ENCOM 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. All ENCOM broadband systems are equipped with the most advanced security features available. This includes: WPA2, WPA, WEP, MAC Authentication, Radius Server Authentication.

EN-STREAM PROTOCOL

All ENCOM broadband systems can be 802.11 a/b/g compliant, however utilizing our proprietary EN-Stream protocol increases bandwidth and security on the wireless network.

ADAPTIVE MODULATION

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

ENVIRONMENTALLY HARDENED OUTDOOR RADIOS

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

SIMPLE INSTALLATION

ENCOM 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.



ETHERNET

COMMPAK BROADBAND/2 DUAL

SPECIFICATIONS



FEATURES

- E-OFDM Technology
- Dynamic Frequency Selection
- Up to 108 Mbps data rates
- Up to 20 miles range
- 802.11 a/b/g compliant
- Secure Wireless networking WPA2, WPA, MAC and RADIUS authentication
- EN-Stream Protocol (proprietary)
- Environmentally Hardened Outdoor Units
Operating Temperature: (-40°C to +80°C)
- Built-in diagnostics tools: Antenna alignment, Bandwidth test, Frequency usage.
- Integrated antennas or connectorized versions
- Plug and Play solutions



SECURITY (ENCRYPTION)

- AES-CCM Encryption
- 64 bit, 128 bit WEP Encryption
- WPA
- WPA2
- TKIP
- MAC / RADIUS Server authentication
- EAP-tls / EAP-passthrough

DATA RATES

- 1 Mbps, 2 Mbps, 5.5 Mbps, 6 Mbps, 9 Mbps, 11 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps and 108 Mbps Through Air Rate

NETWORKING FEATURES

- STP (Spanning Tree Protocol)
- DHCP Server or Client
- NTP Network Time Protocol
- Firewall and NAT
- Routing
- QOS
- VPN
- VLAN
- SNMP
- Bandwidth test tool

INTERFACE

- Industrial Weatherproof 10/100 Base-T Ethernet (RJ45)
- 150' Cat5e or better Industrial Outdoor rated cable included

WIRELESS INTERFACE

- 802.11 b/g or EN-Stream Proprietary protocol for greater security
- Dynamic Frequency Selection
- 5 MHz, 10 MHz, 20 MHz and 40 MHz channels available
- Antenna alignment tool available via software

MANAGEMENT

- IP discovery tool with remote management
- Remote SSH
- SNMP
- FTP

WIRELESS MODULATION

- OFDM and/or DSSS

RADIO SPECIFICATIONS

1 Mbps	-97 dBm	12 Mbps	-91 dBm
2 Mbps	-96 dBm	18 Mbps	-90 dBm
5.5 Mbps	-95 dBm	24 Mbps	-86 dBm
6 Mbps	-94 dBm	36 Mbps	-83 dBm
9 Mbps	-93 dBm	48 Mbps	-77 dBm
11 Mbps	-92 dBm	54 Mbps	-74 dBm

RADIO TRANSMIT POWER

26 dBm 400 mW

ANTENNAS

- Omni, Yagi and Panel Antennas available with up to 23 dBi gain
- N Female Connector
- Integrated Flat Panel Antennas available with up to 23 dBi gain

POWER

- Power over Ethernet injector with lightning and surge protection included
- POE input voltage: 100 to 240 VAC
- POE output voltage: 1 A @ 18 VDC
- Power Consumption: 0.5A transmit 0.2A standby (9W max 8W typical 3W standby) @18VDC

ENCLOSURE

POLE MOUNT / WALL MOUNT

- Die Cast Aluminum
- Dimensions: 8.5" x 7" x 2"
- Weight: 3 lbs
- IP67 Weatherproof Rating

ENVIRONMENTAL SPECIFICATIONS

- Operating Temperature: -40°C to +80°C
- Storage Temperature: -40°C to +80°C
- Humidity (non-condensing): 5% to 95%

ACCESSORIES INCLUDED

- Pole Mounting Hardware
- 150' Cat5e or better Industrial Outdoor rated cable with weatherproof connector
- PoE Injector with lightning and surge protection
- 6' Ethernet Crossover Cable
- Plug and Play Capability

WARRANTY

- 1 year limited

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

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