The fastest way to wireless.

ConnexNet provides a complete hardware and software solution for adding wireless network connectivity to serial-based applications. The transceiver serves as a conduit between the user and multiple destination devices via a local network or the Internet. Controlling distant OEM networks is as easy as accessing the 'Net.

Unlike other industrial wireless Ethernet offerings, ConnexNet does not require a COM port director. All software controls communicate directly to the device, greatly improving system latency. And ConnexNet will support a wireless Ethernet-to-serial bridge to allow separate networks to talk with one another simultaneously.

Each unit is small and easily portable for use in mobile or temporary settings as well as for fixed installations. FHSS modulation ensures reliable transmissions, while use of the 900MHz ISM band makes ConnexNet ready to use with no further certification.

ConnexNet™ Highlights

· *Wireless LAN service supporting Ethernet interface.*
· *Comprehensive networking protocols.*
· *Equipped with a CPU, real-time OS , TCP/IP stack.*
· *Provides control from virtually anywhere via the 'Net.*

Applications

Industrial Control
Remotely program your plant, factory, SCADA equipment. ConnexNet enables machine monitoring across countless miles without invasive wiring.

Electronic Signs
Reprogram sign and display equipment from anywhere in the world. ConnexNet lets you set up your signs anywhere, then change them at any time.
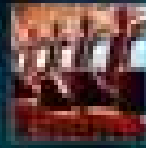
Vending & Gaming
Locate your equipment in the highest traffic areas; tie devices together for complete network management. ConnexNet provides for both ease and opportunity.

Point of Sale
Process transactions remotely and securely via wireless links. ConnexNet lets you access Ethernet bridges without the high cost of cable.

Building & Utility
Monitor and manage building control systems (such as power, lighting, security, HVAC, irrigation, etc.) from anywhere in the world on your own PC.

Specifications

PARAMETER	CN4790-1000	CN4490-1000
Architecture	Peer-to-peer	Server-client
Network interface		
Standard	IEEE 802.3	IEEE 802.3
Physical layer	10/100BaseT	10/100BaseT
Mode	Half-duplex and full-duplex	Half-duplex and full-duplex
Interface Connector	RJ-45	RJ-45
Frequency band	902-928 MHz	902-928 MHz
Modulation	FHSS FSK	FHSS FSK
Serial interface data rate	Up to 115.2 Kbps	Up to 115.2 Kbps
Output power	1000mW variable	1000mW variable
Input power	7Vdc to 18Vdc	7Vdc to 18Vdc
Power draw (@ 12Vdc)	400mA TX, 40mA RX	400mA TX, 40mA RX
Power supply	AC transformer via 6-foot cable (183 cm)	AC transformer via 6-foot cable (183 cm)
Electrical requirements	Line voltage 100-120V (240V outside U.S.) Frequency 50-60 Hz	Line voltage 100-120V (240V outside U.S.) Frequency 50-60 Hz
Channels	Up to 32	Up to 32
Security	1-byte system ID, DES	1-byte system ID, DES
Sensitivity	-99 dB @ full RF data rate	-99 dB @ full RF data rate
Range (line-of-sight)	Up to 20 miles (32 km)	Up to 20 miles (32 km)
Temperature	-40° to +80ºC	-40° to +80ºC
Humidity (non-condensing)	10% to 90%	10% to 90%
Dimensions	4.75 x 2.75 x 1.17 in. (121 x 70 x 30 mm)	4.75 x 2.75 x 1.17 in. (121 x 70 x 30 mm)
Weight	< 6 oz (< 170 g)	< 6 oz (< 170 g)
Antenna; connector	Dipole; RPSMA jack (female)*	Dipole; RPSMA jack (female)*
Configuration software	Optional, for Windows OS	Optional, for Windows OS

Higher-gain antenna options are available; ask an AeroComm sales associate for more information.

AEROCOMM

Wireless Protocol

RF PROTOCOL MODES

a) **Communication**
   Unicast (one-to-one addressing)
   Broadcast (one-to-many addressing)

b) **Acknowledgement mode (ACK)**
   API with hardware and/or software ACK
   indication

c) **One-beacon mode**

d) **Dynamic radio data table**
   Retains data from up to 12 transceivers

INTERFACE PROTOCOL

a) **On-the-fly transceiver configuration**
   Destination address
   RF transmit power
   Co-located servers
   RF Channel
   Broadcast/addressed

b) **Raw data or transmit/receive API**

c) **9-bit serial interface mode**

d) **Long range mode**
   Enables sensitivity control

e) **Generic A/D, D/A generic I/Os**

f) **Variable baud rate**

g) **RF packet size, timeout control**

h) **Onboard temperature sensor**

i) **Handshaking**
   CTS/RTS
   Full modem-mode available

j) **In-range indicator**

k) **Error detection**
   Onboard CRC
   Duplicate packet filtering

l) **Data encryption standard (DES)**

Ethernet Protocol

a) **Network Communication**
   ARP, UDP, TCP, ICMP, TelNet, TFTP,
   AutoIP, DHCP, HTTP, SNMP

b) **Connections to serial port**
   TCP, UDP, TelNet

c) **Firmware update**
   TFTP

d) **Addressing, routing, data block
   handling over the network**
   IP

Placing Orders

Select features from the list below to identify the appropriate part number. More product lines are available for industrial & commercial applications. Contact AeroComm Sales for details: toll-free 1-800-492-2320, email sales@aerocomm.com.

PART NUMBERS

CN4490-1000-232-SP
   Ethernet-enabled packaged transceiver for *server/client* networking, 1000mW output power, –40º to +80º C, 900MHz FHSS. Starter Pack (SP) includes one (1) ConnexNet and one (1) ConnexLink RS232*.

CN4790-1000-232-SP
   Ethernet-enabled packaged transceiver for *peer-to-peer* networking, 1000mW output power, –40º to +80º C, 900MHz FHSS. Starter Pack (SP) includes one (1) ConnexNet and one (1) ConnexLink RS232*.

* RS485 versions available.

Typical Application