

The fastest way to wireless.

ConnexLink stand-alone transceivers can be set up in minutes to virtually cut the cables between RS232 or RS485 devices. Their flexibility and price (as low as \$99 per unit) allow users to quickly upgrade wired terminals to cordless operation in industrial, commercial, even residential applications.

Powered by a 100mW 2.4GHz radio or a 1000mW 900MHz radio, each unit is small and easily portable for use in mobile and temporary settings as well as for fixed installations. Optional software enables custom configurations based on user needs.

ConnexLink implements a proprietary communication protocol to provide secure local data transmissions. Because it uses FHSS technology, the data remains reliable over distances of up to 20 miles (32 km) line-of sight (900MHz version). Use of license-free frequency bands ensures that units are ready to use with no further certification requirements. Every unit is backed by a 30-day guarantee and full one-year warranty.



ConnexLink™ Highlights

- Durable industrial-grade enclosure.
- Transmits around corners, through walls.
- Reliable communication up to 288 Kbps.
- Point-to-point & point-to-multipoint setups.

Applications



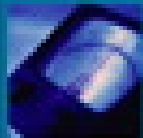
Weigh Scales
Instantly access weight and measurement data. Link virtually cuts wires to all brands and sizes of scale equipment, from indicators to receipt printers.



Process Control
Set up any factory or lab conveniently. Engineers and technicians can quickly move data links from machine to machine without costly wiring.



Kiosks & P.O.S.
Small and portable, Links make it possible to set up equipment where it best serves customers. Use at retail stores, service stations, events, etc.



Data Logging
Upload data to your PC from your logger or monitor without getting up from the chair. Use Link for level monitoring, control instruments, etc.



Electronic Signs
Faster, cheaper and less invasive than trenching to lay cable, Links simply attach to the serial ports of both the PC and sign or scoreboard.

Specifications

PARAMETER	CL4424-100	CL4790-1000	CL4490-1000
Network architecture	Server/client	Peer-to-peer	Server/client
Standard interface	RS232 (DB9 male) or RS485	RS232 (DB9 male) or RS485	RS232 (DB9 male) or RS485
Frequency band	2.402-2.478 GHz	902-928 MHz	902-928 MHz
Modulation	FHSS FSK	FHSS FSK	FHSS FSK
Serial interface data rate	Up to 288 Kbps	Up to 115.2 Kbps	Up to 115.2 Kbps
Output power	100mW fixed	1000mW variable	1000mW variable
Input power	7Vdc to 18Vdc	7Vdc to 18Vdc	7Vdc to 18Vdc
Power draw (@ 12Vdc)	125mA TX, 80mA RX	400mA TX, 40mA RX	400mA TX, 40mA RX
Power supply (optional; provided with Starter Packs)	AC transformer to 7.5Vdc via 6-foot cable (183 cm)	AC transformer to 7.5Vdc via 6-foot cable (183 cm)	AC transformer to 7.5Vdc 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	Line voltage 100-120V (240V outside U.S.); Frequency 50-60 Hz
Channels	64 in U.S., 32 in Europe	Up to 32	Up to 32
Security	1-byte system ID	1-byte system ID, DES	1-byte system ID, DES
Sensitivity	-90 dB @ full RF data rate	-99 dB @ full RF data rate	-99 dB @ full RF data rate
Range (line-of-sight)	Up to 2 miles (3.2 km)	Up to 20 miles (32 km)	Up to 20 miles (32 km)
Temperature	-40° to +80°C	-40° to +80°C	-40° to +80°C
Humidity (non-condensing)	10% to 90%	10% to 90%	10% to 90%
Dimensions	4.75 x 2.75 x 1.17 inches (121 x 70 x 30 mm)	4.75 x 2.75 x 1.17 inches (121 x 70 x 30 mm)	4.75 x 2.75 x 1.17 inches (121 x 70 x 30 mm)
Weight	< 6 oz (< 170 g)	< 6 oz (< 170 g)	< 6 oz (< 170 g)
Antenna; connector	Dipole; RPSMA jack (female)*	Dipole; RPSMA jack (female)*	Dipole; RPSMA jack (female)*
Configuration software	Optional, for Windows OS	Optional, for Windows OS	Optional, for Windows OS

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



Flexible RF Protocol

AeroComm's embedded transparent protocol simplifies the integration process by allowing for seamless plug-and-play installation. As each unit receives raw data, it manages over-the-air protocol to assure successful communication. Headers, data packet length, and CRCs are not needed.

RF232 supports simple cable-replacement up to complex peer-to-peer setups. Broadcast communication to all devices or address packets to a specific destination using unique MAC addresses embedded in each unit.

Protocol Features

Features vary by product. Ask an AeroComm Representative to explain why some features are particular to CL4424, CL4790 or CL4490.

RF PROTOCOL MODES

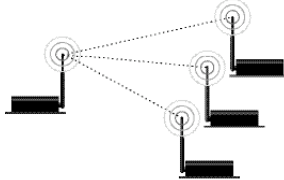
- **Communication**
Unicast (one-to-one addressing)
Broadcast (one-to-many addressing)
- **Acknowledgement mode (ACK)**
API with hardware and/or software ACK indication
- **Handshaking**
(unique to CL4790, CL4490)
CTS/RTS
Modem mode
- **Variable baud rates**
- **Long range mode**
(unique to CL4790, CL4490)
Enables sensitivity control
- **In-range indicator**
- **DES encryption**
(unique to CL4790, CL4490)
- **Raw data or transmit/receive API**
(unique to CL4790, CL4490)
- **Transceiver configuration**
Destination address
RF transmit power
RF Channel
Broadcast/addressed
- **9-bit serial interface mode**

RF Architectures

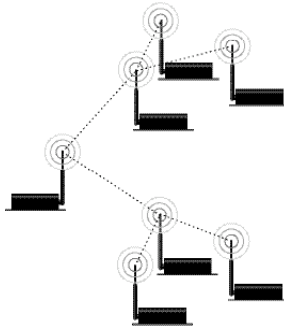
Point-to-point
(CL4424, CL4490)



Point-to-multipoint
(CL4424, CL4490)



Peer-to-peer (CL4790)



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

CL4424-100-232

2.4GHz ConnexLink RF device, *server/client*, 100mW, -40° to +80° C, RS232 interface*

CL4424-100-232-SP

Starter Pack of two (2) 2.4GHz ConnexLinks, *server/client*, RS232 interface*

CL4790-1000-232

900MHz ConnexLink RF device, *peer-to-peer*, 1000mW, -40° to +80° C, RS232 interface*

CL4790-1000-232-SP

Starter Pack of two (2) 900MHz ConnexLinks, *peer-to-peer*, RS232 interface*

CL4490-1000-232

900MHz ConnexLink RF device, *server/client*, 1000mW, -40° to +80° C, RS232 interface*

CL4490-1000-232-SP

Starter Pack of two (2) 900MHz ConnexLinks, *server/client*, RS232 interface*

* RS485 interface available.