

**New**

# FASTLINC FLC910E

## ETHERNET 900MHz OFDM HIGH-SPEED MODEM

**INDUSTRIAL HIGH-SPEED FLC910E ETHERNET 900MHz OFDM**

Data-Linc Group's FLC910E, part of the *FastLinc* Family of high-speed wireless, industrial Ethernet modems, utilizes OFDM technology, a new option in data transmission— Orthogonal Frequency Division Multiplexing. It is an ideal data communication option for installations requiring exceptionally fast data rates, as well as for high RF-noise environments. The FLC910E offers greater speeds than other 900 MHz products because it combines the 900 MHz band and OFDM technology.

Its long-range capability—up to 10 miles line-of-sight (LOS), farther with Repeaters— along with its exceptional speed (up to 54 Mbps) supports data transfer on a single network for real-time security/surveillance networks where SCADA is also required. Additionally, it provides the user with data prioritization through QoS (Quality of Service), permitting user-adjusted preferential data service for reduced data latency—the transmission time for a data packet to travel from point A to point B.

The combination of these outstanding features has produced a data communication product with excep-

### APPLICATIONS

#### Security/surveillance video/audio with SCADA

#### High-noise environments:

- Arc welding
- High voltage
- Plant floor
- Variable frequency drives

### FEATURES

- Adapts to high-noise conditions
- Supports AES encryption
- Features data prioritization capability through QoS
- Reduces LOS issues
- Minimizes multi-path fading
- Offers long range data transfer (up to 10 miles LOS, farther with Repeaters )
- Provides exceptionally high data rates (up to 54 Mbps)
- Enhances plant floor performance

tional performance. The FLC910E is extremely robust and reliable. The broadband and OFDM greatly enhance plant floor performance by reducing LOS issues and multi-path fading caused by RF reflection that can be particularly troublesome for plant-floor data transfer— conditions that constrain data rates and reliability in typical high-speed data systems. The *FastLinc* FLC910E also supports modern encryption standards (AES, WPA, etc.) for enhanced security.

The OFDM technology permits data transfer via a wide channel that supports complex modulation and the resulting high data rates with low latency. The advantage of the 900 MHz band, wide-channel modulation and immunity to multi-path fading permits the FLC910E to provide high data transfer rates while maintaining excellent noise resistance and improved line-of-sight issues. For long distances, challenging plant-floor LOS issues and high data rate needs, the *FastLinc* FLC910E is the ultimate solution.

## FLC910E SPECIFICATIONS

### Operating Frequency

License-free, 902-925 MHz ISM band

### Included.

CD User Manual

**Antenna.** 0 dB bench test antenna

**Other.** Ethernet cable, power supply, Quick Start Guide

### Transmitter

**Distance.** 10 miles (16 km) LOS with omni antennas

**RF Output Power.** 316 mW (25 dB)

**Modulation.** CCK, OFDM

**Spreading Code.** Direct sequence

**Channel.** 3

**Occupied bandwidth.** 5 MHz, 10 MHz or 20 MHz

### Receiver Sensitivity

-72 dBm @ 54 Mbps

-92 dBm @ 6 Mbps

### RF Data Transmission

**RF Encryption.** AES, TKIP, WEP, WPA, WPA2

**RF Data Rate.** 6, 9, 12, 24, 36, 48 or 54 Mbps

### Operating modes

Base Station, Station Adaptor and Interbuilding Repeater

### Data Throughput

1 Mbps to 20 Mbps

(depending on range and link quality)

### Connections

**Antenna.** SMA connector (female), 50  $\Omega$

**Ethernet.** 10Base-T/100Base-T

**Power connector.** 10-28 VDC

### Indicators— Status LED's including

Power

Status

LAN (Link-Act)

LAN (100)

WLAN

RSSI\* in SA mode (5 stages)

### Operating Environment

**Humidity.** 0 95% non-condensing humidity

### Enclosure

**Standard.** 18-gauge steel with mounting flanges

**Optional.** DIN rail mounting

**Shipping Weight.** appx 1.8 lb (0.82 kg)

\*Receiver Signal Strength Indicators

Specifications subject to change without notice.

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## HIGH-SPEED *FastLinc* FAMILY



## ABOUT *DATA-LINC*

Since 1988, Data-Linc Group has provided reliable communication solutions for industrial automation systems. Data-Linc Group, an alliance partner with most major PLC manufacturers including Rockwell Automation, Siemens, Schneider Electric, GE Fanuc, and Omron, as well as others, provides expert technical support and communications consultation. Data-Linc's industry proven RF technology has been successfully implemented in all major industries including automotive plants, paper mills, consumer goods manufacturing/packaging, steel mills, mines, oil and gas refineries, utilities and transportation systems. Data-Linc offers a line of industrial wireless modems for the European Union. Its products are available worldwide.

## ALLIANCE PARTNERSHIPS



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