



DATA-LINC GROUP™
The Industrial Data Communication Experts

FastLinc FLC910E

900MHz HIGH-SPEED OFDM ETHERNET MODEM



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 high data rates, performs exceptionally well in noisy RF environments. The FLC910E offers greater speeds than other 900 MHz products by utilizing OFDM technology in the less crowded 900 MHz ISM band.

It provides long-range capability—up to 11 miles line-of-sight (LOS), farther with Repeaters— and exceptional speed (up to 54 Mbps) that supports data transfer on a single network for real-time security/surveillance 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 exceptional performance. The FLC910E is extremely robust and reliable. The 900 MHz transceiver and OFDM technology 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

FEATURES

- Adapts to high-noise conditions
- Supports AES encryption
- Features data prioritization capability through QoS
- Reduces LOS issues and minimizes multi-path fading
- Offers long range data transfer— up to 14 miles (22.5 km) LOS, farther with Repeaters
- POE compatible
- Provides exceptionally high data rates (up to 54 Mbps)

data transfer— conditions that constrain data rates and reliability in typical high-speed data systems. The FastLinc FLC910E also supports modern encryption standards (AES, TKIP, WEP) for enhanced security.

For long distances, challenging plant-floor LOS issues and high data rates, the FastLinc FLC910E is the ultimate solution.

TYPICAL APPLICATIONS

- Security/surveillance video/audio with SCADA
- High-noise environments:
 - Arc welding
 - High voltage
 - Plant floor
 - Variable frequency drives

900 MHz HIGH-SPEED FLC910E OFDM ETHERNET

FLC910E SPECIFICATIONS

Operating Frequency

License-free, 902-925 MHz ISM band

Included

CD User Manual

Antenna Test Antenna

Other Ethernet Cable, Power Supply, Quick Start Guide

Power Supply. Wall mounted transformer.

120- 240 VAC. 50/60 Hz

Maximum Range Standard

14 miles (22.5 km) @ 6 Mbps, LOS with yagi antennas

.8 miles (1.2 km) @ 54 Mbps LOS with yagi antennas

RF Output Power

316 mW

54 Mbps 25 dB

6 Mbps 20dB

Modulation

CCK, OFDM

Spreading Code

Direct Sequence

Channels

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 with Repeating

Data Throughput

1 Mbps to 20 Mbps

(Depending on range and link quality)

Power

10-28 VDC

max 250 mA @ 24 VDC

max 1100 mA @ 12 VDC

Connections

Antenna SMA connector (female),

Nominal Impedance: 50 Ω

Ethernet 10/100 Base-T Auto-MDIX

Power 10-28 VDC, 3-pin pluggable terminal block.

Indicators— Status LED's including

Power

Status

LAN (Link-Act)

LAN (100)

WLAN

RSSI* in SA mode (5 stages)

Operating Environment

Temperature. -40 to 167°F (-40 to 75°C)

Humidity. 0 to 95% non-condensing humidity

Enclosure

Standard 18-gauge steel with mounting flanges

Dimensions 7.6 x 5.6 inches (19.3 x 14.3 cm);

9.4 x 5.6 inches (23.9 x 14.3 cm) with mounting flanges

Included Optional DIN rail mounting flanges (3)

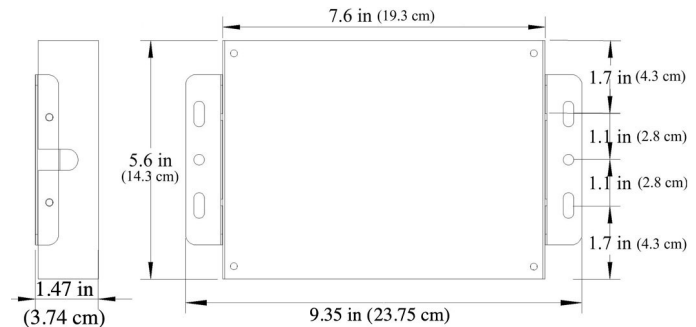
Shipping Weight approx 1.8 lb (0.82 kg)

*Receiver Signal Strength Indicators

Specifications subject to change without notice.

©2013 DATA-LINC GROUP. All rights reserved.

FLC910E DIMENSIONS



ABOUT DATA-LINC GROUP

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 a solution based approach thanks to its long-time experience with instrumentation and automation devices such as sensors, PLCs, HMIs, etc. Data-Linc's products use industry proven RF technologies that have been successfully applied in all major industries worldwide, including automotive plants, paper mills, consumer goods, manufacturing/packaging, oil & gas refineries and pipelines, utilities, moving platforms and transportation systems— underground, off-shore and above ground, Data-Linc meets the challenge.

ALLIANCE PARTNERS



GE Fanuc



OMRON



DATA-LINC GROUP
Corporate Headquarters

1125 12th Avenue NW
Issaquah, WA 98027 USA
info@data-linc.com

Tel: (425) 882-2206

Fax: (425) 867-0865

www.data-linc.com