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 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.

**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)

**Typical Applications**

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

Shipping Weight approx 1.8 lb (0.82 kg)

*Receiver Signal Strength Indicators
Specifications subject to change without notice.
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