DATA-LINC GROUP

FastLinc™ 810E+

802.11b Industrial Wireless Ethernet for 2.4 GHz Band

802.11b Industrial Wireless Ethernet

The *FastLinc*™ Family of high speed Industrial Ethernet Wireless Modems provide secure wireless communications using 2.4 GHz direct sequence technology available in stand-alone Ethernet (FLC810E+ and FLC820G) and PCMCIA card (FLC800C+) models as well as the 900 MHz OFDM Ethernet FLC910E modem. With an output power much higher than commercial 802.11b products, the FLC810E+ provides longer outdoor range and broader indoor coverage.

The *FastLinc* 810E+ adds higher RF power (300mW), the ability to connect multiple Ethernet devices in station adaptor mode and a built-in router to the *FastLinc* Family whose reputation for reliable, robust industrial installations is unsurpassed. Rated at a range up to 6 miles (10 km) with unobstructed line-of-sight (farther using Repeaters), the FLC810E+ is ideal for wireless Ethernet communications in challenging industrial environments.

The FLC810E+ includes wireless bridge mode for linking remote plant networks, access point mode for creating wireless hotspots within industrial plants and station adapter mode for linking one or more devices to the plant network. A built-in Network Address Translations (NAT) router and DHCP server give plant managers the option to create separate private networks.

In wireless bridge mode, the FLC810E+ wirelessly connects remote networks using a non-standard transmission technique which enhances security. When in wireless bridge mode, the FLC810E+ also acts as a Repeater for extending range or working around obstructions.

The FLC810E+ is housed in a sturdy steel enclosure with an optional DIN rail clip for mounting. It is designed for harsh environments and has an extended operating temperature of –40 to +65° C.

The FLC810E+ is easy to configure and trouble shoot using a web browser to access an internal web server. A software configuration utility is also included. As with all *Data-Linc* products, support services such as pre-sale project consultation, post-sale tech support with PLC expertise and site survey planning assistance are part of the *Data-Linc Group* commitment.

FLC810E+ Features

- Delivers high output power (300mW) and excellent receiver sensitivity for range to 6 miles LOS (line-of-sight) coverage and outdoor range
- Station Adapter Mode supports multiple field devices for wireless network bridging
- Provides single radio repeater service using Data-Linc's proprietary IBR mode
- Provides high level of security and repeater function with unique, non-WiFi wireless bridge mode (optional ESSID beacon suppression)
- Supports Network Address Translation (NAT) routing feature and DHCP for dynamic IP address allocation
- Designed with rugged 18 gage steel enclosure, universal mounting including an optional DIN rail clip for compact, flexibility
- Withstands extended temperature of –40° to +65° C
- Easy to configure with included software utility or web browser
- Ensures security through built-in data encryption and authentication

FLC810E+ Specifications

Operating Frequency
License-free, 2.412-2.462 GHz

Transmitter
Range. Up to 6 miles, LOS (line-of-sight) using 14 dBi* antennas
Output Power. 300 mW (+24.7 dB)
Modulation. CCK, DQPSK or DBPSK
Spreading Code. Direct sequence
Channels. 11 (3 non-overlapping)
Occupied bandwidth. 22 MHz

Receiver
Sensitivity. 11 Mbps –89 dBm; 5.5 Mbps –91 dBm; 2 Mbps –93 dBm; 1 Mbps –94 dBm

RF Data Transmission
Data Encryption. WEP+ (64 or 128 bit)
RF Data Rate. 1, 2, 5.5 or 11 Mbps

Operating Modes
Wireless Bridge, Wireless Bridge and Repeater, Access Point, Station Adapter, Router, DHCP Client, DHCP server

Data Interface
Interface. 10BaseT or 100BaseT (auto select)
Data Throughput. 800 Kbps to 6 Mbps (dependent upon RF link quality)

Diagnostics
Web (HTML) RF statistics; 7 indicators (Top: Power, Access Point activity, W-LAN Link, Data and Link; Side: Ethernet link, 10/100 BaseT)

Antenna
Connectors. reverse-polarity SMA, 50 Ω (Ohm)

Power
Power requirements. 12 VDC
Peak Transmit Current. 470 mA @ 12 VDC (6 Watts)

Operating Environment
Standard Temperature. -40° to 150° F (-40° to 65° C)
Humidity. 0 to 95% non-condensing humidity

Enclosure
Standard. NEMA 1; 18-gauge steel; 4.25” x 1.7 inch x 7.2 inch – including mounting feet (10.8 x 4.3 x 18.3 cm)
Mounting. Base bracket for horizontal or vertical mounting; Optional DIN rail clip

Weight
2.0 lb (.91 kg)

*Some dB restrictions apply
Specifications subject to change without notice.

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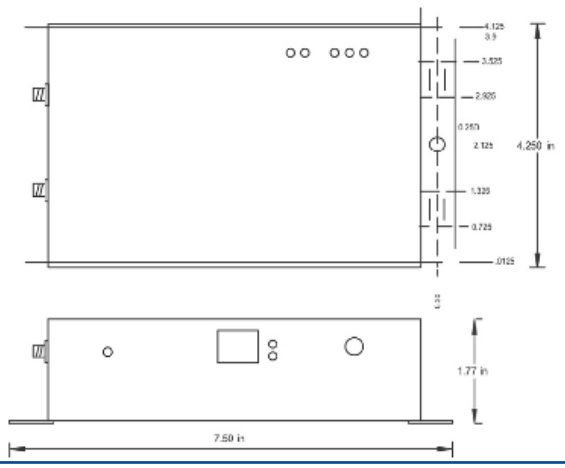
FLC810E+ Dimensions



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 expert technical support and communications consultation. *Data-Linc*’s industry proven RF technology has been successfully implemented in all major industries including automotive plants, consumer goods manufacturing/packaging, steel mills, mines, oil/gas applications, paper mills, utilities and transportation systems. Data-Linc also offers modems compliant with European Union specifications. Its products are available worldwide.

Alliance Partners

GE Fanuc

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