

EDG-4100W

EDG-4110W

**1-port RS-232 to WLAN
Data Gateway Module**

**1-port RS-422/485 to WLAN
Data Gateway Module**



FCC CE

Features

- Supports 802.11b standard
- Supports high transmission speeds up to 230 kbps
- Provides RS-232 (EDG-4100W), 422/485 (EDG-4110W) interfaces
- Supports TCP/IP protocol
- Provides 8 universal digital inputs/outputs for fast On/Off control
- Easy configuration via utility
- Supports Microsoft® Windows® 98/NT/2000/XP/2003 driver
- Automatic RS-485 data flow control (EDG-4110W)
- Easy to mount through backside PIN connectors
- Small size (54 * 59 mm)

Introduction

EDG-4100W and EDG-4110W are fast and cost-effective 802.11b board modules for enabling wireless networking. EDG-4100W provides one RS-232 port, while EDG-4110W provides one RS422/485 port. The modules enable nearly any device to communicate with 802.11b wireless LAN and shared networks, and they allow those devices to be remotely monitored, managed, and controlled. Functionally transparent and efficient, EDG-4100W and EDG-4110W provide a complete software and hardware solution. The modules effectively eliminate the need for OEMs and systems integrators to invest engineering resources to develop 802.11b wireless Ethernet networking solutions, and reduces the time it takes to bring intelligent devices to market. Thus, the modules are especially suitable to provide remote management and data accessibility to thousands of devices that cannot connect to the network such as factory machinery, security systems, heating and ventilation systems, lighting control systems and Point-of-Sale devices.

EDG-4100W and EDG-4110W are 54 x 59 mm wireless networking-enabled boards, so they can easily fit into almost any device. A wireless antenna is provided to connect to the 802.11b wireless LAN and pin headers are provided to connect DI/O, power and RS-232/422/485 into your boards. There are also 8 DI/O, which provides additional flexibility. These modules replace expensive dedicated PCs or lengthy serial cables with fast and reliable networking technology.

There is also development kit called EDG-4100WDK, that can be used develop custom applications. With this kit, you can easily complete serial and DIO applications. The kit includes, debug LED, driver CD, RS-232 loop back test connector, standard male DB9 connector, 8 channel DIO on terminal block, null modem cable and 100~240 V_{AC} to 5 V_{DC} power adaptor.

Specifications

Ethernet Communications

- **Compatibility** IEEE 802.11b
- **Speed** 11 Mbps
- **Connectors** Wireless

Serial Communications

- **Type** RS-232 (EDG-4100W)
RS-422/485 (EDG-4110W)
- **Connectors** Pin headers (8 x 2, 6 x 2)
- **Ports** 1
- **Data Bits** 5,6,7,8
- **Stop Bits** 1,1.5,2
- **Parity Bits** Odd,even,none,space,mark
- **Baudrate** 50 bps ~ 230 kbps
- **Data Signals** TxD,RxD,CTS,RTS,DTR,DSR,DCD,RI,GND (RS-232)
TxD+,TxD-,RxD+,RxD-,GND (RS-422)
Data+,Data-,GND (RS-485)

Digital I/O

- **Channels** 4 x DI, 4 x DO
- **Digital Input** Logic level 0 : 0 ~ 4.2 V , close to GND
Logic level 1 : 4.4 ~ 5 V , open
- **Digital Output** Open collector up to 30 V, 200 mA Max load

Software & Function

- **Drivers Supported** Windows 98/NT/2000/XP/2003
- **Utility Software** Auto-detecting configuration utility (up to 128 devices)
Port mapping utility
- **Operation Mode** Virtual COMport
- **Configuration** Configuration utility
Port mapping utility

Mechanics

- **Enclosure** None
- **Dimensions** 54 x 59 mm

General

- **Certifications** Pre-tested CE and FCC Class B

Power

- **Power Input** 5 V_{DC} +5%
- **Power Consumption** 2.5 W

Environment

- **Operating Temperature** 0~55° C (32~131° F)
- **Storage Temperature** -20~80° C (-4~176° F)
- **Operating Humidity** 20~95% (non-condensing)
- **Storage Humidity** 0~95% (non-condensing)

Ordering Information

- **EDG-4100W** 1-port RS-232 to WLAN Data Gateway Module
- **EDG-4110W** 1-port RS-422/485 to WLAN Data Gateway Module
- **EDG-4100WDK** EDG-4100W, EDG-4110W development kit