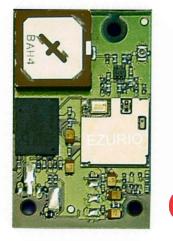
EZURiO

Intelligent Wireless LAN Module – 802.11b/g

(with 802.3 SLIP Interface)



Part No: WISMC03BI-01

The Intelligent Wireless LAN module is a fully integrated 802.11b/g module that is designed for embedded applications where an 802.3 interface is required. The module provides a UART connection to the host system. An integrated ARM processor runs the wireless network drivers for the 802.11b/g radio. With its integrated +2dB gain antenna it provides a complete 802.11b/g solution in a single module.

To make integration easy the WISM-MC has a simple control interface for managing the wireless connection. At the UART it provides an 802.3 packet interface over SLIP for easy integration into systems with existing host-based TCP/IP applications. The Wireless LAN module contains 2 configurable 10bit ADCs, 2 configurable 10bit DACs and 9 GPIO ports for application use. This level of integration brings the development of Wireless LAN applications down from months to just hours.

The EZURIO Wireless LAN module has been designed to be extremely small and thin, with a physical footprint of only 25 x 35mm and 5.5mm high (excluding connector). The Wireless LAN module contains an on-board high performance ceramic antenna plus a secondary U.FL connector for use with an external antenna or to implement antenna diversity. For product developers the EZURIO Wireless LAN module provides un-paralleled flexibility in terms of wireless connectivity.

Key Features

- Embedded 802.11 driver
- SLIP for Wireless Ethernet 802.3
- 802.11b and 802.11g drivers embedded
- Integrated high performance ceramic antenna
- UART interface
- Complete stand alone device with on board flash
- WEP encryption 64 and 128 bit options
- Support for access point and ad-hoc connections
- 2 x 10bit ADC
- 2 x 10bit DAC
- 9 x GPIO
- Low power
- 2 Year warranty

Key Benefits

- Stand alone dynamic module
- Integrated drivers
- SLIP support for Wireless Ethernet
- Backwards compatible with the EZURIO's Bluetooth® Intelligent Serial Modules
- Secure connections
- RoHS Compliant
- FCC and CE approved

Whether your requirement is for *Bluetooth* or Wireless LAN, EZURiO's embedded modules are designed with compatibility in mind. The pin configuration and physical dimensions of both the Wireless LAN module and EZURiO's *Bluetooth* Intelligent Serial Module (BISM) are the same giving you the choice of wireless technology.

EZURiO's wireless modules are the only choice for wirelessly enabling your applications.

Wireless Intelligent LAN Module

Features

Features		
Embedded 802.11b/g drivers		
SLIP Wireless Ethernet support		
Real-time scripting engine		
Processor and flash memory for application embedding		
Integrated high performance ceramic antenna		
Antenna diversity		
UART interface		
Support for access point and ad-hoc connections		
Pre-approved radio no further approvals required		
2 x 10bit ADC		
2 x 10bit DAC		
9 x GPIO		
Low power modes		
Ultra low physical size		
RoHS compliant		
2 Year warranty		



Overview of the technical specification

Feature	Implementation
Wireless LAN	802.11b and 802.11g compliant
Frequency	2.412 - 2.472 GHz
Channels	11 channels – USA
	13 channels – Europe (excl France)
	14 channels – Japan
	4 channels - France
Power Supply	3.3v – 5v DC +/- 5%
Access Modes	Infrastructure and Add-hoc
Program Memory	1000 script lines
Receive Sensitivity	-82dBm @ 2Mbps
Serial Interface	RS-232 bi-directional for commands
	and data. 16550 compatible.
Antenna	Integrated high gain ceramic
	antenna with support for antenna
	diversity (U.FL connector)
Range	100m (open field) at 2Mbit/s
	throughput
Power Saving Modes	Standby mode
	Deep Sleep with hardware and
	configurable software wake up
GPIO	9 x Configurable I/O
ADC	2 x 10bit
DAC	2 x 10bit

Physical Size25.0 X 35.0 mm. 11 grams Height 5.5 mm (excl connector) Height 8.0 mm overallData transfer rateUp to 2MbpsMax Transmit Power+15 dBm at antenna connector +17 dBm from integrated antenna +10 dBm limit for France and Hungary +0 dBm minimum transmit powerInterface Levels3.0vSLIPSupported for wireless EthernetPower ConsumptionLess than 250 mA during data transfer Serial ParametersSerial ParametersBaud rates configurable from 1200 to 230.4 bps DTR,DSR, DCD, RI, CTS and RTSTemperature Range-40° to +85°C operational -40° to +125°C storageSecurityWEP 64 and 128 bit supportInterfaceUART full RS-232	Feature	Implementation
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Dello Osmarliant	Interface	UART full RS-232
KOHS Compliant	RoHS Compliant	

The details contained within the document are subject to change; please download the product specification available from www.ezurio.com for the most up to date specification