EZL-50M
(Embedded Serial Ethernet Converter)

MODULE | ETHERNET NETWORK INTERFACE | TTL SERIAL INTERFACE | FIRMWARE Download TFTP(LAN) | ezConfig | VOLTAGE 5V | ID entification MAC | RoHS Compliant

12PIN CONNECTOR for SERIAL INTERFACE

12PIN CONNECTOR for ETHERNET INTERFACE

32 mm

50 mm
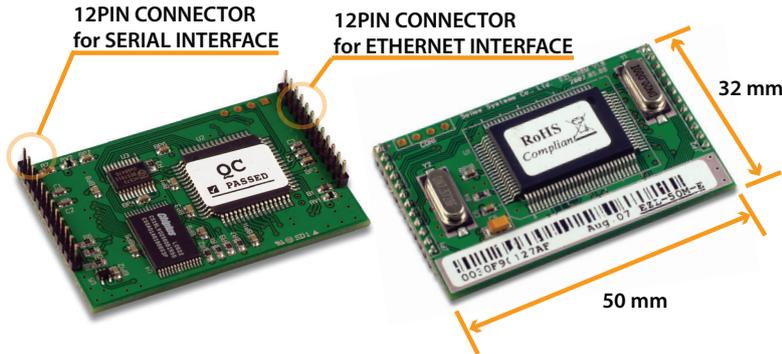
Overview

EZL-50M, one of the best seller of our company so far, is for manufacturers who want to easily and economically embed Ethernet connectivity in their products.

This compact module helps your devices get network connectivity with just serial connection. Applying this module, not only you can reduce cost and risk, but also you can shorten development time to add the network capability.
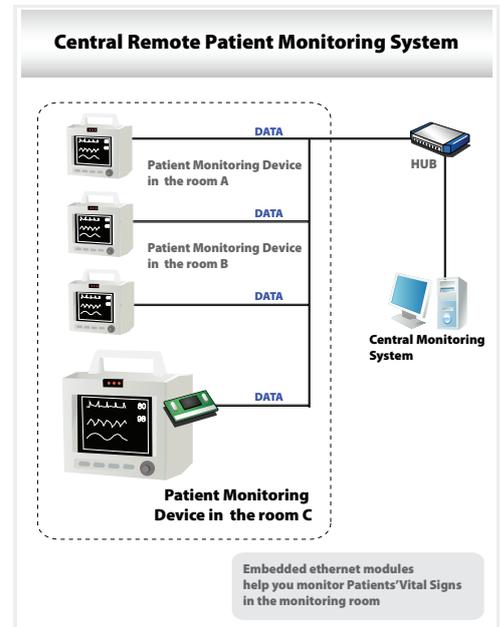
Because EZL-50M allows to extend the distance of your serial communication system, you are able to remotely control and monitor the serial devices over the Internet anywhere you are.

Since EZL-50M's UART port can be designed to interface with RS232, RS422 or RS485 systems, it is available on various environments.

Highlights

- Serial to Ethernet Converter
- Compact module type : 50mm x 32mm x 11mm
- 10Base-T Ethernet
- 1 x UART (5V-TTL, up to 115,200bps) available on RS232/RS422/RS485 extension
- Access Restriction : IP filtering, Password
- 4 Communication modes (TCP server, TCP client, AT Command and UDP)
- DHCP and PPPoE
- Flexible configuration and network communication by 'AT Commands' (patent)
- Powerful configuration software for Windows OS (ezConfig)
- Virtual COM Port Redirector for Windows OS (ezVSP)
- Firmware upgrade through Network
- Environmentally-friendly RoHS compliant

Applications

Central Remote Patient Monitoring System

DATA

Patient Monitoring Device in the room A

HUB

DATA

Patient Monitoring Device in the room B

DATA

Central Monitoring System

DATA

Patient Monitoring Device in the room C

Embedded ethernet modules help you monitor Patients' Vital Signs in the monitoring room

Specifications

*Serial Physical Interface

Serial Interface
5V TTL UART-RXD, TXD,
RTS(TXDE for RS485), CTS

Connector
1x12 2mm pitch male header

*Serial Port Property

Data Rate
1200 bps ～ 115200 bps

Data Bits
7, 8 bits

Parity
None, Even, Odd , Mark, Space

Stop Bit
1 bit

Flow Control
RTS/CTS Hardware, Xon/Xoff Software

* Network Physical Interface

Network Interface
1x12 2mm pitch male header (10Base-T)
Additional circuit required

* Software Functions

Protocols
TCP, UDP, IP, ICMP, ARP, Ethernet,
TFTP, DHCP, PPPoE

Security
IP filtering - Restrict host
Password for Configuring

Communication Mode
TCP server (T2S)
TCP client (COD)
TCP server/client with AT command (ATC)
UDP mode (U2S)

Additional Functions
Sending MAC address Option

* Indicators(LEDs)

Status
Active Low
Ethernet Link
Active Low
Ethernet RXD
Active High
Ethernet TXD
Active High

* Processors

CPU
Atmel AVR
ROM
64K bytes Flash Memory
RAM
32K bytes SRAM

* Management

ezConfig
Configuration and Monitoring Tool through
Ethernet

AT Command
Configuring in ATC mode

* Supplementary Software

ezConfig
Configuration Tool for Windows

ezConfig Library
The Library of ezConfig for VC++, VB, Java,
and Linux

ezVSP
Serial to Network Virtual Driver for Windows

ezTerm
Simple TCP/IP Communication Test Tool

hotflash
Firmware Upgrade Utility for Windows

* Dimension

Size
50mm x 32mm x 11mm

Body Netweight
about 10g

* Operating Environment

Input Voltage
DC 5±0.25V

Power Consumption
61mA typical

Operating Temperature
0 ℃ ～ 55℃

Storage Temperature
-40 ℃ ～ 85℃

System Diagram

Network Application

SERIAL(TTL)
Micro Processor
EZL-50M
ETHERNET TCP/IP
HUB
INTERNET
ETHERNET TCP/IP
LAN
PC