#### Data Sheet

# EZL-50M(A) | Embedded Serial Ethernet Convert

### **Overview**

EZL-50M(A), 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.

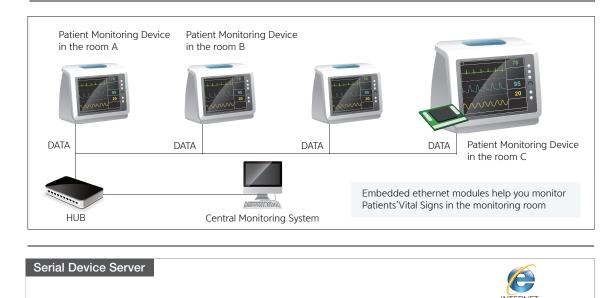
This compact module helps your devices get network connectivity with just serial connection. Applying this module, not only you can reduce cost and risk, but also you can shorten development time to add the network capability. Because EZL-50M(A) allows to extend the distance of your serial communication system, you are able to remotely control and monitor the serial devices over the Internet anywhere you are. Since EZL-50M(A)'s UART port can be designed to interface with RS232, RS422 or RS485 systems, it is available on various environments. Not only EZL-50M(A) performs like EZL-50M in all the functions, but also has an advantage in power consumption.

### **Features**

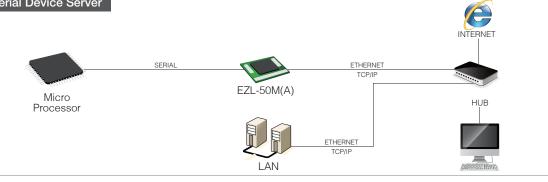
#### • 1 x UART(5V level)

- Compact module type (50mm x 32mm x 11mm)
- Flexible configuration and network communication by 'AT Commands' (patent)

## **Application**



### System Diagram



# **Specifications**

|  | Serial Physical Interface   |
|--|---|
| Serial Interface   | 5V level-RXD, TXD, RTS(TXDE for RS485), CTS   |
| Connector  | 1x12 2mm pitch male header x 2  |
|  | Serial Port Properties  |
| Data Rate  | 1,200 bps ~115,200 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  | 10Base-T Ethernet   |
|  | Additional circuit required   |
|  | Software Functions  |
| Protocols  | TCP, UDP, IP, ICMP, ARP, Ethernet, TFTP, DHCP, PPPoE  |
| Security   | IP filtering  |
| Security   | 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)   |
| Protocols  |   |
| FIOLOCOIS  | Active Low  |
| Ethernet Link  | Active Low  |
|  |   |
| Ethernet Link  | Active Low  |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD  | Active Low<br>Active High   |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig  | Active Low<br>Active High<br>Active High  |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD  | Active Low<br>Active High<br>Active High<br>Management  |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command  | Active Low<br>Active High<br>Active High<br>Management<br>Configuration and Monitoring Tool through Ethernet  |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig  | Active Low<br>Active High<br>Active High<br>Management<br>Configuration and Monitoring Tool through Ethernet<br>Configuring in ATC mode   |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig  | Active Low<br>Active High<br>Active High<br>Management<br>Configuration and Monitoring Tool through Ethernet<br>Configuring in ATC mode<br>Supplementary Software   |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP   | Active Low<br>Active High<br>Active High<br>Configuration and Monitoring Tool through Ethernet<br>Configuring in ATC mode<br>Supplementary Software<br>Configuration Tool for Windows<br>The Library of ezConfig for VC++, VB, Java, and Linux<br>Serial to Network Virtual Driver for Windows  |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig  | Active Low<br>Active High<br>Active High<br>Management<br>Configuration and Monitoring Tool through Ethernet<br>Configuring in ATC mode<br>Supplementary Software<br>Configuration Tool for Windows<br>The Library of ezConfig for VC++, VB, Java, and Linux<br>Serial to Network Virtual Driver for Windows<br>Simple TCP/IP Communication Test Tool   |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP<br>ezTerm   | Active Low<br>Active High<br>Active High<br>Management<br>Configuration and Monitoring Tool through Ethernet<br>Configuring in ATC mode<br>Supplementary Software<br>Configuration Tool for Windows<br>The Library of ezConfig for VC++, VB, Java, and Linux<br>Serial to Network Virtual Driver for Windows<br>Simple TCP/IP Communication Test Tool<br>Dimension  |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP   | Active Low   Active High   Active High   Configuration and Monitoring Tool through Ethernet   Configuring in ATC mode   Supplementary Software   Configuration Tool for Windows   The Library of ezConfig for VC++, VB, Java, and Linux   Serial to Network Virtual Driver for Windows   Simple TCP/IP Communication Test Tool   Dimension   50mm x 32mm x 11mm   |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP<br>ezTerm<br>Size   | Active Low   Active High   Active High   Management   Configuration and Monitoring Tool through Ethernet   Configuring in ATC mode   Supplementary Software   Configuration Tool for Windows   The Library of ezConfig for VC++, VB, Java, and Linux   Serial to Network Virtual Driver for Windows   Simple TCP/IP Communication Test Tool   Dimension   50mm x 32mm x 11mm   Operating Environment                |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP<br>ezTerm<br>Size<br>Input Voltage                        | Active Low   Active High   Active High   Configuration and Monitoring Tool through Ethernet   Configuring in ATC mode   Supplementary Software   Configuration Tool for Windows   The Library of ezConfig for VC++, VB, Java, and Linux   Serial to Network Virtual Driver for Windows   Simple TCP/IP Communication Test Tool   Dimension   50mm x 32mm x 11mm   Operating Environment   DC 5±0.25V                |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP<br>ezTerm<br>Size<br>Input Voltage<br>Current Consumption | Active Low   Active High   Active High   Configuration and Monitoring Tool through Ethernet   Configuring in ATC mode   Supplementary Software   Configuration Tool for Windows   The Library of ezConfig for VC++, VB, Java, and Linux   Serial to Network Virtual Driver for Windows   Simple TCP/IP Communication Test Tool   Dimension   50mm x 32mm x 11mm   Operating Environment   DC 5±0.25V   55mA typical |
| Ethernet Link<br>Ethernet RXD<br>Ethernet TXD<br>ezConfig<br>AT Command<br>ezConfig<br>ezConfig Library<br>ezVSP<br>ezTerm<br>Size<br>Input Voltage                        | Active Low   Active High   Active High   Configuration and Monitoring Tool through Ethernet   Configuring in ATC mode   Supplementary Software   Configuration Tool for Windows   The Library of ezConfig for VC++, VB, Java, and Linux   Serial to Network Virtual Driver for Windows   Simple TCP/IP Communication Test Tool   Dimension   50mm x 32mm x 11mm   Operating Environment   DC 5±0.25V                |