EZL-410
(Embedded Serial Ethernet Converter)

VOLTAGE 3.3V | MODULE | ETHERNET NETWORK INTERFACE | TTL SERIAL INTERFACE | ezConfig | FIRMWARE Download | MULTI PORT

TELNET | SECURITY SSL | RoHS Compliant
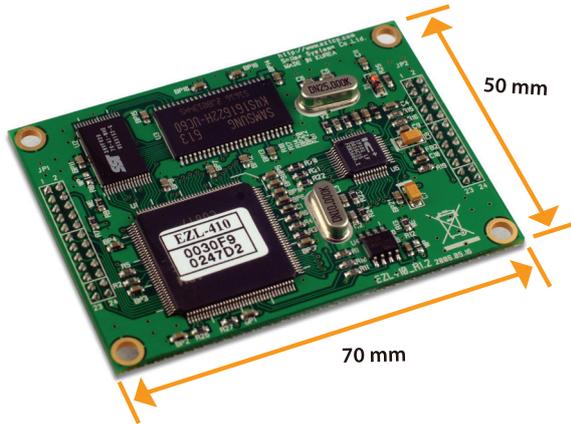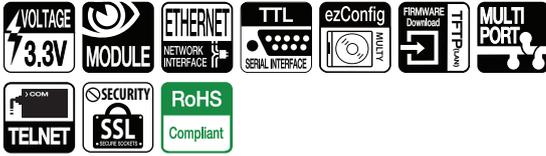
Overview

EZL-410 is a module for manufacturers who want to quickly and easily embed Ethernet connectivity in their products.

This module helps your multiple 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.
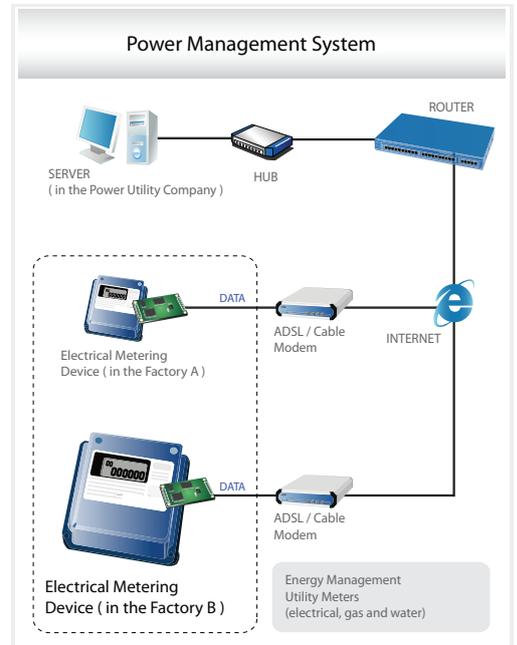
Because EZL-410 allows to extend the distance of your serial communication system, you are able to remotely control and monitor the serial devices over the Internet anywhere you are.

Since EZL-410 has four UART interfaces, it could be an ideal solution for environments where multiple serial devices are used.

50 mm

70 mm

Highlights

- Multi port Serial to Ethernet Converter
- 10/100Base-T Ethernet
- 4 x UART (3.3V-TTL, up to 115,200bps) available on RS232 extension
- MIC (Embedded RTOS developed by ourselves)
- Access Restriction : IP filtering, Password
- Security Protocol : SSL3.0/TLS1.0
- Flexible configuration and network communication by 'AT Commands' (patent)
- 4 Communication modes (TCP server, TCP client, AT Command and UDP)
- DHCP and PPPoE
- Powerful configuration software for Windows OS (ezConfigMP)
- Virtual COM Port Redirector for Windows OS (ezVSP)
- Firmware upgrade through Network
- Environmentally-friendly RoHS compliant

Applications

Power Management System

SERVER (in the Power Utility Company)

HUB

ROUTER

DATA

ADSL / Cable Modem

INTERNET

Electrical Metering Device (in the Factory A)

DATA

ADSL / Cable Modem

Electrical Metering Device (in the Factory B)

Energy Management Utility Meters (electrical, gas and water)

Specifications

*Serial Physical Interface

Serial Interface
4 x UART (3.3V-TTL)
RXD, TXD, RTS, CTS

Connector
2x12 2mm pitch male header

*Serial Port Property

Data Rate
600 bps ~ 115200 bps

Data Bits
5, 6, 7, 8 bits

Parity
None, Even, Odd

Stop Bit
1 or 2

Flow Control
RTS/CTS Hardware

* Network Physical Interface

Ethernet
2x12 2mm pitch male header
10Base-T/100Base-TX
Ethernet Speed Auto Sense
1:1 orCross-over Cable Auto Sense

* Software Functions

Protocols
TCP, UDP, IP, ICMP, ARP, Ethernet, TELNET
TFTP, DHCP, PPPoE, SSL3.0/TLS1.0,

Security
SSL (Secure Socket Layer)
Password for Configuring

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

Operating System
MIC RTOS

* Indicators(LEDs)

Link
Ethernet

Status LED
4 x Status LEDs

Ethernet
Link, Full duplex, 10M, 100M

* Processors

CPU
ARM7 Core

ROM
256K bytes Flash Memory

RAM
2M bytes SDRAM

* Management

ezConfigMP
Configuration and Monitoring Tool through Ethernet

Telnet
Telnet Login

AT Command
Configuring in ATC mode

* Supplementary Software

ezConfigMP
Configuration Tool for Windows

ezConfigMP Library
The Library of ezConfigMP for VC++

ezVSP
Serial to Network Virtual Driver for Windows

ezTerm
Simple TCP/IP Communication Test Tool

hotflash
Firmware Upgrade Utility for Windows

* Dimension

Size
70mm x 50mm x 9mm

Body Netweight
about 18g

* Operating Environment

Input Voltage
3.3V

Power Consumption
300mA typical

Operating Temperature
0 ℃ ~ 55℃

Storage Temperature
-40 ℃ ~ 85℃

System Diagram

Serial Device Server

Serial Tunnelling

SSL

Multiple Serial Ports (4)