

CSE-M32

(Embedded Serial to Ethernet Converter)



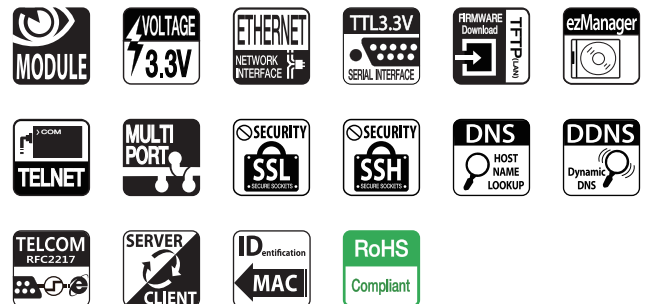
Overview

CSE-M32 is a module for manufacturers who want to quickly and easily 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 CSE-M32 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 each of CSE-M32's two UART ports can be designed to interface with RS232, RS422 or RS485 systems, it is available on various environments.

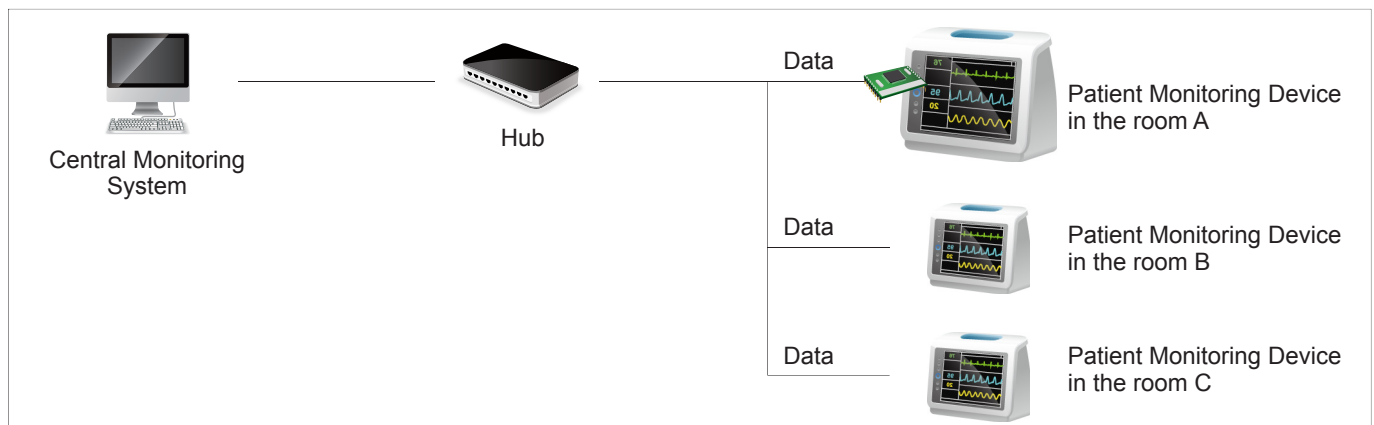
Highlights

- Compact size : 50mm x 32mm x 9mm
- 10/100Base-T Ethernet, auto MDI/MDIX
- High speed UART x 2 (3.3V-TTL, up to 1.8Mbps) available for RS232/RS422/RS485 extension (In case of use both COM1 and COM2, the maximum data rate of the UART is limited to 921.6Kbps)
- Access Restriction : IP and MAC address filtering, Password
- Security Protocols : SSL3.0/TLS1.0, SSH2.0
- Flexible configuration and network communication by 'AT Commands' (Patent)
- 4 Communication modes
(TCP server, TCP client, AT Command and UDP)
- Variety of monitoring status
(Debugging mode, ezManager, Telnet)

Icons



Application



Specifications

Serial Physical Interface

Serial Interface	2 x 3.3V TTL UART
	RXD, TXD, RTS (TXDE for RS485), CTS, GND
Connector	2 x 12 2mm pitch pin header

Serial Port Properties

Baudrate	300bps ~ 1,843,200bps (When only COM1 is used)
	300bps ~ 921,600bps (When both COM1 and COM2 are used)
Data Bits	5, 6, 7, 8 bits
Parity	None, Even, Odd, Mark, Space
Stop Bit	1, 1.5, 2

Network Physical Interface

Network Interface	10Base-T/100Base-TX Ethernet
	Ethernet Speed Auto Sense
	1:1 or Cross-over Cable Auto Sense
	Simple External Circuit Required

Software Functions

Protocols	TCP, UDP, IP, ICMP, ARP, Ethernet, TELNET
	TFTP, DHCP, PPPoE, DNS, Telnet COM Port Control Option
Security	SSL (Secure Socket Layer)
	SSH (Secure Shell)
	IP & MAC filtering - Restrict host or network
	Password for Configuring
Communication Mode	TCP Server (T2S)
	TCP Client (COD)
	TCP Server / Client with AT Command (ATC)
	UDP Mode (U2S)
Additional Functions	Remote Debug Function
	Sending MAC address Option

Indicators (LEDs)

Status	The Current Status
CN0, CN1	TCP Connection Indicator

Management

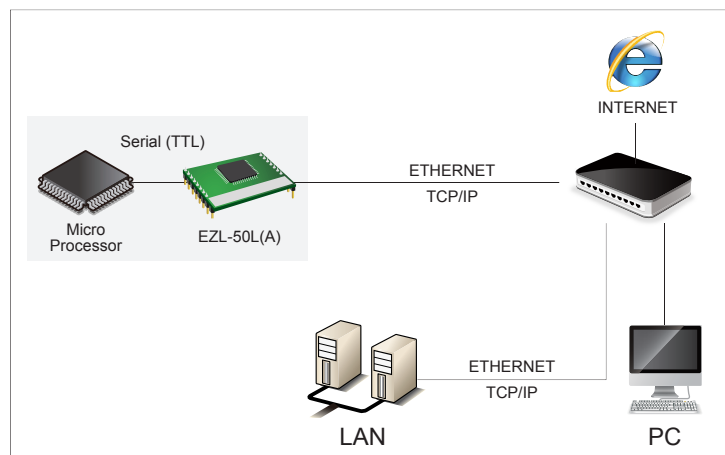
ezManager	Configuration and Monitoring Tool through Network and Serial
Telnet	Telnet Login
AT Command	Configuring in ATC Mode

Supplementary Software

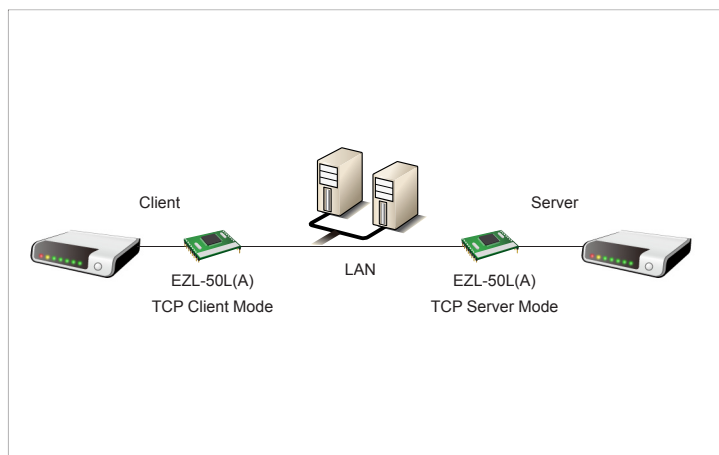
ezManager	Configuration Tool for Windows
ezVSP	Serial to Network Virtual Driver for Windows
ezTerm	Simple TCP/IP Communication Test Tool

Dimension	
Size	50.0mm x 32.0mm x 9.0mm
Operating Environment	
Input Voltage	DC 3.3V
Current Consumption	230mA typical
Operating Temperature	0℃ ~ +55℃
Storage Temperature	-45℃ ~ +85℃

System Diagram



Serial Device Server



Serial Tunnelling