

Data Sheet

# CSE-M53G | Serial Ethernet Module



## Overview

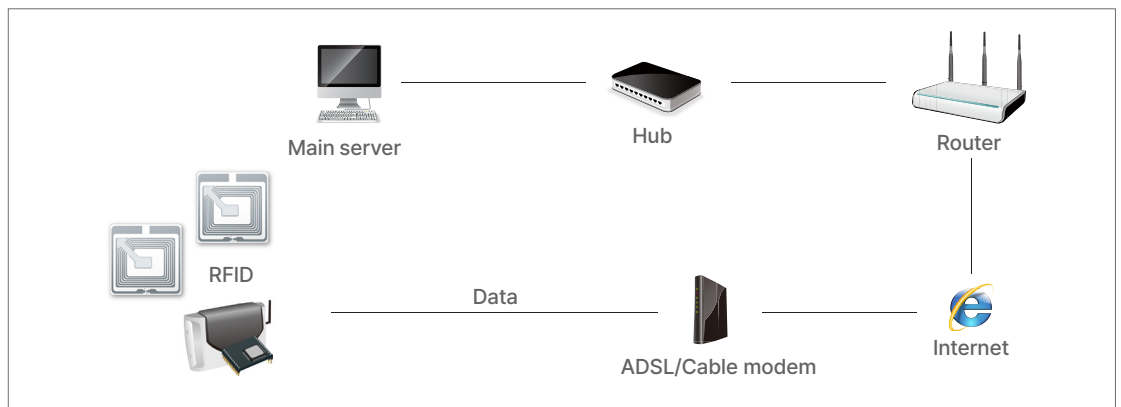
CSE-M53G is a super compact embedded Serial to Ethernet converting module which is pin compatible with both CSE-M53 and CSE-M53N.

This module is equipped with various communication functions such as IPv6, DNS, secure communication (TLS v1.2) and delimiter settings for packet fragmentation, and supports industrial temperature specifications of -40°C to +85°C.

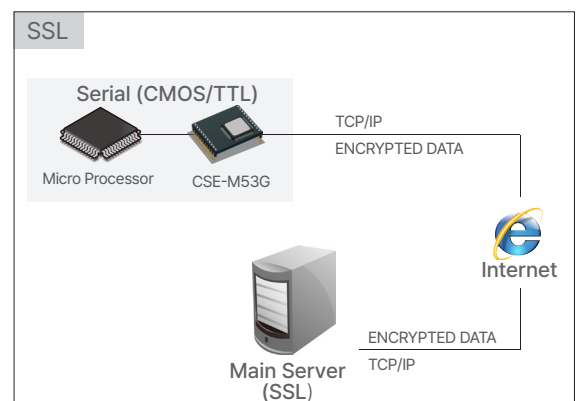
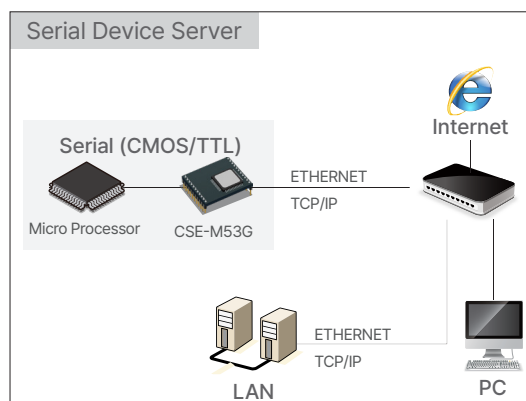
## Features

- 1 x UART(3.3V level)
- 10/100Mbps Ethernet
- Super compact module type (20mm x 24mm)
- High speed UART x 1 (up to 921.6Kbps, under certain conditions)
- Industrial temperature range (-40°C~+85°C)
- Support TLS v1.2
- Multiple Connection (F/W v2.3A or later)
- Delimiter settings for packet fragmentation
- IPv4/IPv6 dual stack
- Flexible configuration and network communication by 'AT Commands' (patent)

## Application



## System Diagram



## Specifications

| Serial Physical Interface  |   |
|----------------------------|---|
| Serial interface           | 3.3V level with 5V tolerant input<br>RXD, TXD, RTS(TXDE for RS485), CTS, GND  |
| Connector                  | 1 X 10 2mm pitch pin header X 2   |
| Serial Port Property       |   |
| Baudrate                   | 300bps ~ 921,600bps   |
| Data Bits                  | 8bits, 7bits with parity  |
| Parity                     | None, Even, Odd, Mark, Space  |
| Stop Bit                   | 1, 2 (* a single idle bit is automatically added to every stop bit by the MCU function)   |
| Network Physical Interface |   |
| Network Interface          | 10Base-T/100Base-TX Ethernet<br>Ethernet Speed Auto Sense<br>1:1 or Cross-over Cable Auto Sense<br>Simple External Circuit Required |
| Software Functions         |   |
| Protocols                  | IPv4/IPv6 dual stack, ICMPv6/TCPv6/UDPv6<br>TCP, UDP, IP, ICMP, ARP, TELNET<br>DHCP, PPPoE, DNS, DDNS                               |
| Security                   | SSL (Secure Socket Layer)<br>IP & MAC filtering - Restrict host or network<br>Password for Configuring                              |
| Communication Mode         | TCP Server (T2S)<br>TCP Client (COD)<br>TCP Server/Client with AT command (ATC)-Patent<br>UDP Mode (U2S)                            |
| Additional Functions       | Separator settings for packet fragmentation<br>TCP Server / Client Mode<br>Sending MAC address Option                               |
| Management                 |   |
| ezManager                  | Configuration and Monitoring Tool through Network and Serial  |
| Telnet                     | Telnet Login  |
| AT Command                 | Configuring in ATC Mode - Patent  |
| Supplementary Software     |   |
| ezManager                  | Configuration Tool for Windows  |
| ezVSP                      | Serial to Network Virtual Driver for Windows  |
| ezTerm                     | Simple TCP/IP Communication Test Tool   |
| Dimension                  |   |
| Size                       | 20mm X 24mm X 9.1mm   |
| Operating Environments     |   |
| Input Voltage              | DC 3.3V   |
| Current Consumption        | 110mA(100M Ethernet), 150mA(10M Ethernet)   |
| Operating Temperature      | -40°C ~ +85°C   |
| Storage Temperature        | -40°C ~ +85°C   |