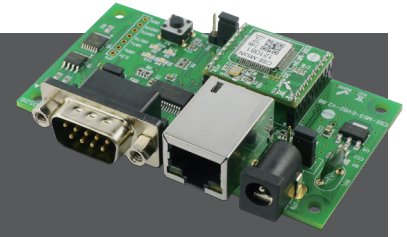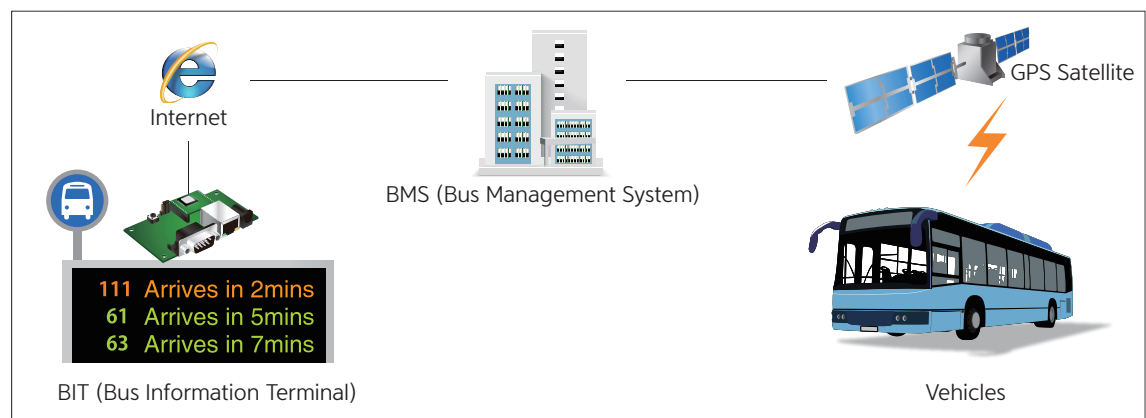Data Sheet

CSE-B63N2 | RS232/RS485 Ethernet Module

Overview

CSE-B63N2 is an embedded RS232/RS485 to Ethernet board which CSE-M53N is integrated. CSE-B63N2 is offered with an evaluation board and it becomes much easier to embed CSE-M53N in your system by getting rid of the time burden to build an additional circuit on your own. The basic concept of this RS232/RS485 to Ethernet board is quickly and easily adding networking capabilities to your serial equipment, which helps you remotely control and monitor them from anywhere in the world.

As well as general functions, it provides developed features such as security options (SSL3.0/TLS1.0, IP filtering, Password), a separator for packet fragmentation, and particularly IPv4/IPv6 dual stacks that make you be prepared for moving forward to next generation Internet protocol, IPv6.

Thanks to these benefits, CSE-B63N2 can be used for various industrial applications: RFID System, Remote Monitoring System, Extending distance between two devices through the LAN, etc.
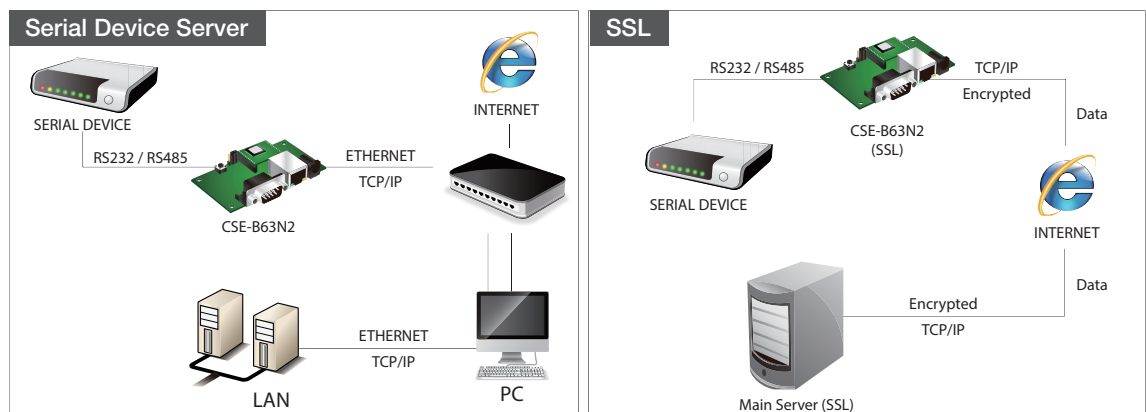
Features

• IPv4 / IPv6 dual stack

• Ethernet 10Base-T or 100Base-TX (Auto-Sensing)

• Stateless / Stateful (DHCPv6) address autoconfiguration

• Security options (SSL3.0/TLS1.0, IP filtering, Password)

• Separator settings for packet fragmentation

• High speed RS232/RS485 x 1 (up to 921.6Kbps)
  - In case of using Xon/Xoff, the maximum data rate of the UART is limited to 230.4Kbps
  - Built-in biasing resistance (3.9Kohm)

• Reverse voltage, Surge protection

• Industrial temperature range (-40℃ ~ +85℃)

Application

Internet

BMS (Bus Management System)

GPS Satellite

111 Arrives in 2mins
61 Arrives in 5mins
63 Arrives in 7mins

BIT (Bus Information Terminal)

Vehicles

System Diagram

Serial Device Server

SERIAL DEVICE

RS232 / RS485

CSE-B63N2

ETHERNET
TCP/IP

INTERNET

ETHERNET
TCP/IP

LAN

PC

SSL

RS232 / RS485

CSE-B63N2
(SSL)

TCP/IP
Encrypted

Data

SERIAL DEVICE

INTERNET

Data

Encrypted
TCP/IP

Main Server (SSL)

Specifications

	Serial Physical Interface	
Serial Interface	RS232 - RXD, TXD, CTS, RTS, GND	
	RS485 - TRX+, TRX-, GND (Built-in 3.9Kohm biasing resistance)	
Connector	9 pin D-sub male	
	Serial Port Properties	
Baudrate	300 bps ~ 921,600 bps	
Data Bits	8bits, 7bits with parity	
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	
	Software Functions	
Protocols	IPv4/IPv6 dual stack, ICMPv6/TCPv6/UDPv6	
	TCP, UDP, IP, ICMP, ARP, TELNET	
	DHCP, PPPoE, DNS, DDNS	
Security	SSL (Secure Socket Layer)	
	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) - Patent	
	UDP Mode (U2S)	
Additional Functions	Separator settings for packet fragmentation	
	TCP Server/Client Mode	
	Sending MAC address Option	
	Indicators (LEDs)	
PWR	Red	
Serial TXD	Green	
Serial RXD	Green	
Serial RTS	Green	
Serial CTS	Green	
TCP	TCP Connection Indicator (Green)	
STS	The Current Status (Green)	
Ethernet Link	Green	
Ethernet RXD	Green	
Ethernet TXD	Green	
	Supplementary Software	
ezManager	Configuration Tool for Windows	
Telnet	Serial to Network Virtual Driver for Windows	
AT Command	Simple TCP/IP Communication Test Tool	
	Dimension	
Size	80.0mm x 44.0mm x 17.0mm	
	Operating Environment	
Input Voltage	DC 5V ±0.5V	
Current Consumption	170mA (100M Ethernet), 200mA (10M Ethernet)	
Protection	Surge Protection / Reverse Voltage Protection	
Operating Temperature	-40℃ ~ +85℃	
Storage Temperature	-40℃ ~ +85℃	