

INTRODUCTION

Synapsys Solutions provide a range of accessory products available for various applications and protocols. They are suitable for both Synapsys Solutions and third party.

These products, used in conjunction with other products on the BMS network, can help ensure a building complies with latest Part L2 Building regulations.

APPLICATION

This product has been designed to convert serial fieldbus networks to an IP network according to the site requirements.



Features

- ModBus Serial to ModBus TCP/IP or RTU/IP
- M-Bus network to ModBus Ethernet
- Pulse Counter to ModBus TCP/IP or RTU/IP
- Pulse Counter to M-Bus Ethernet
- Digital Input to ModBus TCP/IP or RTU/IP
- Digital Input to M-Bus Ethernet

Hardware

- Built-in 60 Unit load M-Bus port (Level Converter NOT required)
- Pulse Counter/Digital Input port
- Single PoE (Power Over Ethernet) port
- Single RS485/RS232 port

Protocol

- M-Bus Serial to up to 60 Unit loads
- M-Bus Ethernet to M-Bus Master
- ModBus RS485, RS232 Serial to slaves
- ModBus TCP/IP or ModBus RTU/IP to Master

DESIGN AND FUNCTION

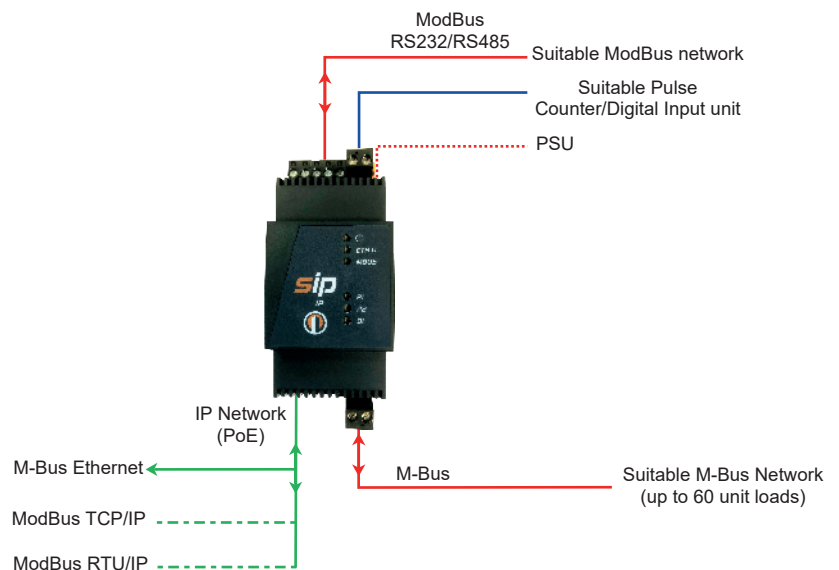
This SIP Slice IP Converter product connects directly to a single ModBus Serial network and/or a single M-Bus network, and converts the messages according to the selected protocol IP network standard.

A ModBus Master communicating via the IP network using ModBus TCP/IP or ModBus RTU/IP protocol, can make a ModBus request for registers in slaves connected to either a ModBus RS232 with a single ModBus slave address or RS485 serial network with up to 32 ModBus slave addresses.

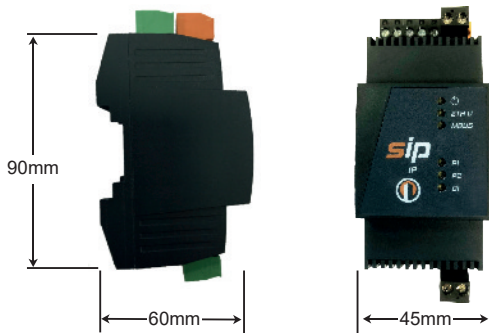
An M-Bus master communicating via the IP network using M-Bus Ethernet protocol, can request M-Bus Telegrams for up to 60 unit loads/M-Bus devices connected directly to the MBUS port. This hardware has a built in level converter.

A Pulse output or Digital output from a third party device, can be connected directly at DI. The Pulse counter or Digital Input status, defined in the internal web pages, will make the value available via ModBus TCP/IP, or ModBus RTU/IP, and/or M-Bus Ethernet.

SYSTEM OVERVIEW



Note Refer to Quick Start for wiring details.



SPECIFICATION

Dimensions

45W x 90H (110 with connectors) x 60Dmm
 120g

Default Setup Parameters

IP address: 192.168.1.128 (255.255.255.0)

Power Input

Input Voltage Range: 24VDC
 Power Consumption: 0.4A @ 24VDC

Hardware connections

Power: 2 pin Terminal
 RS232/RS485: 5 pin Terminal (Half duplex)
 Pulse/Input: 2 pin Terminal (Pulse Counter or Digital Input State),
 Cable: 200m, Freq: 25Hz, 20ms
 Eth0: RJ45 connector supports 10BASE-T/100BASE-TX with auto-negotiation and auto-crossover with standard POE IEEE 802.3af
 LEDs: Power, Eth 0, MBUS, P1 (RS232), P2 (RS485), D1

Environmental

Operating Temperature: 0 - 55°C
 Storage Temperature: -25°C - 85°C

With a comprehensive range of EM&T and interface products for BACnet (IP/MSTP), IoT, M-Bus, ModBus, Pulse/Digital Input, SNMP and Trend protocols we can help you easily link meter, sub-meters and building plant to BeMS systems with energy management and monitoring functionality, and virtual metering.

Download brochures and datasheets from our website. Alternatively, contact us for more information or to request a quote.

INSTALLATION

DIN rail mounting (TS35).

Note Contact the relevant device manufacturer for specific protocol cable recommendations.

CONFIGURATION

Specifically designed HTML web pages from internal web server used to configure this unit.

PRODUCT CODES

PART NO.	DESCRIPTION
SYN/IP/CONV	Converts ModBus Serial network, M-Bus network and/or Pulse Counter/Digital Input to ModBus or M-Bus on the IP network
<i>Accessories</i>	
PSU/24VDC/nA	24V nA DC Power Supply
SYN/ESWn	10/100BaseT(X) ports Ethernet switch

Note Contact Synapsys Solutions for PSU requirements.

REGULATIONS

