

INTRODUCTION

The Procon Melco SIP+ interface is one of a range of innovative interface products available for various applications and protocols. They have been developed to help reduce engineering time and cost, and to meet the demand for more information and better energy control.

These products, used in conjunction with a BeMS, can help ensure a building complies with latest Part L2 Building regulations.

APPLICATION

The Procon Melco SIP+ product range has been designed to expose values from devices connected to the Mitsubishi AC network, and a BMS (BACnet or Trend), a SCADA system, and/or to an IoT (MQTT/REST) platform.



Features

- Max 5000 points
- Max 4 x Melco Instances (1 per AC network)
- Max 50 units per AC network
- BMS compatible application
- IoT compatible application
- SCADA compatible application

Hardware

- 2 x Ethernet Ports
- 1 x RS485 Port (ModBus Master connectivity)
- 1 x RS232 Port (ModBus Master connectivity)

Protocol

- Mitsubishi
 - Supports AE200, and EW50
- BACnet/IP
 - Single BACnet network, BACnet Server, max .100 BICs
- IoT: REST Server
 - Supports REST API
- IoT: MQTT
 - AWS, Microsoft Azure, Google IOT Core via third party Broker
- ModBus Slave
 - Single TCP/IP (3 x masters) or Serial driver (1 x master)
- VIQ
 - Single UDP Group, Trend LAN, max. 100 vIQ OSs

DESIGN AND FUNCTION

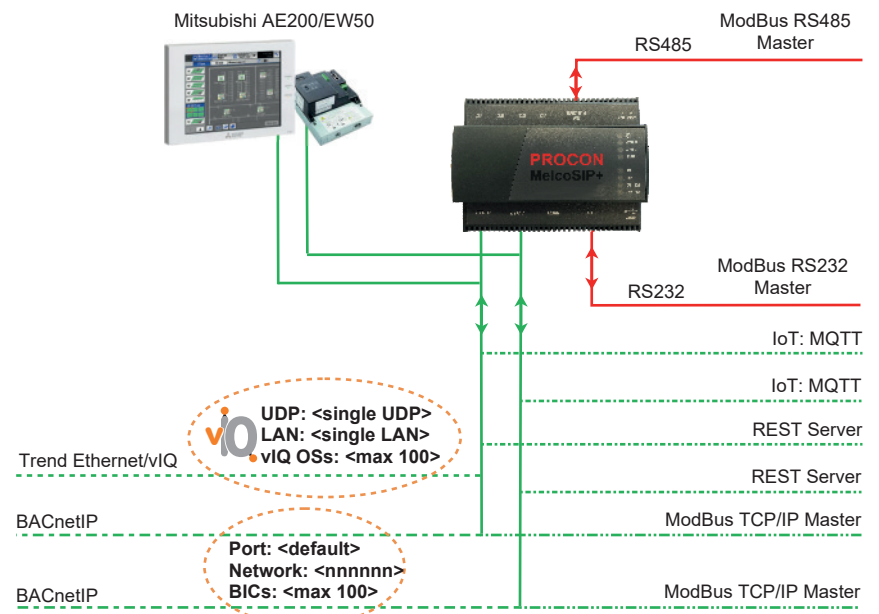
The product provides an interface between devices connected on the Mitsubishi AC (air conditioning) network, available through the Mitsubishi Centralised Controller, e.g. Mitsubishi AE200, and/or EW50, and a BMS (BACnet or Trend), a SCADA system (ModBus Slave), and/or to IoT (MQTT/REST) cloud based platforms.

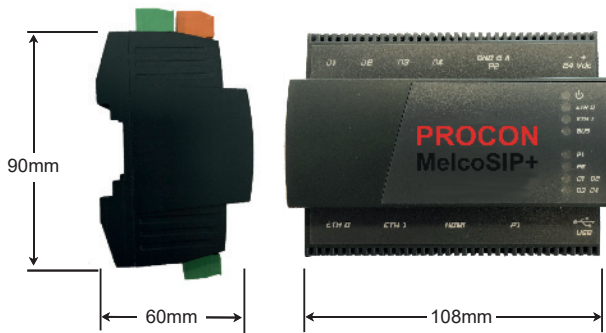
Each Mitsubishi AE200/EW50 central controller supports max 50 units per M-Net AC network, i.e. indoor units, M-Series, City Multi, Mr Slim, Lossnay, & Ecodan CAHV units. All parameters (exc. energy) from each connected device on the AC network can be linked to a defined parameter to expose these values via a required protocol using the configuration web pages.

This product does not support QAHV and CAHV.

To simplify the commissioning, each Melco driver (max 4) includes a discovery tree listing all available devices/parameters, and shows a list of selected Mitsubishi device parameters. Connectivity to BMS/IoT/SCADA drivers are configured via the available BMS/IoT/SCADA drivers.

SYSTEM OVERVIEW





SPECIFICATION

Dimensions

108W x 90H (110 with connectors) x 60Dmm
160g

Default Setup Parameters

IP address: 192.168.1.128 (255.255.255.0)

Power Input

Input Voltage Range: 24VDC

Power Consumption: 0.3A @ 24VDC

Hardware connections

Power Connector: 2 pin Terminal

RS232 Connector: RJ45 Connector (Cable available)

RS485 Connector: 3 pin Terminal, Half duplex

Input Connector: 2 pin Terminal for U1 (Make/Break on Fire)

Eth0 & Eth1: 2 x RJ45 connector supports 10BASE-T/100BASE-TX with auto-negotiation and auto-crossover

LEDs: Power, Eth0, Eth1, Bus, P1 (RS232), P2 (RS485), U1 & U2, and U3 & U4

Environmental

Operating Temperature: 0 - 55°C

Storage Temperature: -25°C - 85°C

INSTALLATION

DIN rail mounting (TS35).

CONFIGURATION

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

PRODUCT CODES

PART NO.	DESCRIPTION
<i>Procon Melco/SIP+</i>	
MELCO/SIP+/1AC/50	Max 1 x Mitsubishi Centralised Controllers with max 50 units (max 1250 points) linked to BMS/IoT/SCADA
MELCO/SIP+/2AC/100	Max 2 x Mitsubishi Centralised Controllers with max 100 units (max 2500 points) linked to BMS/IoT/SCADA
MELCO/SIP+/3AC/150	Max 3 x Mitsubishi Centralised Controllers with max 150 (max 3750 points) units linked to BMS/IoT/SCADA
MELCO/SIP+/4AC/200	Max 4 x Mitsubishi Centralised Controllers with max 200 (max 5000 points) units linked to BMS/IoT/SCADA
<i>Accessories</i>	
PSU/24VDC/1A	24V 1A DC Power Supply
SYN/ESWn	10/100BaseT(X) port Ethernet switch

REGULATIONS

Home and Building Electronic Systems (HBES) and Building Automation and Control Systems (BACS) for EMC requirements

- EMC: EN IEC 63044-5-1:2019, EN IEC 63044-5-2:2019
- EMI: EN55032

RoHS (Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment, 'RoHS & RoHS 2.0')

With a range of products that include fieldbus, BMS, IoT and SCADA protocols, we can help you easily link building data to BeMS, and/or Synapsys Solutions SIP Insight (Billing/Monitoring) platform or a 3rd party platform.

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