

# SIP+ EMT IF - Real-time Energy Monitoring

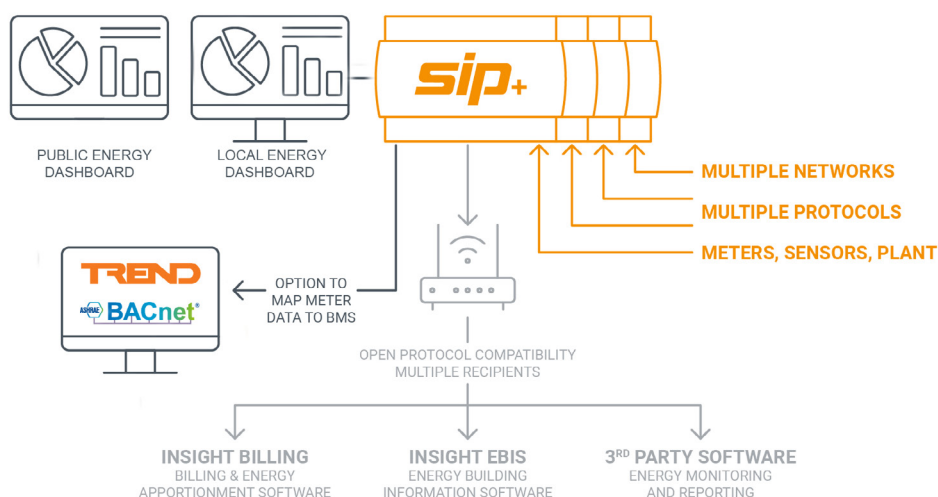
## Real-time insights for efficient building energy usage

## Overview

SIP+ EMT IF is the energy variant of our successful and established range of SIP+ hardware and works on the same principals, delivering a reliable, simple and effective on-site energy monitoring solution. Our Vision software, which can be added to the hardware, provides users with configurable local and public dashboards which can be used to promote greater energy awareness amongst building users.

SIP+ EMT IF is a fixed cost on-site solution with no on-going license fees and uses our latest multi-protocol hardware. The hardware can collect and display data from devices via M-Bus, ModBus, BACnet, Trend Networks and IoT protocols such as MQTT and REST.

The hardware also enables users to interface any of their sub metering or devices with a BACnet BMS via our BACnet Integration Controller (BIC) or Trend BMS via our Virtual IQ (vIQ), when required. Furthermore SIP+ EMT IF will also allow you to access your energy data independently to the BMS if required.

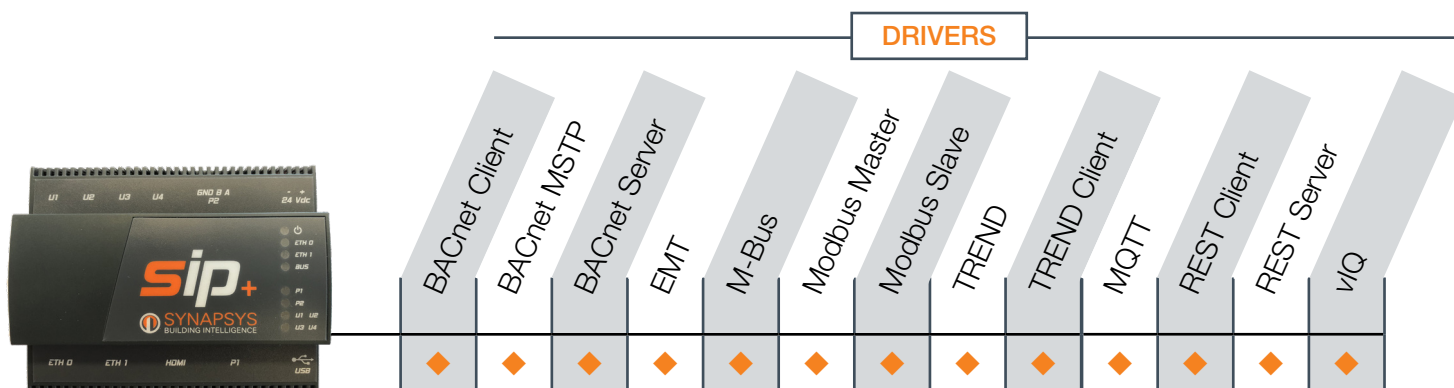


## SIP+ EMT IF hardware

- Cost-effective on-site energy monitoring solution
- Easy to install and commission
- No ongoing licenses or maintenance fees
- Data reports as CSV files via FTP, SFTP, FTPS and email
- Direct data collection via the MySQL database
- Data held on site
- Simplifies monitoring and interfacing
- Reduces engineering time and cost
- Reliable proven platform
- Integrates with a wide range of technologies and protocols

## Drivers available in the SIP+ EMT IF hardware

SIP+ EMT IF is a multi-protocol hardware platform supporting the drivers indicated below for data integration and acquisition.



## Logging data - the choice is yours

SIP+ EMT IF enables users to be able to collect the energy data they require in the way which best suits their requirements or the specification. We provide the user with the freedom to set up the system however they want, integrate the data to the BMS or have a stand alone system, even collect the data directly from the on-site BMS to display. SIP+ EMT IF also stores the data collected on-site, so users can always access and download it if required.

### Logging data from meter networks

SIP+ EMT IF enables you to define, collate and display energy data and performance from multiple networks of ModBus, M-Bus meters, IoT devices and Pulse meters, which can also be included using pulse acquisition modules.

This solution offers a stand alone system which provides a cost effective, energy monitoring solution.

Data visualisation



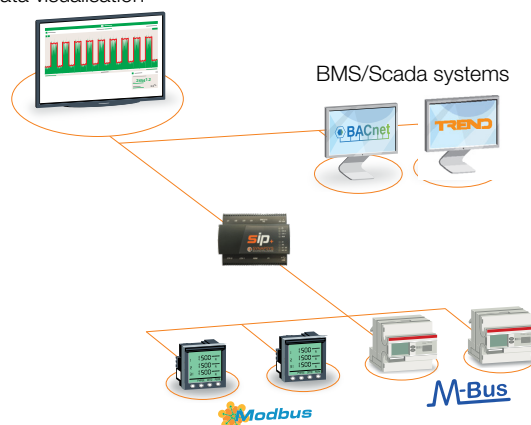
### Logging data from meter networks and interfacing to a BMS

SIP+ EMT IF has all the functionality of the SIP+ EMT devices but with the added benefit of being able to have additional registers from the meters interfaced to your Trend or BACnet BMS.

For Trend interfacing is via our own Virtual IQ - vIQ's present third party devices as Trend Controllers with values transferred as Trend Modules - Sensors, Knobs, Switches, Digital Inputs - with full Trend functionality.

For BACnet interfacing our new BACnet Integration Controller - BIC's present third party devices as BACnet devices, with values transferred as BACnet object types, with Notification Class and Trendlog functionality, cost effective, energy monitoring solution.

Data visualisation

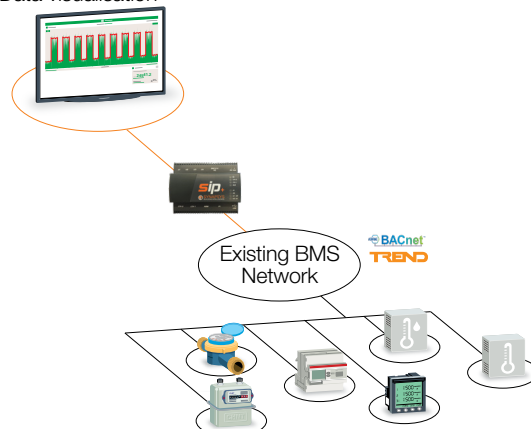


### Logging data points being monitoring by an existing BMS

SIP+ EMT IF enables the devices connected to and monitored by an existing BMS to be included in the system.

The SIP+ EMT IF device sits on the BMS network, learns the pulse meter outputs for example, and these can then be displayed as graphs and included in the Energy Monitoring system.

Data visualisation



## Why add SIP+ Vision?

A range of enhanced features and connectivity options are unlocked by installing Vision on a SIP+ EMT IF device, including a configurable public display option that includes energy graphs, financial calculations, energy and utility comparisons, energy performance, news feeds and weather information.

In addition SIP+ Vision also provides a system portal through which multiple SIP+ EMT IF hardware devices can be connected and networked to provide a fully featured energy monitoring system.

### SIP+ EMT IF

Define, collate and display energy data.

### SIP+ Vision

SIP Vision provides added functionality, networking of SIP+ devices and public display options.

### Features

Energy data graphs	◆	◆
Comparison graphs		◆
Energy performance data	◆	◆
Dynamic web page scaling	◆	◆
Public display		◆
Configurable public display		◆
Financial calculations		◆
Group comparisons		◆
Energy		◆
Video player		◆
Baseline comparison		◆
Image display		◆
Utility performance		◆
Data value display		◆
Carbon footprint		◆
Carbon performance		◆
News feed		◆
Weather data		◆
Sunrise/Sunset data		◆
Network time settings		◆
Alarms displayed	◆	◆
Alarm setting & adjusting	◆	◆
Email exception reports	◆	◆
Manual CSV data download	◆	◆
Scheduled download to FTP	◆	◆
MySQL Connection 3rd party	◆	◆
Scheduled CSV reports	◆	◆
Interface to Trend	◆	
Interface to BACnet	◆	
Data points from Trend	◆	
Data points from BACnet	◆	
Meter grouping single SIP+	◆	◆
Meter grouping multiple SIP+		◆



Dashboard and public display examples

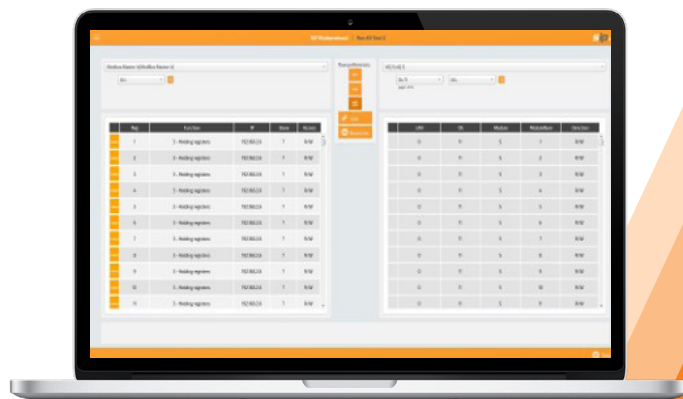
## Commissioning and support

As with all Synapsys products and software solutions, Our SIP+ EMT IF hardware devices have been designed to be simple to deploy and use.

Our Commissioning engineers, Software and Technical support teams are available to support installation and set-up, right through to handover to the end user.

We also provide customers with access to our SIP Integrator support website, which contains all of our technical data sheets and information about our latest technical updates.

Through our SIP Integrator support website we also give customers access to our catalogue of free SIeasy files which simplify the commissioning and configuration of our products, saving you time and money.



## SIP+ EMT IF product range

Order code	Description
SIP+/EMT-IF/25P	Up to 25 EMT data points. Up to 25 BMS data points.
SIP+/EMT-IF/50P	Up to 50 EMT data points. Up to 50 BMS data points.
SIP+/EMT-IF/100P	Up to 100 EMT data points. Up to 100 BMS data points.
SIP+/EMT-IF/250P	Up to 250 EMT data points. Up to 250 BMS data points.
SIP+/EMT-IF/500P	Up to 250 EMT data points. Up to 500 BMS data points.
SIP+/EMT-IF/1000P	Up to 250 EMT data points. Up to 1000 BMS data points.
SIP+/EMT-IF/1500P	Up to 250 EMT data points. Up to 1500 BMS data points.
SIP+/EMT-IF/2000P	Up to 250 EMT data points. Up to 2000 BMS data points.
SIP+/Vision/FW	Firmware only Vision enhancement to existing SIP+ EMT IF product.

## Want to know more?

If you would like to know more or have any questions about our SIP+ EMT IF hardware and its capabilities, please contact your local Synapsys Account Manager, call us on **01444 246 128** or email us at [enquiries@synapsys-solutions.com](mailto:enquiries@synapsys-solutions.com).

For more information about Synapsys and our product range please visit [www.synapsys-solutions.com](http://www.synapsys-solutions.com).