eBMS Branch Monitoring - Solid Core

The Advanced Solid Core Processor Board comes in 6-way intelligent pluggable strips. These strips are simply pushed together and addressed in order to meet your exact PDU requirements and come complete with panel mounting brackets. The top of each bank of strips requires a termination board. Collections of boards also require a power supply, available separately.

System Specifications	
Number of Measuring Circuits per Module	6
Operating Temperatures	5-70 DegC
Operating Humidity	5 to 95% RH
Operating Voltage	18.6 to 36.6v
Operating Current (Nominal) at 24Vdc	0.12 Amps
Error (%) at 21 DegC (Nominal Operating Temp)	0.02 % RMS
Circuit sampling rate (Time)	6 Per Second
Circuit sampling rate (Hz)	12,800
Signal to Noise Ratio	73.9 db
Number of 1/2Hr kWH Readings Stored (Rolling)	10,800
Physical Dimensions	126x60x41mm
Transducer Connection	PCB-Fixed
Transducer Type	Hall Effect
Communications Protocols Supported	Modbus/RTU
Modbus/485 Connection Type	RS485 2-Wire
Recommended RS485 Cable Type	Belden 8762
Modbus/485 Baud Rate	38400
Modbus/485 - Addressing Min and Max:	1 to 24
Modbus/485 - Communication Format: Parity, Data Bits, Stop Bits	8,N,1
Modbus Termination	PCB Switchable

e: info@tyrrellproducts.com **t: +44 (0)1942 732 819**

eBMS Branch Monitoring - Solid Core

Installation

Each 6-way solid core strip comes complete with a metal fixing bracket. The fixing bracket has 4 x 4 mm holes, which should be used to fix the unit to the panel backplate. The fixing is recommended to be using M4 set screws into threaded holes, inserts or clinch nuts.
Where more than one strip is used, these shall be cascaded together, starting at the top and working downwards. Take care to ensure that the different strips are mounted in a straight line, tight to each other to ensure good connections.

Wiring

At the top of each strip or column of strips, you must install a termination card to provide the connections required for the networking of the strips to the interface (BSI or ASI). The termination board should be pushed onto the strip connector and then secured onto the metal bracket suing the M3 set screw provided with the termination board.
The termination board is clearly marked with the connections as follows:
+24v, 0v, MOD(-), MOD(+), Earth
Please use the recommended cable type above to connect the termination board to the BMS interface port (See BSI and ASI Data Sheet for more details).

Addressing

Each 6-way solid core strip has two address switches. These switches are used to provide the strip with a unique address between 1 and 24.

See the table below for the address selections:

Address	Lo	Hi	Address	Lo	Hi	Address	Lo	Hi	Address	Lo	Hi
1			7			13			19		
2			8			14			20		
3			9			15			21		
4			10			16			22		
5			11			17			23		
6			12			18			24		

eBMS Branch Monitoring - Solid Core

LED's

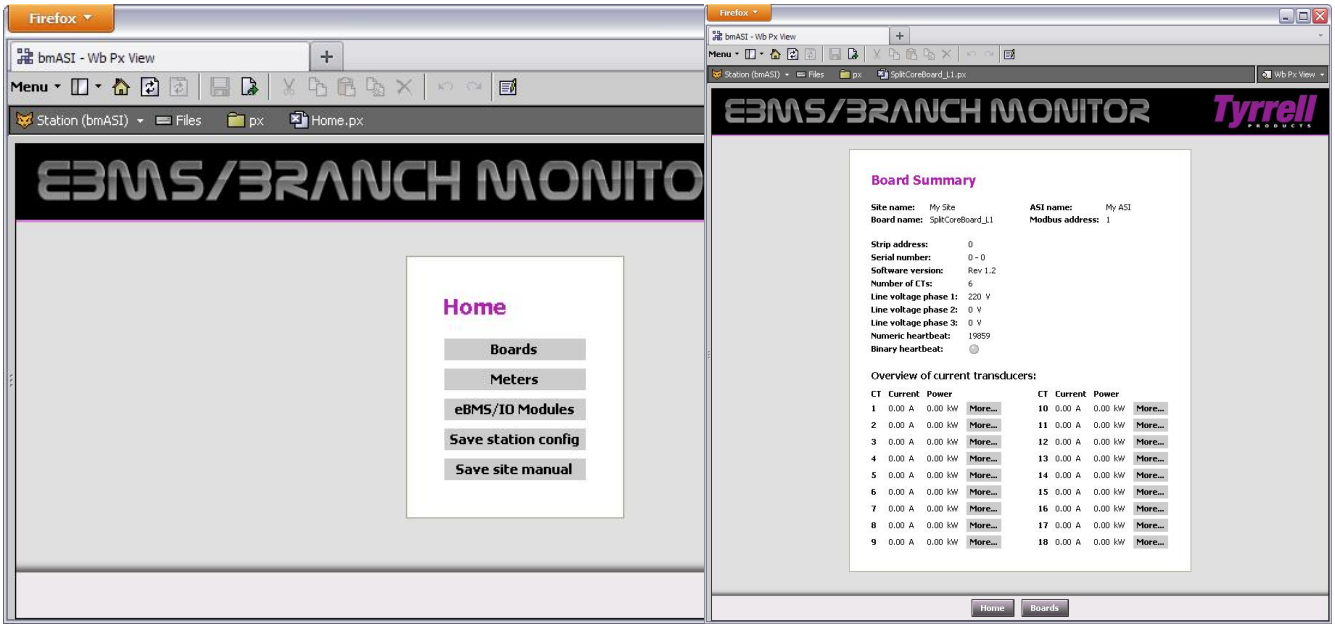
There are 4 LED's on both Solid Core and Split Core board. They are labelled and have the following function:

- GREEN - 'Pwr' - This is the Power LED
- YELLOW - 'Act' - This indicates that the board has been addressed and has communications ongoing
- RED - 'Am' - Alarm State
- AMBER - Not In Use / For Future Use

Extend the capabilities with our Niagara based Advanced System Interface.

With the ASI, you can integrate all the elements you need in the data centre, alongside your branch circuit monitoring, perhaps using the PDU as the natural hub and location to bring back connections to all the essential services and monitoring points. This includes temperature and condition monitoring, logging, alarms and alerts as well as intelligent integration to externally connected electricity meters such as UPS systems and more.

This powerful integration platform was developed on the Tridium Niagara Framework, offering world-wide deployment and support.



e: info@tyrrellproducts.com t: +44 (0)1942 732 819