DFB BMS Interface

Overview:

The FUSION Connect BMS Interface for FDN provides communication between Building Management Systems and FUSION motorized shading systems, either Standalone FDN or FDN IP Building Controller with shade systems. This interface communicates through a direct connection to the building automation IP network or uses a BACnet translator box to send and receive signals. The BACnet to Building Controller IP provides third party communication to standalone FDN systems and building controller IP. When utilizing the interface FUSION motorized system devices provide feedback and could be controlled by the BACnet network.

Features Summary:

- System control
  - ☐ Stand alone FDN – control individual or motor groups.
    - Position (%) – feedback on motors only
    - Position (absolute) – feedback on motors only
    - Intermediate position
    - Up, Stop, and down control
  - ☐ IP – control individual or motor groups, sensors, and virtual keypads.
    - Position (%) – feedback on motors only
    - Up, Stop, and down control/commands
    - Priority control
    - Sensor data – provides single direction information to BMS system
- Supports up to 1500 data points.
- Integration capabilities: Modbus, BACnet MS/TP, BACnet IP
- Sensor data – provides single direction information to the BACnet network.
- Programmable through user friendly interface.
- Auto device discovery for animeo IP.

Technical Specifications:

- 1500 data points maximum
- Input: 9-30 VDC or 12-24 VAC
- Power Consumption: 250 mA
- Material: ABS plastic
- Dimensions: (L x W x H) 4.5 x 3.2 x 1.6 in.
- Operating Temperature Range: F= -40° to 167°
- Relative Humidity: 5-90% RH, non-condensing
- Shipping Weight: 1 Lb.
- Approvals:
  - BACnet Testing Labs (BTL) B-ASC Ver. 12
  - TUV approved to UL 916 EN 60950-1, EN 50491-3 and CSA C22-2 standards
  - RoHS Compliant
  - DNP3 Conformance Tested
  - CE & FCC Approved
  - BTL Marked Certified

What's in the Box:

- (1) 24V DC 1.66A Wall Mount Power Supply (Cat. No. 1822209)
- BACnet device quick guide (in-depth instructions online)

Optional Accessories:

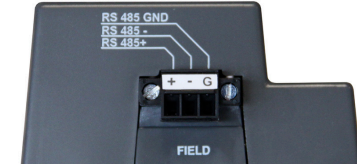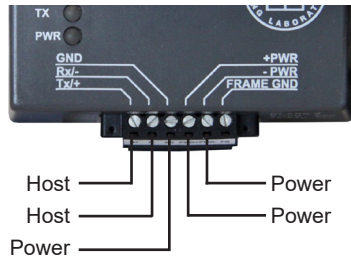- Bus Power Supply (Cat. No. 1822440)
- Data Hub

Connections and Indicators:

	CONNECTIONS	FUNCTION
1	**Field**	BACnet MS/TP and Modbus connection Screw terminal
2	**Ethernet Port**	Local area network configuration connection between BACnet I and IP Building Controller using an RJ45 connection port
3	**Host**	Stand alone FDN or URTSI connection Screw terminal
4	**Power**	9-30V DC or 12-24V AC Screw terminal

1 – Field

2 – Ethernet Port

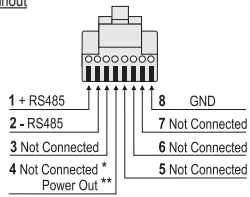3 – Host   4 – Power

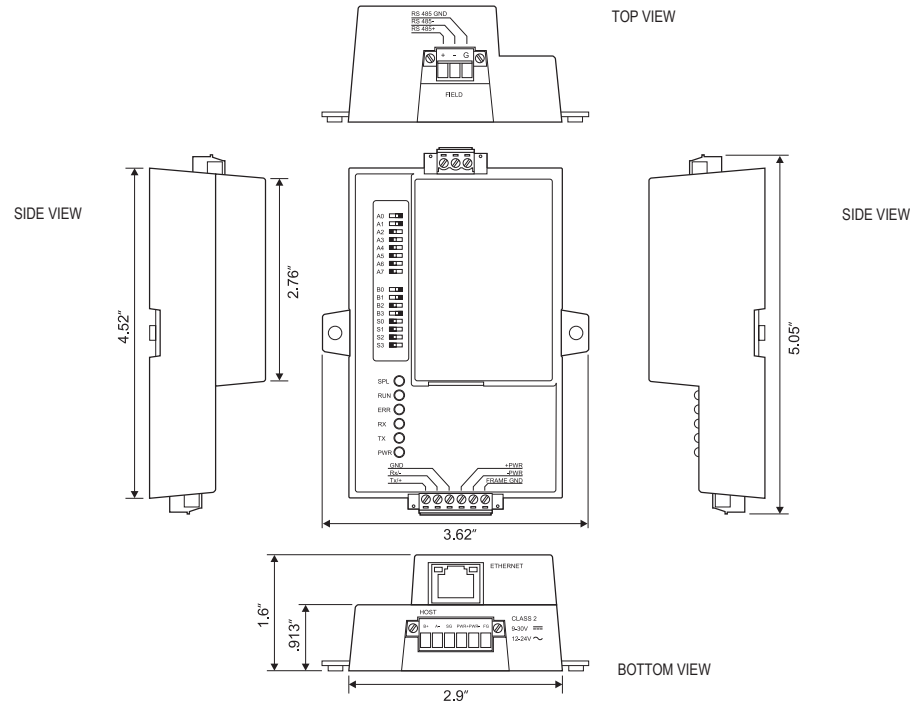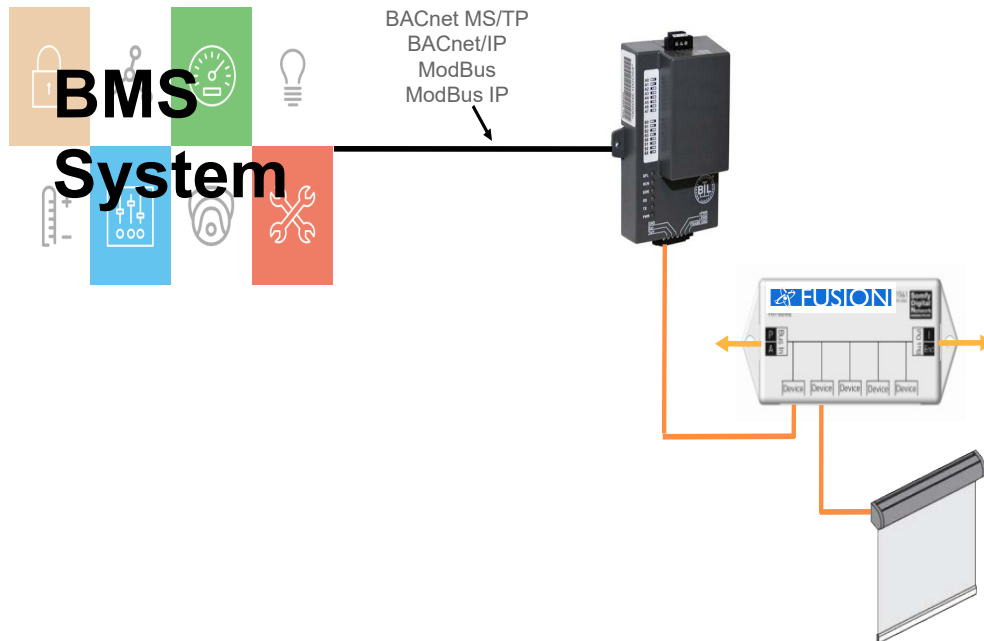| TAG	LED INDICATORS
SPL	Not used
RUN	Once powered, wait 20 seconds and the green LED will begin to flash to indicate normal operation.
ERR	A solid red light indicates a system error on the interface.
RX	Stand alone FDN communication status
TX	Stand alone FDN communication status
PWR	Solid green at all times
RTC	Unused

Cable Pinouts:

GND
Rx/-
Tx/+
+PWR
- PWR
FRAME GND

Host
Host
Power
Power
Power

RS 485 GND
RS 485 -
RS 485+

+ - G

FIELD

RJ45 Pinout

1 + RS485   8   GND
2 - RS485   7 Not Connected
3 Not Connected   6 Not Connected
4 Not Connected *   5 Not Connected
   Power Out **

Dimensions:

TOP VIEW

SIDE VIEW   4.52"   2.76"   SIDE VIEW   5.05"

3.62"

1.6"   .913"

2.9"

BOTTOM VIEW

Wiring Best Practices:

IP Building Controller

BMS System

BACnet MS/TP
BACnet/IP
ModBus
ModBus IP

Component Types

Motor	
Bus Distribution	
User Interface	

Wiring Connection Types

FDN
FDN (data)
FDN with motor power
Sensor Bus