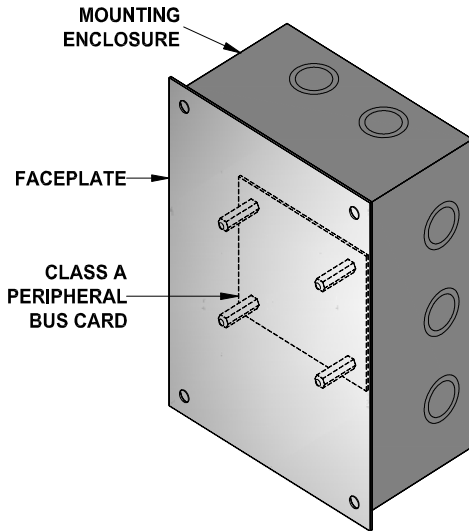




## DESCRIPTION

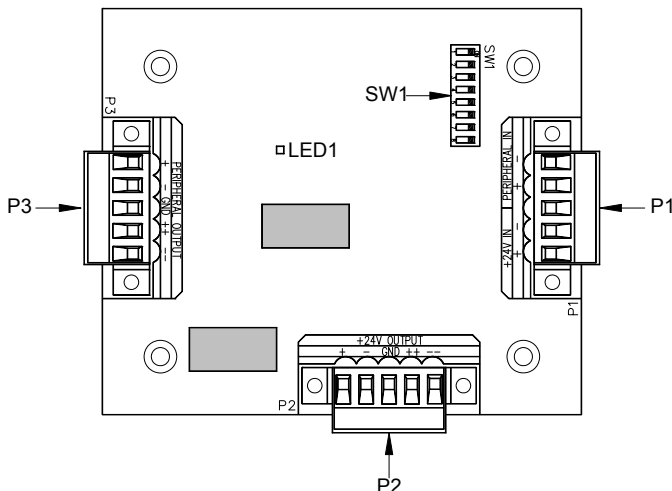
The 10-2818, Class A Peripheral Bus Card Assembly is a peripheral bus device, that when installed, provides a means of wiring the host control panel's RS485 peripheral bus and 24 VDC power output to the peripheral devices in a Class A format. The assembly includes the 10-2792, Class A peripheral bus card and enclosure with mounting plate (See Exhibit 1).



**Exhibit 1: Class A Peripheral Bus Card Assembly**

## COMPATIBILITY

The Class A Peripheral Bus Card is compatible with Fike's CyberCat™ 1016 Fire Alarm and the Cheetah Xi™ Fire Suppression control panels, firmware version 6.XX and higher.



**Exhibit 2: Class A Peripheral Bus Card**

## SPECIFICATIONS

### Power Consumption:

57mA (standby), 57mA (alarm)

### Assembly Dimensions: See Exhibit 3

### Operating Temp: 32°F to 120°F (0°C to 49°C)

### Operating Humidity: 93% RH, non-condensing

### P1 Terminal (removable):

#### PERIPHERAL IN (+,-)

- Connects to panel's RS485 Peripheral Bus
- Accepts 12-26 AWG
- Power-limited and supervised

#### 15 - 30V IN (+,-)

- Power input from control panel or by battery backed, regulated, power-limited power supply listed for Fire Protective Signaling Use
- Accepts 12-26 AWG
- Power-limited and supervised

### P2 Terminal (removable):

#### 15 - 30V OUTPUT (+,-,GND,++,--)

- 24 VDC Class-A power output
- Accepts 12-26 AWG
- Power-limited and supervised
- Output voltage = Input voltage<sup>1</sup>

### P3 Terminal (removable):

#### PERIPHERAL OUTPUT (+,-,GND,++,--)

- Class-A, RS485 peripheral bus output
- Accepts 12-26 AWG
- 31 peripheral devices maximum
- Belden 9841 cable or equal<sup>2</sup>  
4,000 ft. (1,219 m) max. length  
Impedance 100Ω max.  
Capacitance 0.05 μF max.  
9600 bps, 5 VDC, 1mA  
No t-tapping
- Power-limited and supervised

### LED1 (Yellow):

On = RS485 communication O.K.

Flash = RS485 communication lost

*1 Ensure that devices connected to output terminals can operate at the voltage supplied at the input terminals.*

*2 Belden 9841 is suited for standard installations only. Consult with the factory for cables that should be used for plenum and other applications.*

## MOUNTING LOCATION

The enclosure must be mounted within 10 feet (3 m) of the control panel enclosure and all interconnect wiring must be installed in conduit.

## INSTALLATION

1. If the system is already powered, disable critical functions; then power down the system.

### CAUTION

Never remove or install boards, internal cables or components with power applied. Failure to follow the instructions provided in this section can result in irreparable damage to the system components. This damage may adversely affect the operation of the control unit but its effect may not be readily apparent.

2. Unpack the assembly and check for shipping damage prior to installation.

### CAUTION

The assembly and associated control panel contains static sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. Use anti-static packaging to protect electronic assemblies.

3. Remove the faceplate from the enclosure using caution as the Class A card is pre-mounted to the faceplate prior to shipment from the factory.
4. Remove the appropriate conduit knockouts in the back-box.
5. Mount the enclosure at the selected location. See Exhibit 3 for enclosure dimensions.

#### Surface Mounting

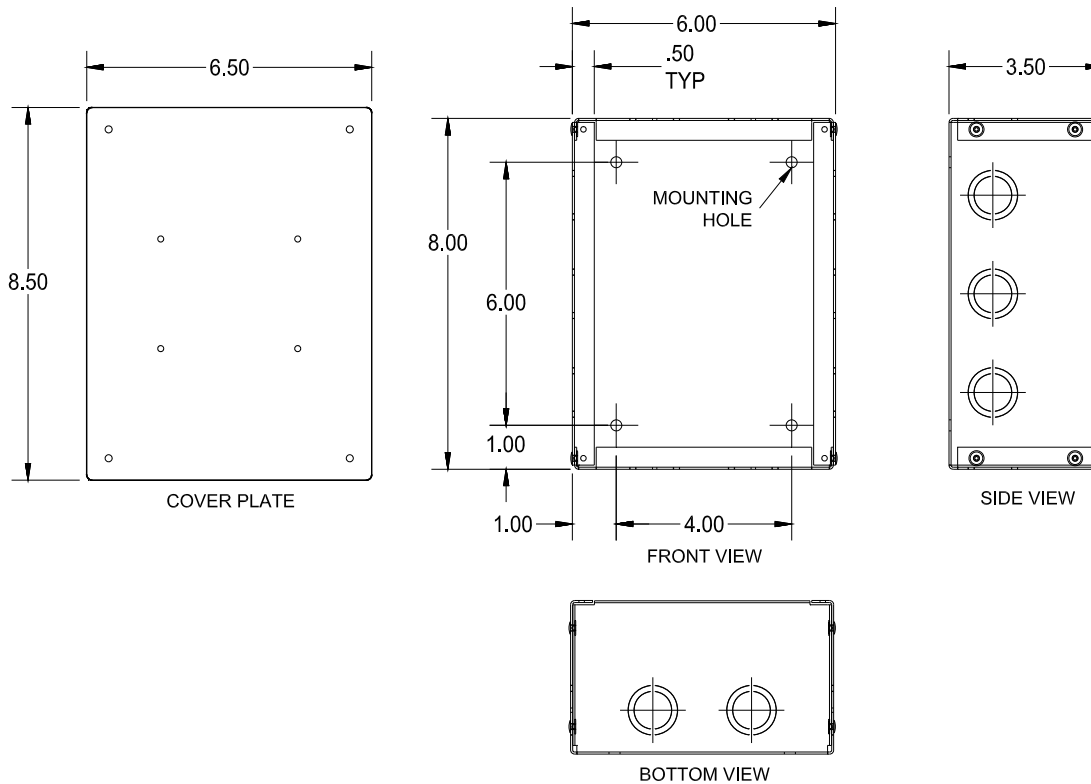
Utilize the four mounting holes supplied in the back of the enclosure to secure it to the wall with suitable anchors.

#### Flush Mounting

Cut an opening in the wall to fit the back-box dimensions and secure the box in place utilizing suitable anchors. The enclosure faceplate overlaps the back-box on all four sides by  $\frac{1}{4}$ " (.63 cm).

### CAUTION

The enclosure is NOT fire rated. Do not mount on or in a fire rated wall unless wall is properly framed to maintain specific fire rating.



**Exhibit 3: Enclosure Dimensions**

- Set the card's peripheral address using the SW1 DIP-switches 1 - 6. The card requires a unique address for identification on the host control panel's RS485 bus (2 – 32). See Exhibit 4 for DIP-switch settings for each binary address (ID number).

**Note:** 00 is not a valid address and 01 is reserved for the control panel.

- Enable or disable supervision of the P2, Class A 24V output terminals (++) and (-) using the SW1 DIP-switch 7.

ON = Class A terminals are supervised  
 OFF = Class A terminals are not supervised

- Set the communication baud rate for the card using the SW1 DIP-switch 8.

ON = 38.4K baud rate  
 OFF = 9600 baud rate

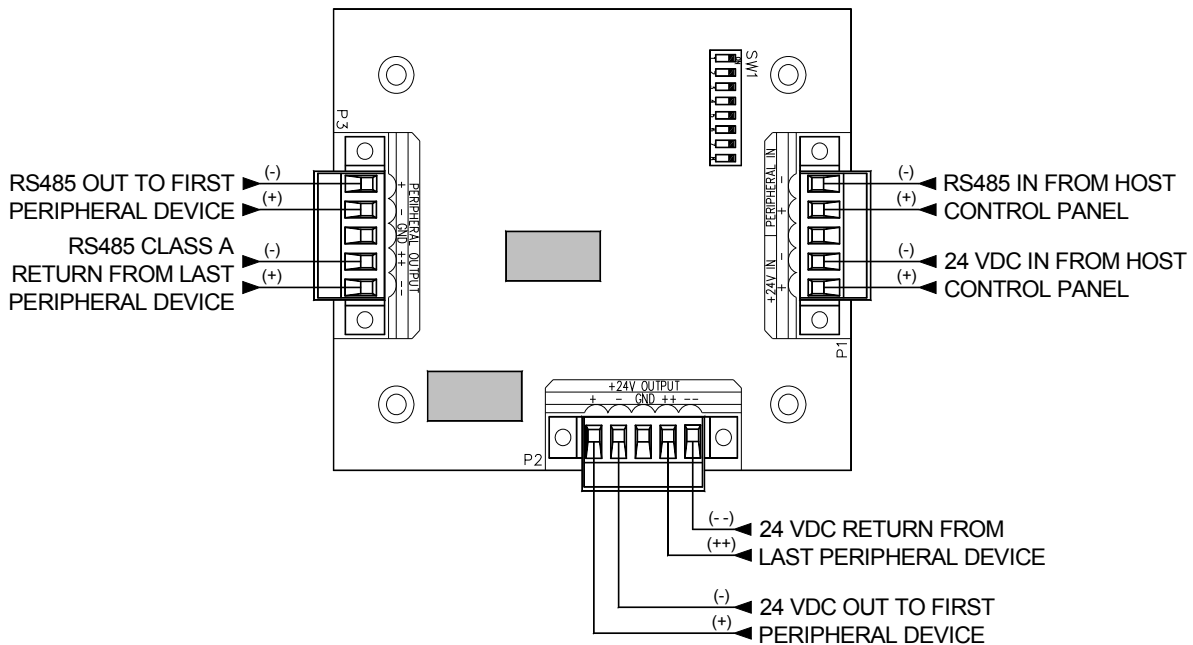
**Note:** Selected baud rate must match the rate used by the host control panel.

- Pull field wiring into the enclosure and connect to the card as shown in Exhibit 5. The cards terminal blocks are removable to allow easy connection of field wiring.

- Secure the faceplate to the back-box using the four mounting screws provided making sure that there is no undue stress placed on the connection terminals by the field wiring.

Binary Value	1	2	4	8	16	32
Dip Switch #	1	2	3	4	5	6
Address						
0	NOT VALID					
1	ON	◀ PANEL ONLY				
2		ON				
3	ON	ON				
4			ON			
5	ON		ON			
6		ON	ON			
7	ON	ON	ON			
8				ON		
9	ON			ON		
10		ON		ON		
11	ON	ON		ON		
12			ON	ON		
13	ON		ON	ON		
14		ON	ON	ON		
15	ON	ON	ON	ON		
16					ON	
17	ON				ON	
18		ON			ON	
19	ON	ON			ON	
20			ON		ON	
21	ON		ON		ON	
22		ON	ON		ON	
23	ON	ON	ON		ON	
24				ON	ON	
25	ON			ON	ON	
26		ON		ON	ON	
27	ON	ON		ON	ON	
28			ON	ON	ON	
29	ON		ON	ON	ON	
30		ON	ON	ON	ON	
31	ON	ON	ON	ON	ON	
32						ON

**Exhibit 4: Binary Addressing**



**Exhibit 5: Card Wiring**

## **OPERATION**

The Class A Peripheral Bus Card monitors the RS485 and DC power connections to the connected peripheral devices and will transmit a trouble condition to the system control board upon loss of communication or loss of DC power.

## **PROGRAMMING**

The Class A Peripheral Bus Card must be added to the control panel configuration to enable module supervision. The configuration changes can be made using the panel's configuration menus or using the C-Linx system programming software. Refer to the associated control panels programming manual or the C-Linx "Users Guide", P/N 06-448 for programming details.