

# 422/485 Fused Port Protector

## Model 485FPP



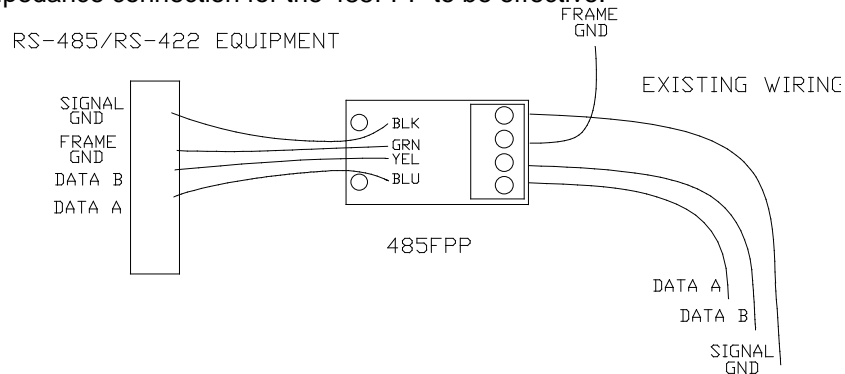
### Description

The 485FPP provides surge suppression for ports with RS-422 or RS-485 signal levels. In addition to surge suppression, fast-acting fuses are used to protect the device against transient voltages too large or long in duration for the device to suppress. The 485FPP was designed as a disposable device. Once a fuse is blown, the unit should be replaced.

### Installation

The 485FPP should be installed in-line with your existing wiring. The terminal blocks connect to your wiring, the wire leads connect directly to your RS-422 or RS-485 equipment.

Four leads are provided on the 485FPP—two data lines, signal ground, and frame or green wire ground. (Note that in four-wire communication systems, two 485FPPs are needed to protect four lines.) The yellow and blue wires and the terminal blocks opposite of them are the data "A" and "B" (or "+" and "-") lines. Polarity is not important to the 485FPP, it is important that your "A" and "B" lines are not crossed from one side of the 485FPP to the other. The black wire and its terminal block are provided for a signal ground connection. If you are not using a signal ground wire, this connection is not necessary. The green wire and its terminal block are the frame ground connection. This connection must be made or the 485FPP will not protect your port. At least one side (the green wire or the terminal block) must be connected directly to a good frame (chassis, green wire, or earth) ground. This must be a low impedance connection for the 485FPP to be effective.



### Specifications

**Surge Suppressors:** 7.5 volt, bi-directional avalanche breakdown device. 500W peak power dissipation. Clamping time <math> < 1 \times 10^{-12}</math> seconds (theoretical).

**Fuses:** 125 mA fast-acting type.

**Series Resistance:** 7.2 Ohms maximum.

**Capacitance:** 6000 pF maximum.