Ins-30065 - RS485 protection module

Technical Support

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Technical help is available: Monday - Friday from 07:00 - 19:00 (GMT)
Saturday from 09:00 - 13:00 (GMT)

Documentation on all Paxton products can be found on our website - http://www.paxton.co.uk/

Net2 data line protection

Under severe electrical storm conditions, the Net2 ACU's connected to the RS485 data line can be damaged due to the very high induced voltages that can be present.

The best method of protecting the system is to make use of Fibre Optic or Wireless Networks between outdoor locations or within large roof spaces. These then communicate with the Net2 PC over a LAN network using a Paxton TCP/IP converter.

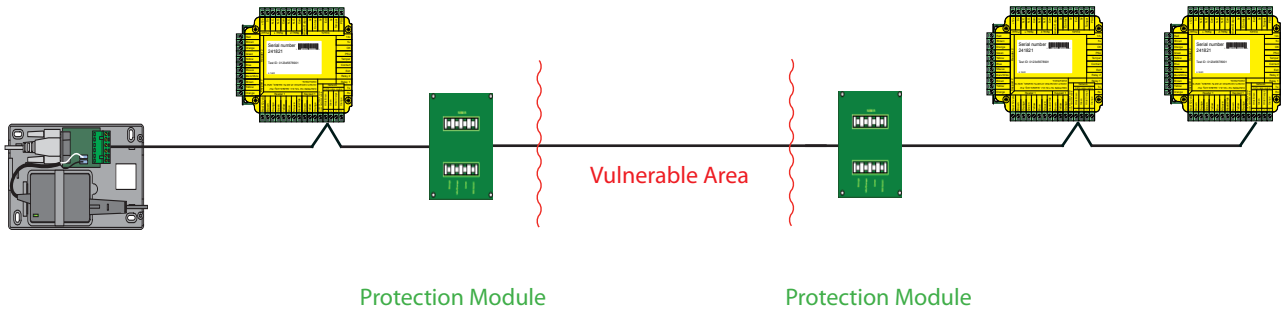
Where this is not practical, the fitting of surge suppressors to limit the voltage passing down the data cable to 5V DC (RS485 standard) is strongly advised.

Where to fit the modules

This module is designed to suppress high voltage transients that can damage the communications circuits of the Net2 ACU through its data line connection.

It makes use of TRANSILTM diodes that have an instantaneous response (less than 10 picoseconds) to any overvoltage condition and will limit the voltage to a maximum to 5V DC with reference to the 0V screen. Under extreme conditions, the diode will fail as a short circuit to 0V. The unit will then need to be replaced before data transmission can be resumed.

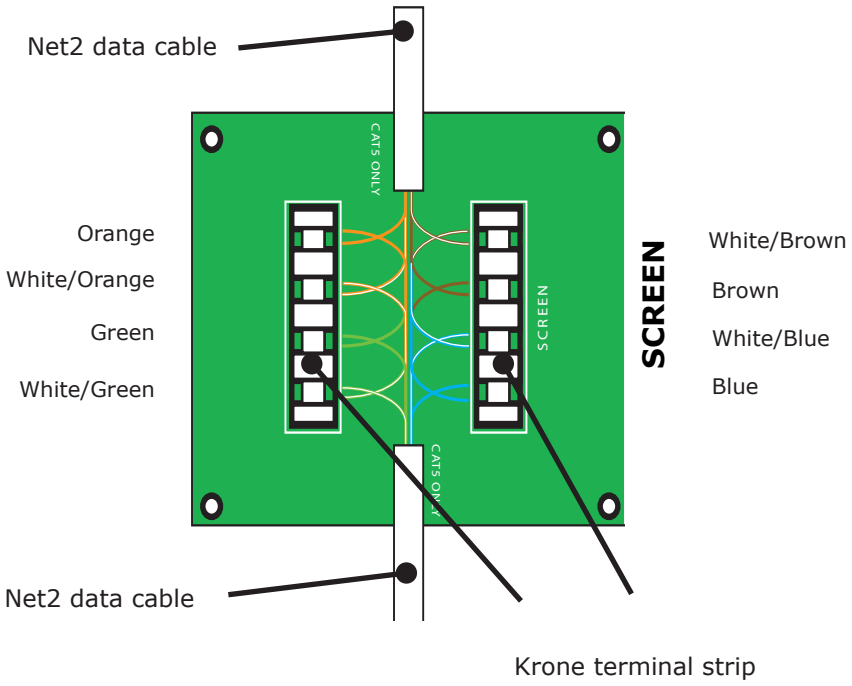
Units should be placed at either end of any vulnerable cabling run to isolate the section.



How to fit the module

The unit is not dependant on the direction of the data flow. Ensure that the Green and Orange data pairs match the correct colour positions. The Brown and Blue pair positions are grouped into a common Screen connection.

A Krone insertion tool (not supplied) should be used to ensure a good connection of the wires into the terminal strip.



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