

PERTRONIC INDUSTRIES LTD
INSTALLATION DATASHEET
FireMap Ethernet Gateway (FMEGATE)



Overview

The Pertronic FireMap Ethernet Gateway (FMEGATE) enables any fire panel or other equipment to interface with Pertronic FireMap® over an Ethernet network.

When connected to the RS-485 port on a Pertronic F220, F100A, or F120A fire panel, the gateway enables FireMap to display detailed fire panel information including the status of all analogue addressable devices controlled and/or monitored by the fire panel.

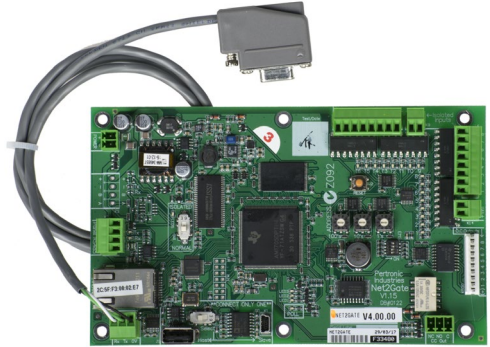
An optional RS-232 connection allows FireMap to read PW4 data from the connected Pertronic fire panel's analogue addressable devices.

In addition, the gateway provides limited control functions including Isolate (Disable), Reset, and Acknowledge.

The FireMap Ethernet Gateway can also interface other equipment to Pertronic FireMap®. The gateway provides two independent sets of eight switched (dry-contact) inputs, which may be connected to equipment such as third party fire panels or Pertronic conventional fire panels. Pertronic FireMap® can be configured to display suitable graphics in response to signals on individual switched inputs.

Features

- » TCP / IP Ethernet interface
- » RS-485 and RS-232 to Ethernet data conversion
- » IP, Netmask, Gateway Address, and other Ethernet settings configurable via web interface
- » Isolate switch
- » Supplied with RS-232 cable and 9-pin D-sub-miniature connector

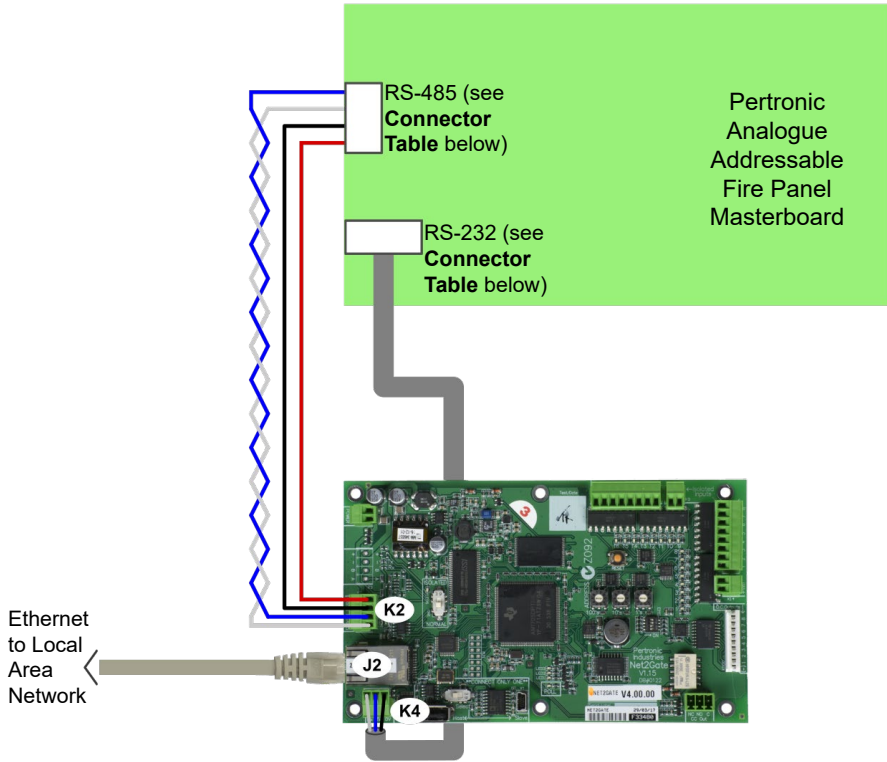


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Specification

Ethernet Port	Speed	10/100 Mbit/s
	Connector	RJ45
RS-485 Port	Speed	9600 bit/s
	Connector	4 way screw terminal
RS-232 Port		3 way screw terminal
USB 2.0 Ports (switched)	Host	USB-A
	Slave	USB-Mini-B
Operating Voltage		18 to 30 Vdc
Switched-Input Supplies		18 to 30 Vdc
Current		60 mA plus 6 mA per active switched input
Dimensions (HxWxD)		100 x 166 x 20 mm
Weight		162 g
Operating Temperature		-10 to +50°C
Relative Humidity		10 to 95% non-condensing

Connection to Pertronic Analogue Addressable Fire Panels



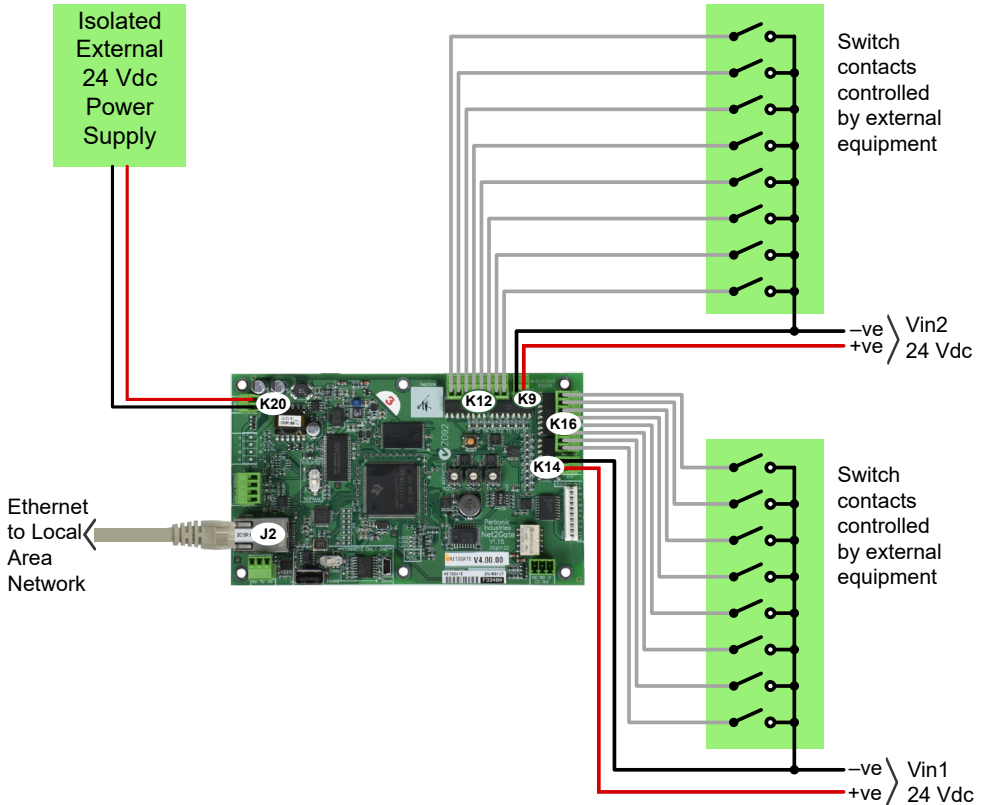
Connector Table

	RS-485	Optional RS-232
FMEGATE	K2	K4
F220	K1, K6, K18, K22, K40	K7
F120A	K1, K6, K18, K22	K7
F100A	K1, K17, K22, K28	J1

Note: RS-232 & PW4 Data

The RS-232 connection makes analogue addressable PW4 data available to FireMap. If PW4 data is not required, the RS-232 connection between FireMap Ethernet Gateway and fire panel masterboard may be omitted. If the RS-232 connection is not used, link the Rx and Tx pins on the FMEGATE connector K4.

Connection to Conventional or Third-Party Fire Panel



Connecting to the switched inputs

There are two 8-way switched inputs: K12 and K16.

Each 8-way switched input requires 24 volt dc power for the input opto-couplers.

- Connect the external power supply for inputs K16 to the two-way connector K14
- Connect the external power supply for inputs K12 to the two-way connector K9

Please note that all eight switches connected to a single 8-way switched input (K12 or K16) must be connected to the same power supply.

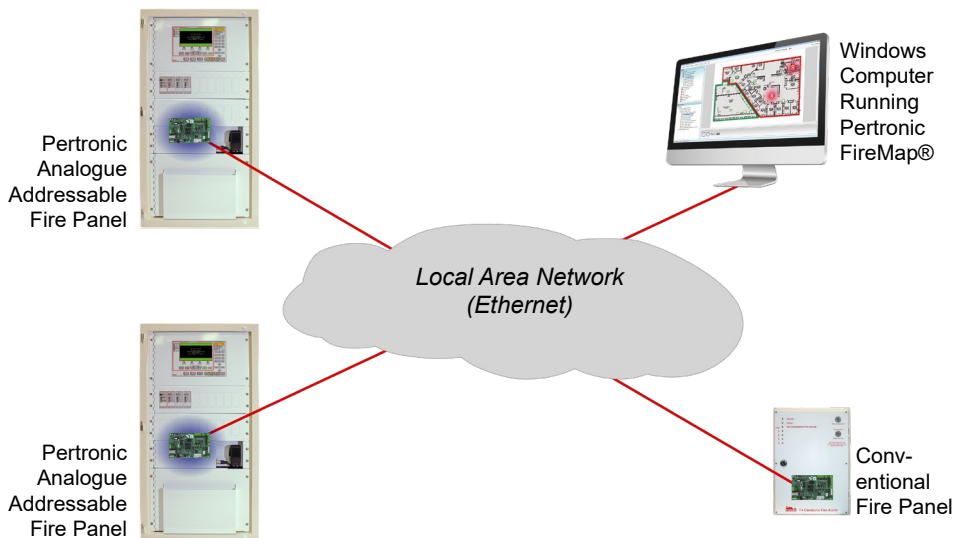
The switched input supplies (K12 or K16) may be earthed or isolated.

If both K12 and K16 are connected to a single external system, both power supply inputs (K9 and K14) should be connected to the external system's 24 volt dc power supply.

The external 24 Vdc power supply (K20) must be **isolated**.

Installers should verify that the external equipment is capable of powering the switched inputs (6 mA per active input). If the external equipment cannot supply this current, a separate power supply is required.

Typical FireMap System Architecture



A typical FireMap system communicating over a local area network (LAN). This example shows two Pertronic analogue addressable fire panels with internal Pertronic FireMap Ethernet Gateways. The system also includes a conventional fire panel connected to the switched inputs of a third FireMap Ethernet Gateway.

Please note: When connecting a FireMap Ethernet Gateway card to a conventional fire panel, it may be necessary to provide a separate 24 Vdc power supply and cabinet for the FireMap Ethernet Gateway card (not shown). Please refer to page 3 for more information.

Ordering Information

Product Code	Description
FMEGATE	FireMap Ethernet Gateway

The information in this document must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements.

Unless explicitly stated otherwise, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.

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