FieldServer Driver
FS8705-16
-
Driver for
MIRCOM
FX2000 Fire Alarm Panel

Description

The FX2000 driver is a passive client driver intended for connection to the serial printer port of a FX2000 Panel. A passive client driver waits for messages to be sent to it (by the panel). The driver cannot send messages to the panel and hence it cannot request the state of any point in the panel.

The driver can process alarm and trouble events and the system reset message. All other messages and events are ignored.

The driver can only be used as a client. Minimal server functionality is provided only to support our ongoing quality assurance program by facilitating automated testing of the driver. It is not documented or supported.

Synchronization

A consequence of the fact that this is a passive client driver, is that the FieldServer must be synchronized with the panel by clearing all abnormal states, resetting the panel and then restarting the FieldServer/Sending the FieldServer a command to reset the data.

Driver Functionality

When an alarm occurs the panel reports the alarm with a message which identifies the loop and address. The driver will store a 1 in a Data Array location mapped for that point. When the condition causing alarm is cleared, the panel does not send a message reporting this. Thus the driver will not know the condition has been cleared until a panel reset is performed. When a reset is performed the driver will clear all the alarm states, previsouly stored, to zero. For those points where the alarm condition has not been cleared, the panel sends a new alarm notification which the driver will recognize and store a 1 in a Data Array location mapped for that point.

Thus for the two scenario's

Alarm condition cleared before reset

Alarm Event - Driver Store a 1
Alarm condition cleared - Driver is not informed (no message from panel)
Reset Initiated - Driver clears the 1 to zero (for all alarms)

Alarm condition not cleared before reset

Alarm Event - Driver Stores a 1
Reset Initiated - Driver clears the 1 to zero (for all alarms)
Panel now sends re-notifications of active alarms
Re-notification of Alarm Event - Driver Stores a 1

For troubles, the panel sends a message when the trouble event occurs and it also sends a message when the event is cleared even if a panel reset has not been performed. The driver will store a 1 when the trouble event occurs and a zero when it is cleared. This will not be affected by a reset.

How the Driver Stores Data

Each loop-address field point can have up to 3 storage locations. One will store the normal/alarm state, the second will store the normal/trouble state and the 3rd will store the normal/alarmORtrouble state for the point. Each one of the storage locations can be mapped onto another protocol to serve to a remote data client.

In addition the driver will also update a block of 16 registers which can also be mapped onto another protocol to serve to a remote data client. This set of registers records data about the most recent event. It is cleared when a system reset is done. The block contains the loop, address, event type, time and date.

Max Nodes Supported

FieldServer Mode	Nodes	Comments
Passive Client	1	*Each port on the FieldServer can only be connected to 1 panel since the message do not report the panel number so message from different panels connected on the same port cannot be differentiated.*
Active Server (Simulate a FX2000 Panel)	0	*Not supported or documented.*

Formal Driver Type

Serial
Passive Client

Compatibility Matrix

FieldServer Model	Compatible with this driver
FS-x2010	Yes,
FS-x2011	Yes,
FS-x40	Yes,
FS-X30	Yes,

Connection Information

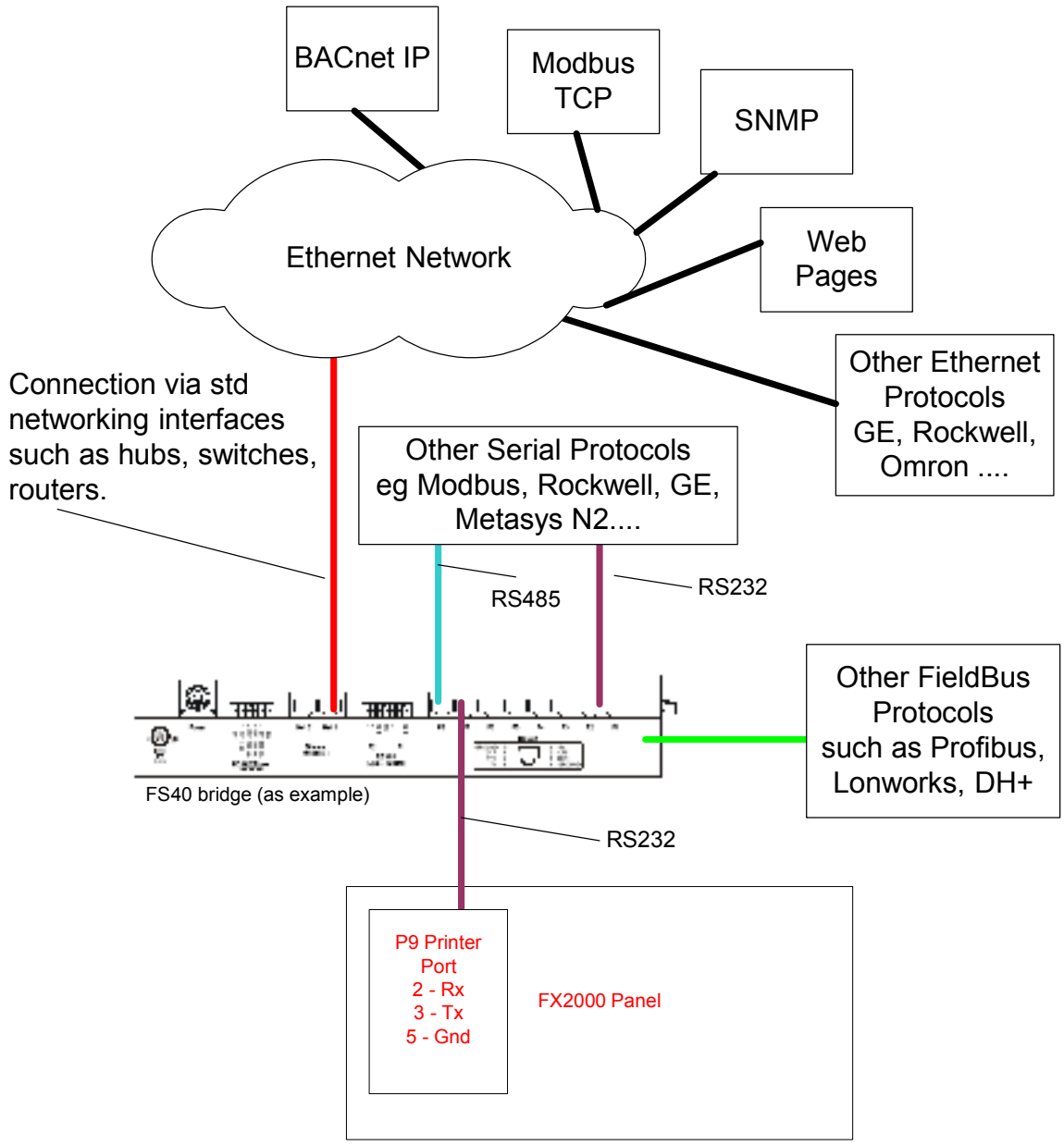
Connection type:	EIA232
Baud Rates:	Driver Supports : 110; 300; 600; 1200; 2400; 4800; **9600**; 19200; 28800; 38400; 57600 Baud *FX2000* supports: 9600
Data Bits:	Driver Supports : 7,**8** *FX2000* supports: 8
Stop Bits:	Driver Supports : **1**,2 *FX2000* supports: 1
Parity:	Driver Supports : Odd, Even, **None** *FX2000* supports: none
Hardware interface:	N/A
Multidrop Capability	No

Devices tested

Device	Tested (FACTORY, SITE)
FX2000	WestFraser Mills (May/June 2009)

Connection configurations

Multiple upstream protocols and connection supported. See list of FieldServer Drivers.



Support

This driver was developed by Chipkin Automation Systems (CAS), a FieldServer Approved Integrator®. CAS are proud to provide support for the driver. For support please call CAS at (866) 383-1657.

Revision History

Date	Resp	Format	Driver Ver.	Doc. Rev.	Comment
23 Apr 09	PMC		0.00	0	Created