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# FS-8705-19 – Security Industry Association – SIA Codes DSC System III

DATASHEET – Rev 1


## DESCRIPTION

The driver provides an interface to alarm panels that support the Security Industry Association (SIA) codes and which produce event messages formatted as described in this document. The DSC system III is a device which meets these requirements. Take care – The SIA codes are a table of two letter event codes and their meanings. Many security panels use these codes BUT they do not all format messages in the same way.
When combined with another protocol driver the security panel event data can be served using another protocol such as BACnet, Lonworks, Johnson Controls N2, Rockwell, XML etc. A block diagram showing potential connectivity is provided below.

This is a passive client driver – it waits passively to receive event notifications. It cannot poll for data – this means this driver cannot send a message to the panel to obtain the status of the panel or some device. A consequence of this is that the user must be involved in synching the panel and the data collected by this driver. For information on synchronization is provided in this document.

The driver allows new codes to be added and existing codes to be modified providing some future proofing.

It is possible to configure this driver to store some events and not others. When events are received for which no storage location has been defined then the driver will print messages and update operation statistics. This will allow you to ensure you are not missing the events you need to monitor.

Each SIA code has been allocated an (arbitrary) integer value. When an event is received, the driver extracts the SIA code, looks it up in a table and stores the corresponding number. It is your job to interpret these numbers (suing the table provided in this manual)
The driver can only be used as a passive client. Minimal active server functionality is provided only to support our ongoing quality assurance program by facilitating automated testing of the driver. This functionality allows the driver to send messages as if it were in fact a security panel. It is not documented or supported.

# FS-8705-19 – SIA Codes

## CONNECTION FACTS

| FIELDSERVER MODE | NODES | COMMENTS |
|---|---|---|
| Passive Client | 1 | Only one panel can be connected to a single FieldServer . If this limitation has significant impact for your project, contact us, we might be able to change this limitation. |
| Active Server (Simulate a Panel) | 0 | Not supported or documented. |

## FORMAL DRIVER TYPE

Serial
Passive Client

## COMPATIBILITY

| FIELDSERVER MODEL | COMPATIBLE |
|---|---|
| CAS1010 | Yes |

## CONNECTION INFORMATION

| | |
|---|---|
| Connection Type: | EIA232 |
| Baud Rates: | Driver Supports : 110; 300; 600; 1200; 2400; 4800; **9600**; 19200; 28800; 38400; 57600; 115200 Baud |
| Data Bits: | Driver Supports : 7,**8** |
| Stop Bits: | Driver Supports : **1**,2 |
| Parity: | Driver Supports : Odd, Even, **None** |
| Hardware Interface: | N/A |
| Multidrop Capability: | No |

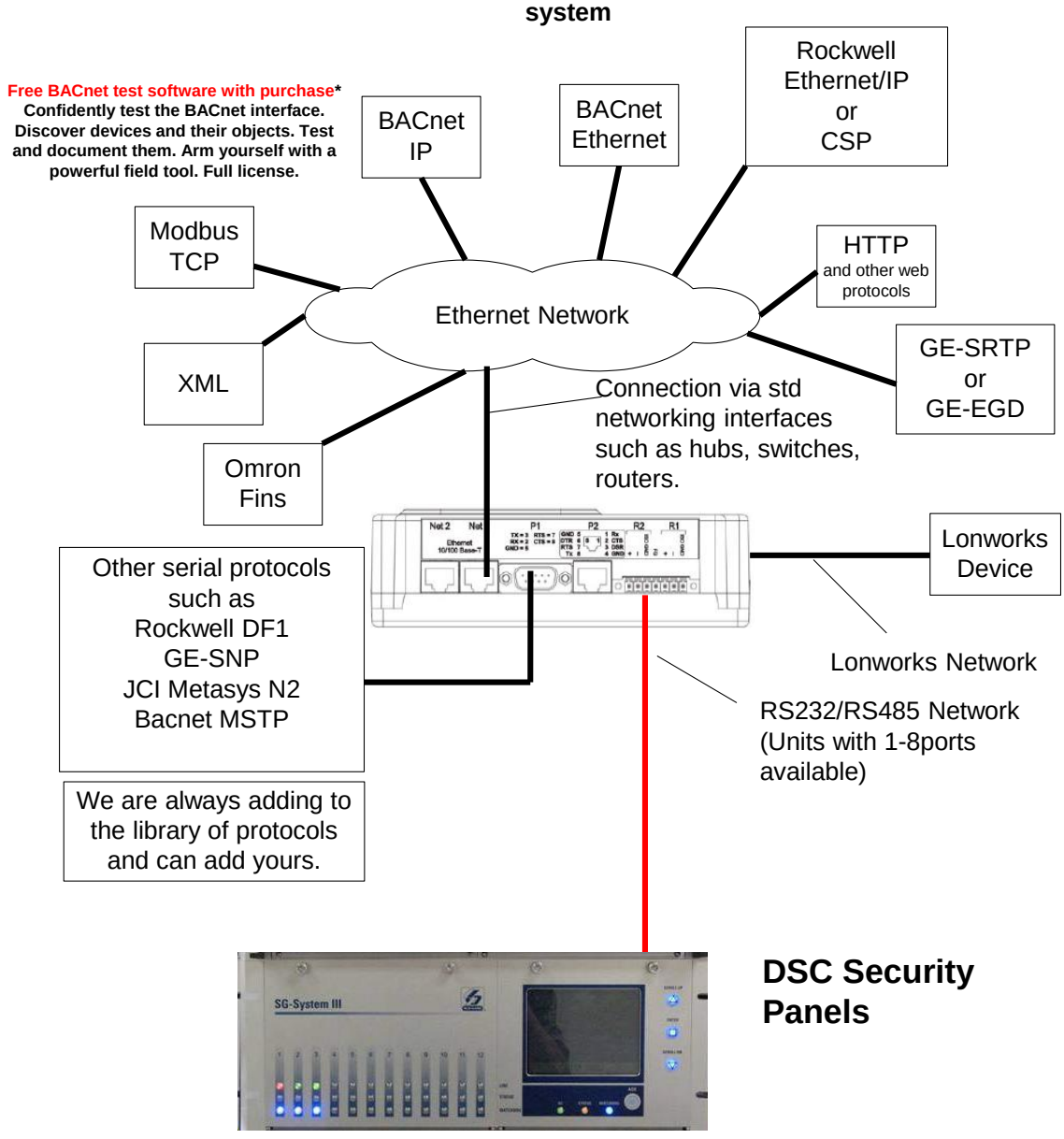
## DEVICES TESTED

| DEVICE | TESTED (FACTORY, SITE) |
|---|---|
| Hobart Model xxxxxx | Not Tested |

## CONNECTION CONFIGURATIONS

Single SIA Systems can be connected. One per port.
Multiple upstream protocols and connection supported. See list of Gateway Drivers.

**Monitor and Control DSC Security Panels with SIA codes using BACnet, Lonworks or a PLC system**



## DRIVER FUNCTIONALITY

The driver waits for messages from the Panel.  It cannot initiate communications nor read the status of a device.

Normally, the panel requires that each message it sends is acknowledged. The driver can be configured to send these acknowledgements. The default behavior is to not send the acknowledgements. Typically, a panel will report a trouble if it does not receive an acknowledgement message within 4 seconds of sending a message.

The panel sends a message each time there is an event. In addition the panel sends a empty message periodically. When an acknowledgement is sent in response to the empty message (or in response to other messages) the panel knows that the connection is good and that the messages are being monitored.

When an event message arrives, the driver breaks out the data, determining the event type. The event type tells the driver whether the event applies to a zone, printer, line, door, area etc. Now the driver can determine, the zone, printer, door (… etc) number.  This gives the driver enough information on where to store the event data.  If a new event occurs for that zone (for example) then the previous event data is overwritten.

In addition, the driver can store the most recent event data in a particular location. Each new event overwrites the previous data. There is no queue of data.

## CUSTOMER SUPPORT

SIA Codes Driver for FieldServer was developed by Chipkin, and we are proud to provide support for our products. For technical support, sales and customer service, please call us at 1 (866) 383-1657.

Thanks for choosing Chipkin's products and integration services to meet your building and industrial automation requirements!

Chipkin™ is a building and industrial automation protocol expert. We develop, configure, install and support gateways (protocol converters), data loggers and remote monitor and controlling applications. Founded in October 2000, Chipkin provides expert solutions for converting BACnet®, Modbus®, and LonWorks®—to name just a few—and enabling interfaces for HVAC, fire, siren, intercom, lighting, transportation and fuel systems. The high-quality products we offer (including those from other vendors) interface with Simplex™, Notifier™, McQuay™, GE™ and many others—so you can rest assured that we will select the most appropriate solution for your application.

With Chipkin you are buying a solution. Our configuration expertise in this field combined with free BACnet and other tools ensure your success; and our customer support via phone, email and remote desktop tools means that we are there when you need us. Chipkin is a small responsive company, and we live or die by the quality of our service—and with offices in two time zones—we can provide support when you need it. Give us a call now!

## Sales and Customer Service

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## REVISION HISTORY

| DATE | RESP. | DRIVER VERSION | DOCUMENT REVISION | COMMENTS |
|---|---|---|---|---|
| 20 Oct 2020 | PMC | 0.00 | 0 | Created |
| 10 Jun 2021 | YC | 0.00 | 1 | Updated to latest template |