

BiG USB Relay Datasheet

General Description

SMTs Building Intelligence Gateway (BiG) is designed to receive monitored data from both wired CAN based units and wireless data loggers. BiG features built in alarm processing routines allowing received data to be converted, compensated and compared against pre-programmed thresholds.

Triggered alarms can be associated with a variety of actions including sending email, alphanumeric page messages, running an external software program, displaying a pop-up message and by controlling relay alarm contacts.

Relay alarm contacts can be used to trigger signals to building management systems (BMS), trigger external buzzers, visual alerts or even actuate shut off valves. The relay can also be used to remotely toggle or reset something if required.

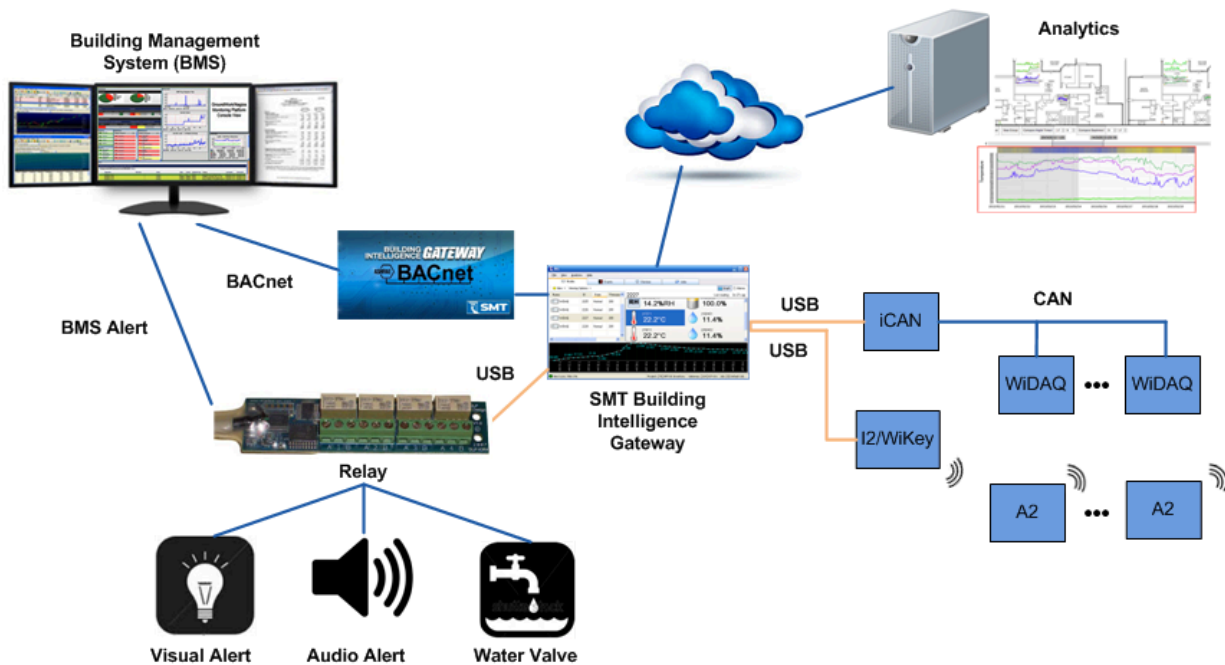
Features

- USB 2.0/1.1 Compatible
 - USB Port Powered, no external power supply required
 - 4 latching SPDT relays – each configurable as Normally Open (NO) or Normally Closed (NC) as required
 - Up to 10* units per system, for a total of 40 relays
 - Initial relay states can be programmed in BiG
- *Based on available USB ports.

Applications

- Interface to building management and alarm systems.
- Activation of audible or visible alarms.
- Actuation of compatible electronic solenoids, valves, and other equipment.
- For BMS systems requiring detailed alarm information the SMT BACnet CAS Gateway is recommended.

Typical Application



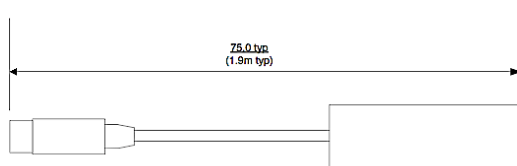
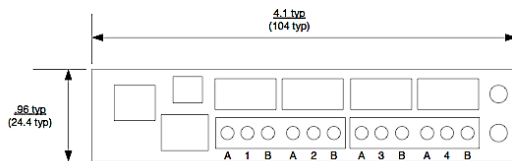
Electrical Specifications

Wired USB 2.0/1.1 mode per Quad Relay

Relay Type	4 latching SPDT, each configurable as A-x NO, B-x NC or A-x NC, B-x NO as required
Terminals	3 screw type per relay: A – Common – B
Power Loss	Retains last state
Contact Ratings	60W, 250VA
Max Switching Voltage	220VDC, 250VAC
Max Switching Current	2A
Max Carrying Current	2A
Operating Temperature	0°C to 70°C

Note: The two sets of contacts for each relay are connected in parallel.

Mechanical Dimensions in Inches (mm)



Warnings

Unplug from the host PC **before** connecting to the DLP-IOR4.

Observe static precautions to prevent damage to the DLP-IOR4 module.

Installation

Upon inserting the DLP-IOR4 relay into a USB port in BiG, Windows will automatically perform a search and install the required drivers. In the event that Windows does not perform this search, the following driver can be downloaded and installed: [CDM \(Combined Driver Model Version 2.8.24\) Windows Drivers](http://docs.smtresearch.ca/cdm20824certified.zip).

<http://docs.smtresearch.ca/cdm20824certified.zip>

Configuration with BiG

The Building Intelligence Gateway (BiG) can be used to set the initial state of the DLP-IOR4 relays upon start-up. To define the current state of the relays, select the Relay tab under the settings menu.

See the BiG manual for more information and configuration instructions.

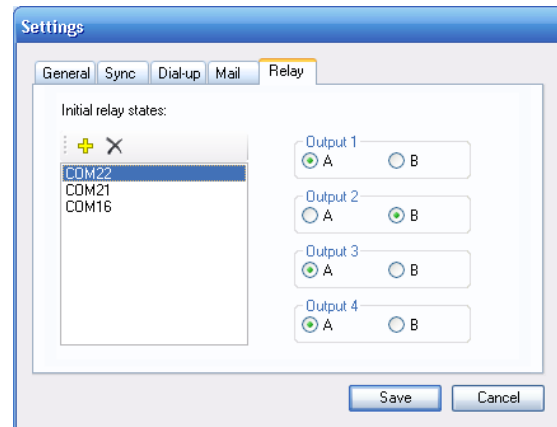


Figure 1. Initial relay configuration state screen in BiG

To define a relay action, select the Targets... menu under View. Select **Add...** to add a new Target, name the target and then select **Add...** to select an action. Select Relay.

You will then be prompted to select the appropriate COM port, relay output and actions to be performed upon an Alarm Triggered and an Alarm Cleared signal.

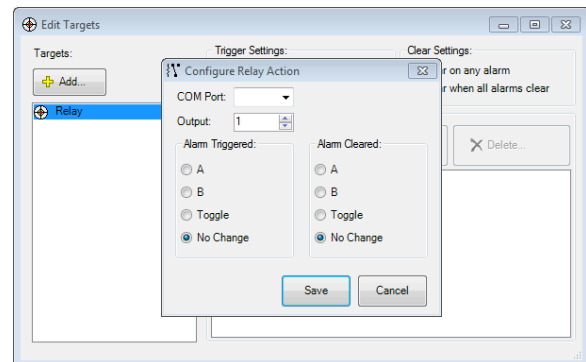


Figure 2. Configure relay action in BiG