

BMS Devices - BACnet Instance Modification Technical Guide



This guide tells you how to modify the BACnet Instance ID on an RLE BMS device. Before you make this modification, check RLE's website to ensure you are using the most recent version of our documentation.

If you need further assistance, please contact RLE Technologies at support@rletech.com.

Raptor

v11.18

RLE
Technologies

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Default Setting

The default BACnet ID setting on RLE's BMS devices uses a combination of DIP Switch 1.4 (set to the OFF position) and DIP Switch 2 to set the BACnet instance. In this default setting, the BACnet instance is a combination of the vendor ID and the station ID (as set on DIP switch 2):

$$ID_{\text{interface}} = 70 \times 1000 + ID_{\text{station}}$$

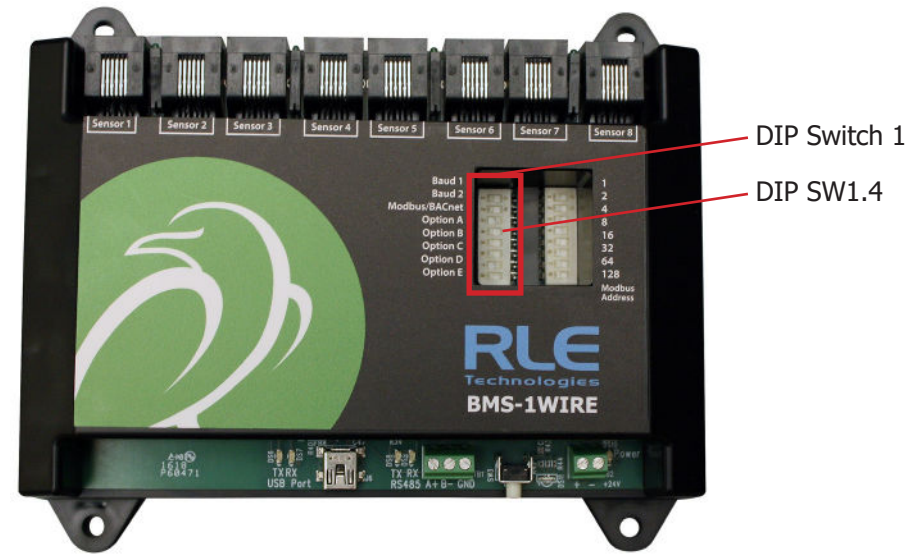
For example, if the station ID is set to 5, the BACnet interface ID is 70005.

Modify the BACnet Instance

There are two options to update the BACnet instance – through the command line or by using the BACnet "writeProperty" command.

For both options, SW1.4 ("Option A") must be in the "ON" position (to the right) to enable a custom BACnet ID. When "Option A" is disabled (in the OFF position to the left), the device will revert to the default behavior for the interface ID.

The device may require a power cycle to refresh the device ID.



Modify the BACnet Instance Via The Command Line

To update the BACnet interface ID from the command line interface, connect the BMS device to a PC via a USB Mini cable and open a serial connection with 115200 baud (8 data bits, no parity, and 1 stop bit). The ID can be modified with the "sbid" command and viewed with the "bid" command.

```
COM4 - Tera Term VT
File Edit Setup Control Window Help

9101e0a80BMS-LD3Z $ ?

  Console Commands:

  slist.....list all sensors
  settings.....show current system settings
  bid.....show bacnet device ID in use
  sbid.....configure custom bacnet device ID
  reboot.....reboot unit
  ?.....print this menu

9101e0a80BMS-LD3Z $ bid
Using Bacnet Device ID: 32
  NOTE: You must configure switch 4 to ON to enable custom device ID
9101e0a80BMS-LD3Z $ sbid 33
Saving Bacnet params to NVM...Done.
Custom bacnet device ID set to: 33
Using bacnet device ID: 33
  NOTE: You must configure switch 4 to ON to enable custom device ID
9101e0a80BMS-LD3Z $
```

Modify the BACnet Instance Via The BACnet Write Property

A BACnet software tool (like BQT) can also be used to update the interface ID. Sending a 32-bit BACnet “writeProperty” command to the object-identifier property of the Device object will use the bottom 22 bits as the device ID (automatically keeping the object type as “device”). Attempts to change the object-identifier property of objects other than the Device object will be rejected.

