



# ***Application Bulletin***

---

August 8, 2007

SMS Messaging on the XL Series OCS

---

## **SMS Messaging on the XL Series OCS**

### ***Objective***

The objective of this application bulletin is to provide the necessary steps on how to implement SMS messaging on the XL series product line. To achieve this functionality, the XLe will be using the internal GSM modem (HE-GSM04). External GSM modems can also be used to achieve this functionality. Although an XLe is used in this bulletin, any XL series OCS could be used.

This application bulletin uses the Outgoing Messaging and Incoming Messaging features of the XLe.

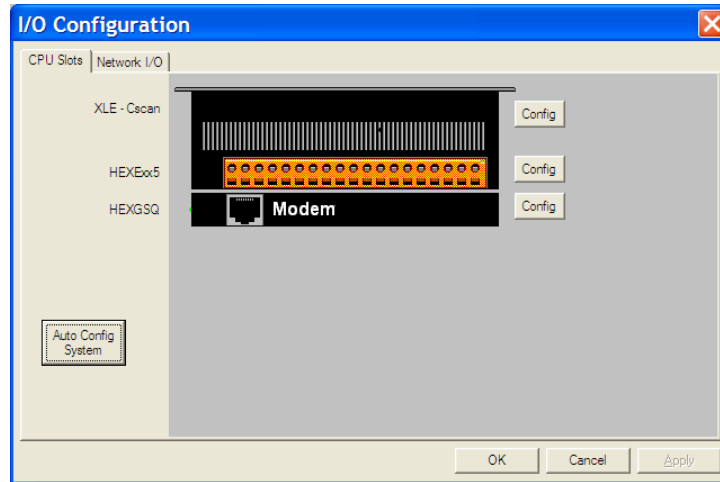
- Outgoing messaging allows the XLe to broadcast a SMS message with embedded data to an external device like a cell phone or another SMS compatible device.
- Incoming messaging allows the XLe to receive messages from other SMS compatible devices. The incoming messages can contain embedded data allowing registers to be updated remotely.

### ***Hardware Installation:***

1. Place the XLe flat on the display
2. Remove the existing back cover.
3. Install the SIM card into the GSM modem.
4. Carefully install the GSM modem onto the pins.
5. Install the new extended back cover and screws.

### **Configuration:**

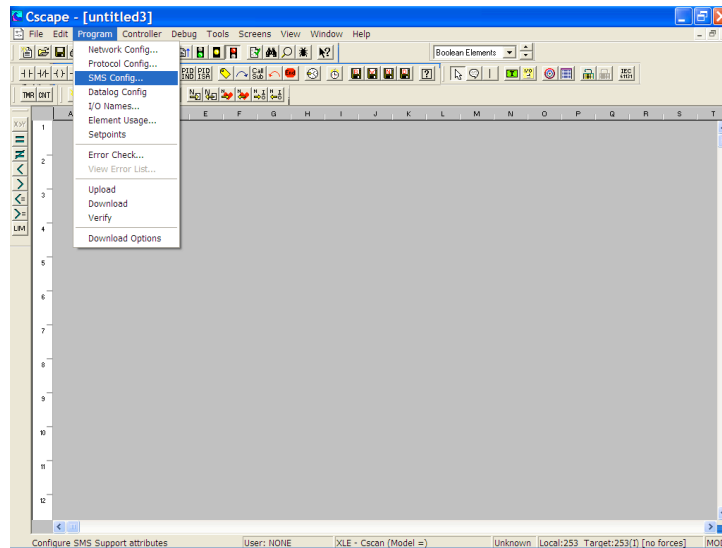
1. Configure the XLE for the HEGSQ under the I/O configuration either through manually configuring the I/O or through the Auto Config. feature.



2. Click OK.

### **SMS Configuration:**

1. Click on SMS Config

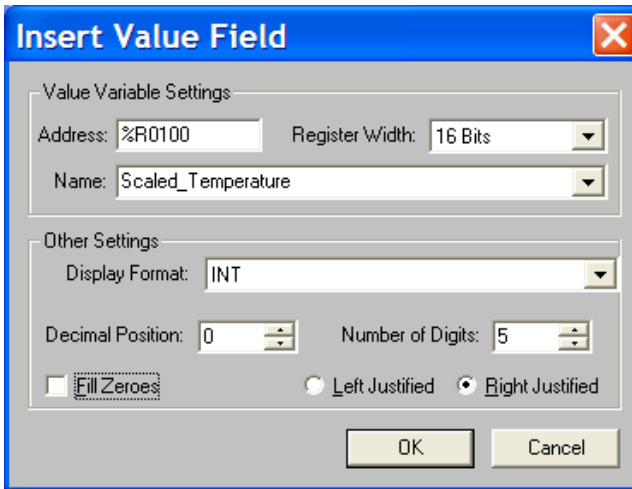


2. Check Enable SMS Configuration
3. Configure the Status Register. Remember that the status uses 4 consecutive registers.
4. Configure the Message Buffer Register. The message buffer uses 80 consecutive registers so take this into consideration when selecting registers.
5. Click on COM Port Settings and configure the parameters as follows.





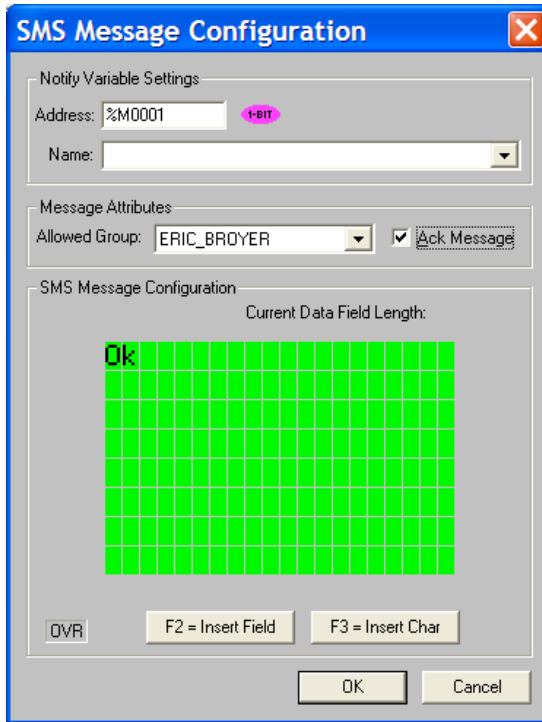
- e. Configure the SMS message. To embed data into the message, press the F2 key or click on F2 = Insert Field.



- f. Configure the data field accordingly.

### ***Incoming Messages***

- a. Click on Incoming Messages
- b. Click on Add New Message
- c. Assign a Notify Variable. This is a bit that energizes when a valid message comes in from the Group that is assigned to the message.
- d. Assign a group from the pull down list.
- e. Check Ack Message to send a response back to the device sending the SMS message. This is very handy to confirm that a valid message was received by the XLe.
- f. Configure the Incoming SMS message. The incoming message needs to be exactly the same as the configured message. So the case of the characters and the length of the incoming embedded data will need to be exactly the same. If the embedded data has 5 digits configured in the configured Incoming Message, then the data coming will need 5 digits. An example would be if you wanted to send a value of 10 to a register via SMS from a cell phone and the message was configured for 5 digits, then the embedded data will need to have 3 leading zero's, 00010 as the data. The phone number for the group will also need to match, including the 1 preceding the phone number.



**Summary**

Horner APG wrote this document on August 7, 2007. Questions or comments can be directed to the Tech Support Department by phone at 317-916-4274 or email [techspt@heapg.com](mailto:techspt@heapg.com).