September 2025

Setting Up the GSM-KIT-50 SMS Modem for Unitronics Vision PLCs

Follow the steps below to connect, configure, and test the modem.

Hardware Setup

1. Insert the SIM card, connect the antenna, and power up the modem.
2. Wait several minutes and confirm that the modem is registered to a cellular provider.
   - If the SIM card is activated and the PIN code is disabled, one of the LEDs (2G, 3G, or 4G) will light up.
   - The signal strength indicator bar should display between 1 and 4 LEDs.
3. Attach the **MJ10-22-CS76 adapter** to the modem.
4. Use the **MJ10-22-CS25 adapter** and connect it either to your PC's RS232 port or to a USB-to-Serial adapter.
5. Connect the **gray 4-wire Unitronics Vision/Samba programming cable** between the MJ10-22-CS76 adapter and the MJ10-22-CS25 adapter.

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Software Setup

1. Start the **VisiLogic** software.
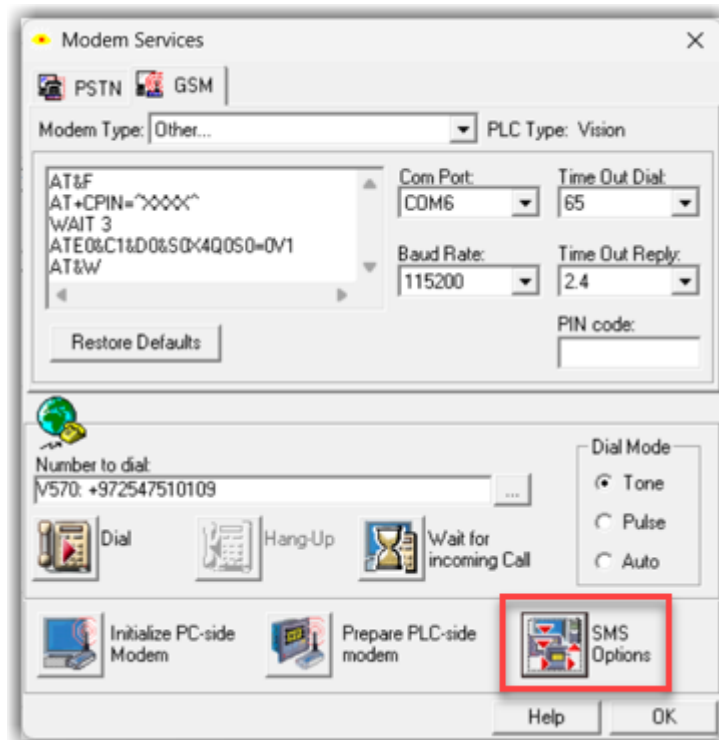2. Navigate to **Connection > Modem Services**.

3. Select **GSM > Other.**
4. Click **Prepare PLC-side modem**.
5. In the AT command editor, copy and paste the **exact** following command set below. Ensure there is **no Enter (CR+LF)** after the AT&W command.

```
AT&F
AT+CPIN=^XXXX^
WAIT 3
ATE0&C1&D0&S0X4Q0S0=1V1
AT+IPR=115200
AT+CNMI=2,1,0,0,0
AT&W
```
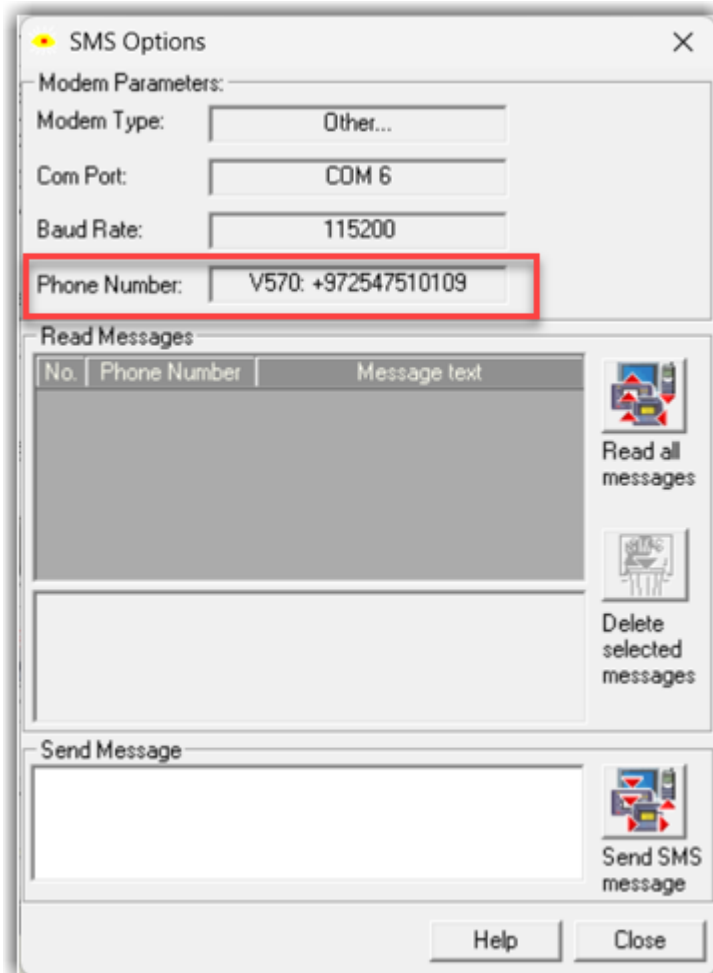
6. Click **Init Modem**. The process should complete without errors.
7. Click **Close**.
8. Ensure that the **Baud Rate** set in the modem (AT+IPR=115200) matches the baud rate in your Ladder COM INIT block.
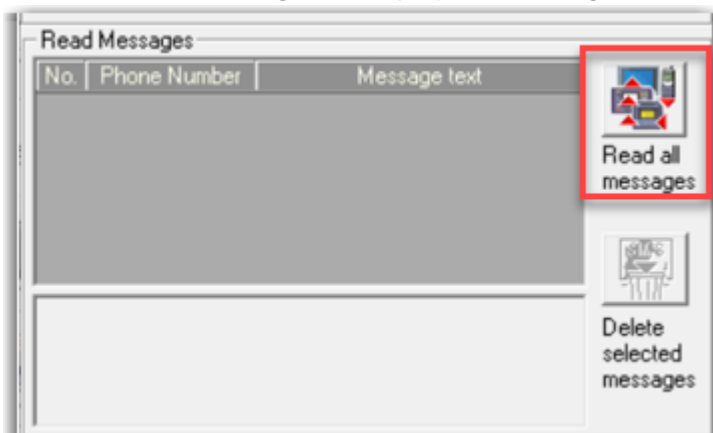
SMS Testing

1. Select **SMS Options**.

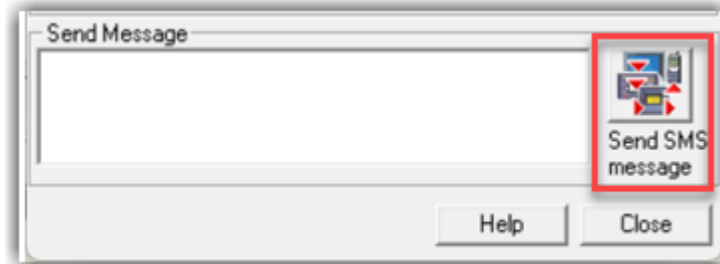2. Enter your phone number to test SMS functionality.

3. Click **Read all messages** to display the messages stored in the modem.

4. If there are messages in the list, select and delete them as needed.

5. In the **Send Message** field, type a message and click **Send SMS message**.
   - You should receive the SMS at the phone number you entered.

6. Send a reply SMS from your phone to the modem's number.
7. Click **Read all messages** again.
   - The SMS you sent from your phone should appear in the list.
8. Close **SMS Options** and **Modem Services**.

✅ **At this stage, the modem is ready to be connected to and used with the PLC.**

Final Steps

1. Connect the **gray 4-wire programming cable** between the MJ10-22-CS76 adapter and the PLC COM port.
2. Configure the PLC to send/receive SMS, as with any other modem.
   - Select **Other** as the modem type.

Operating System Support

1. The GSM-KIT-50 is supported by any VisiLogic before 9.9.0.
2. For projects developed using VisiLogic 9.9.0, special OS version must be used. Download link: OS 4.12(44)