

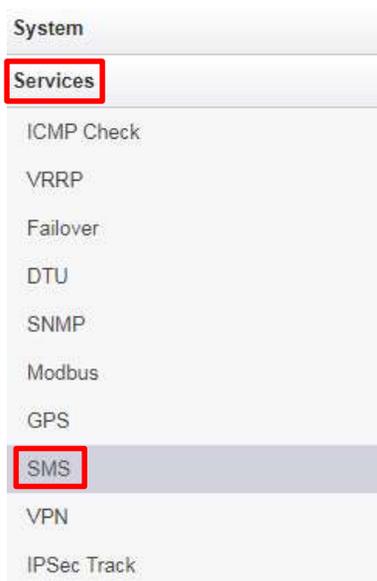
Configuring DIO SMS/Email Notification on the CM685VX and CM950W

The CM685VX comes with four DIO ports that can be used as digital output ports to control electrical devices via SMS, such as turning on a pump or opening a gate. The four DIO ports can also be used as digital input ports that can send an email or an SMS when triggered for alarm notification.

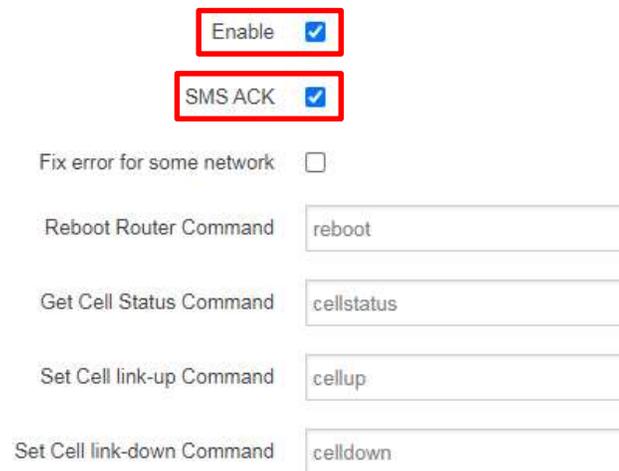
This guide is to show you how to configure DIO on the router to send alarm notifications via SMS or Email.

SMS Notification

1. Navigate to Services -> SMS -> SMS Command -> enable the SMS function and SMS ACK. Click on 'Save & Apply'. See screenshot below.

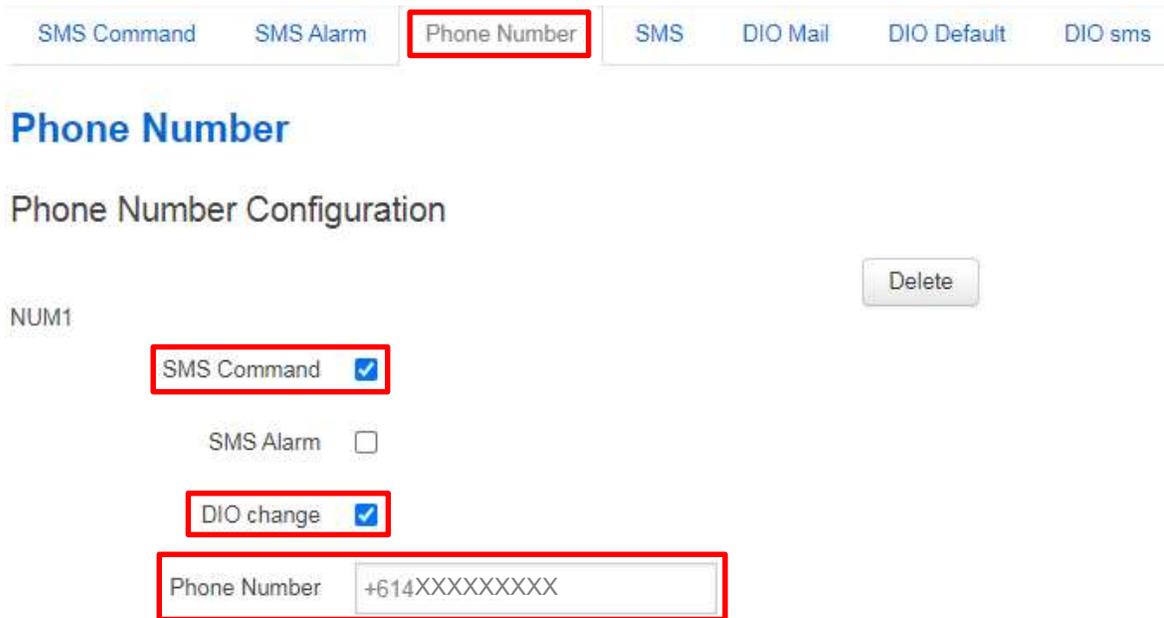


SMS Command



A screenshot of the 'SMS Command' configuration page. The 'Enable' checkbox is checked and highlighted with a red box. The 'SMS ACK' checkbox is also checked and highlighted with a red box. Below these are several input fields for commands: 'Fix error for some network' (unchecked), 'Reboot Router Command' (reboot), 'Get Cell Status Command' (cellstatus), 'Set Cell link-up Command' (cellup), and 'Set Cell link-down Command' (celldown).

- Go to the 'Phone Number' tab to set the user's mobile number that will receive SMS notifications. Click on 'Save & Apply'. See screenshot below.



SMS Command SMS Alarm **Phone Number** SMS DIO Mail DIO Default DIO sms

Phone Number

Phone Number Configuration

NUM1 Delete

SMS Command

SMS Alarm

DIO change

Phone Number

- By default, the direction for each DIO is 'Output'. To receive alarms this needs to be set to 'Input'. Go to 'DIO Default' and set the desired DIO to 'Input' and click on 'Save & Apply'. See screenshot below.



DIO_0 direction

DIO_1 direction

DIO_2 direction

DIO_3 direction

Note: After saving, the status of DIO0 (or any DIO set as an input) should be changed to 1. See below.



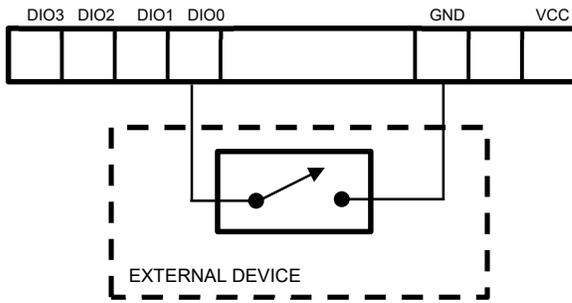
DIO_0 Status

DIO_1 Status

DIO_2 Status

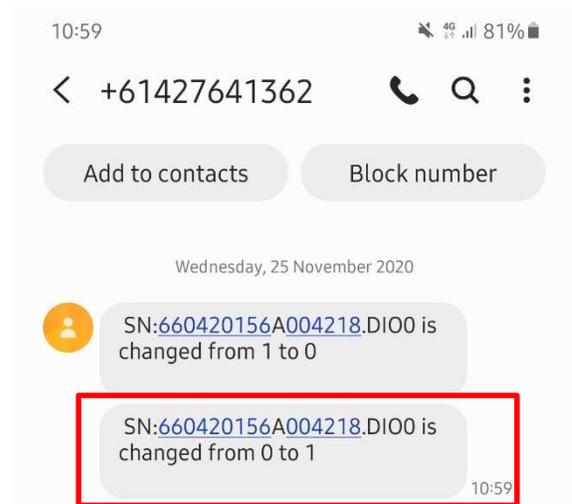
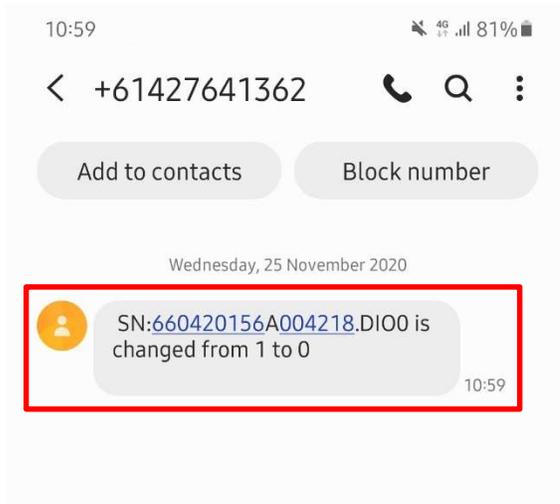
DIO_3 Status

4. To test SMS notification, short DIO0 and Ground. Refresh the page to see that DIO0 has changed to '0'.



DIO_0 Status 0
DIO_1 Status 0
DIO_2 Status 0
DIO_3 Status 0

5. You will receive a text confirming that DIO0 has been changed from '1' to '0', shown on the left below. Once you remove the short, you will also receive a message saying that DIO0 has been changed from '0' to '1' (shown right).



- You can customise the digital input SMS message. Go to Services> SMS> DIO SMS and enter the customised SMS message. See example below:

The screenshot shows the 'DIO SMS configuration' page. The left sidebar has 'Services' expanded, with 'SMS' selected. The main content area is titled 'DIO SMS configuration' and 'DIO SMS Settings'. It includes a checked checkbox for 'Enable self-defined DIO SMS alarm' and three text input fields for custom SMS messages: 'SMS text for bootstrap', 'SMS text for DIO0 changed from low to high', and 'SMS text for DIO0 changed from high to low' (with 'fire alarm' entered).

Email Notification

- Go to Services -> SMS -> DIO Mail.

The screenshot shows the 'Mail Configuration' page. The left sidebar has 'Services' expanded, with 'SMS' selected. The main content area is titled 'Mail Configuration' and 'Send email to specified address when DIO changed'. It includes an unchecked checkbox for 'Enable', an 'SMTP server' input field, a 'Port' input field with '25' entered, a 'Username/Account' input field, and an unchecked checkbox for 'SMTP Authentication'.

2. Set appropriate parameters based on your email account settings. Please see screenshot below.

Mail Configuration

Send email to specified address when DIO changed

Enable

SMTP server

Port

Username/Account

SMTP Authentication

Username

Password 

TLS ▼

StartTLS ▼

Check server certificate ▼

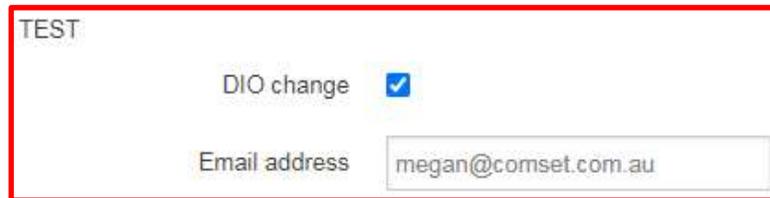
TLS trust file No file chosen

3. Set DIO_0 name, high text and low text to identify status via email (optional). See screenshot below.

DIO_0 name	<input type="text" value="Gate01"/>
DIO_0 high text	<input type="text" value="Closed"/>
DIO_0 low text	<input type="text" value="Open"/>

4. Add a new Group under 'Receiver Configuration' and check the box 'DIO change' to enable email notifications. See below screenshot.

Receiver Configuration



TEST

DIO change

Email address

New group name

5. You should now be able to receive an email notification from the router to your email client host when there is a change of the DIO status value. This can be tested by shorting the DIO to ground, like in Step 4 of configuring SMS notifications. The screenshot below shows the email received when the DIO is changed from '1' (closed) to '0' (open).

Gate01 changed

 M megan@comset.com.au
To

Hostname:CM685VX, Gate01 is changed from Closed to Open