

NR500 Series Industrial Cellular VPN Router

Application Note 038

SMS Gateway

Version: V1.0.1
Date: Jun. 2021
Status: Confidential



Directory

1. Introduction.....	3
1.1 Overview.....	3
1.2 Compatibility.....	3
1.3 Version.....	3
1.4 Corrections.....	3
2. Topology.....	4
3. Test on Serial Port.....	5
3.1 NR500 Pro Configuration.....	5
3.2 Testing.....	6
4. Test on Ethernet Port.....	9
4.1 NR500 Pro Configuration.....	9
4.2 Testing.....	10

1. Introduction

1.1 Overview

This document contains information regarding the configuration and use of SMS gateway.

This guide has been written for use by technically competent personnel with a good understanding of the communications technologies used in the product, and of the requirements for their specific application.

1.2 Compatibility

This application note applies to:

Models Shown: NR500 series.

Firmware Version: V1.1.6(0742bac) or newer

Other Compatible Models: None

1.3 Version

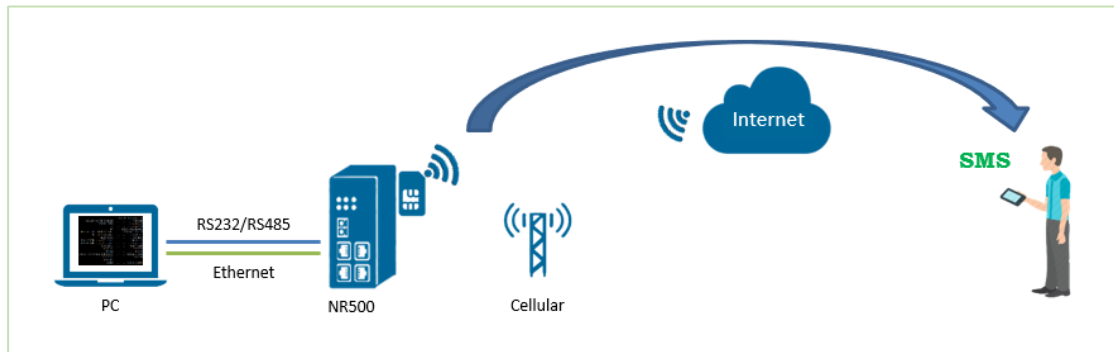
Updates between document versions are cumulative. Therefore, the latest document will include all the content of previous versions.

Release Date	Doc. Version	Firmware Version	Change Description
2020/04/14	V1.0.0	V1.1.2(3be6e5a)	First released
2021/06/04	V1.0.1	V1.1.6(0742bac)	Set on ethernet port

1.4 Corrections

Appreciate for corrections or rectifications to this application note, and if any request for new application notes please email to: support@navigateworx.com

2. Topology



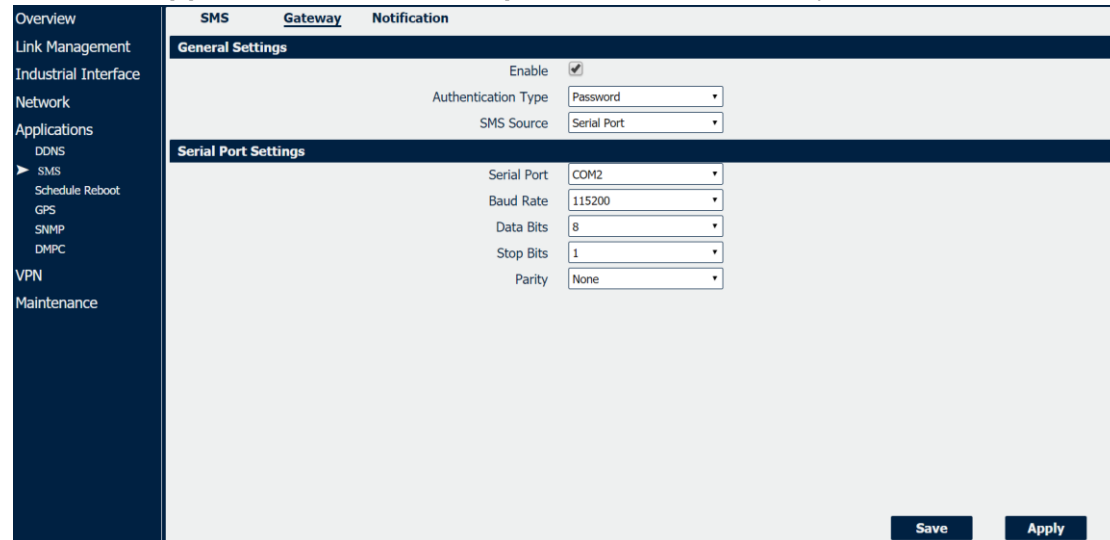
1. NR500 Pro connect to Internet via SIM card.
2. PC connect to NR500 Pro via Serial Port (RS232 or RS485) or Ethernet Port.
3. PC send the special command via serial port/ethernet port to NR500 Pro and trigger NR500 Pro to send the SMS to the receiver.

Note: This Application Note will show the example when the router receives the special command from RS232 Port and Ethernet Port.

3. Test on Serial Port

3.1 NR500 Pro Configuration

1. Go to **Application>SMS>Gateway**, enable SMS Gateway feature like below:



The screenshot shows the configuration page for the SMS Gateway feature. The left sidebar contains a navigation menu with the following items: Overview, Link Management, Industrial Interface, Network, Applications, DDNS, SMS (highlighted), Schedule Reboot, GPS, SNMP, DMPC, VPN, and Maintenance. The main content area has three tabs: SMS, Gateway (selected), and Notification. Under the Gateway tab, there are two sections: 'General Settings' and 'Serial Port Settings'. In the 'General Settings' section, the 'Enable' checkbox is checked, 'Authentication Type' is set to 'Password', and 'SMS Source' is set to 'Serial Port'. In the 'Serial Port Settings' section, 'Serial Port' is set to 'COM2', 'Baud Rate' is '115200', 'Data Bits' is '8', 'Stop Bits' is '1', and 'Parity' is 'None'. At the bottom right of the configuration area, there are two buttons: 'Save' and 'Apply'.

2. Click Save>Apply.

3.2 Testing

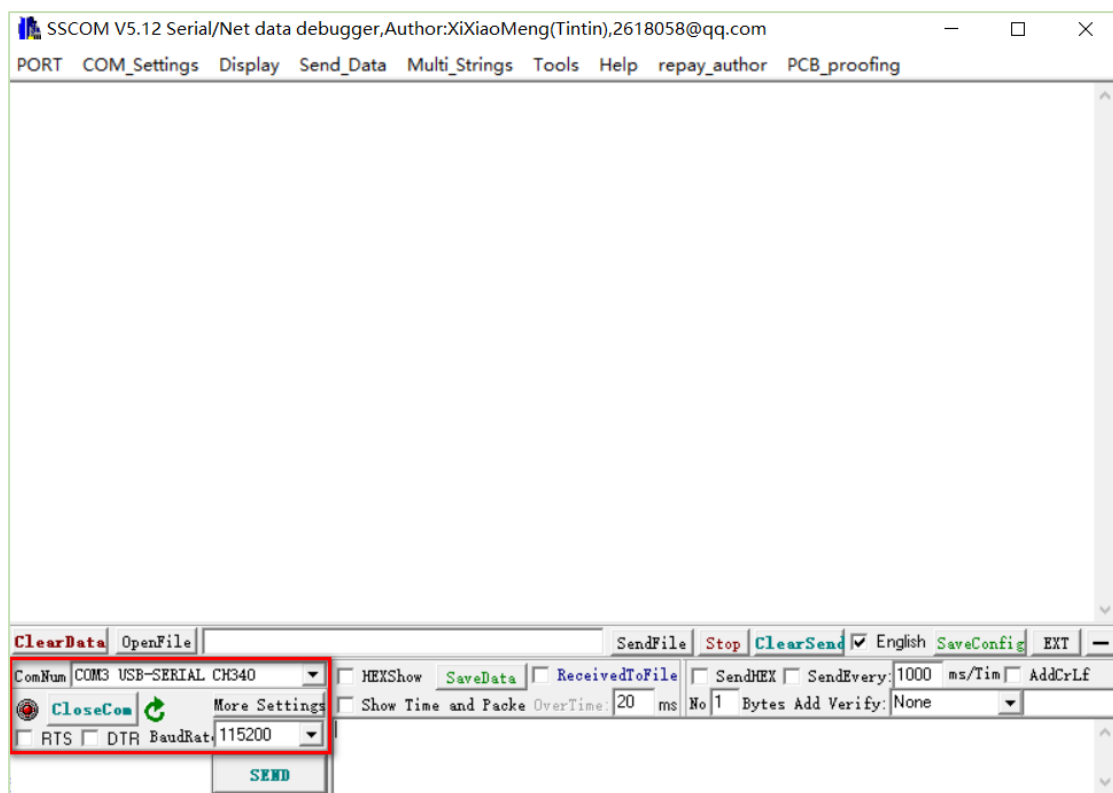
Send the content “**hello**” to the special mobile phone as an example. Below is the special command need to be sent to the router via RS232 Port.

- a. **sms_send&admin&admin&15915802180&Text_To_Send**
- b. **1a** // it is the ending code and need to be sent with “HEX”

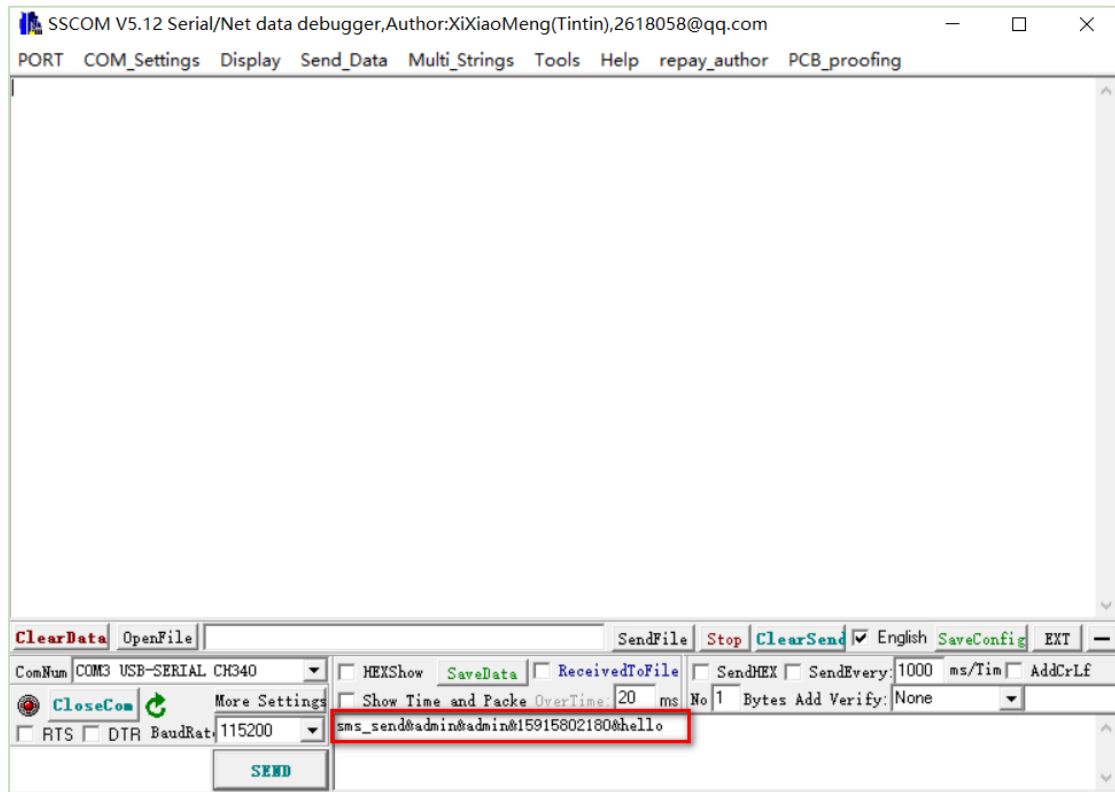
Here is the explanation of the command “a”:

sms_send&username&password &phone number&SMS content

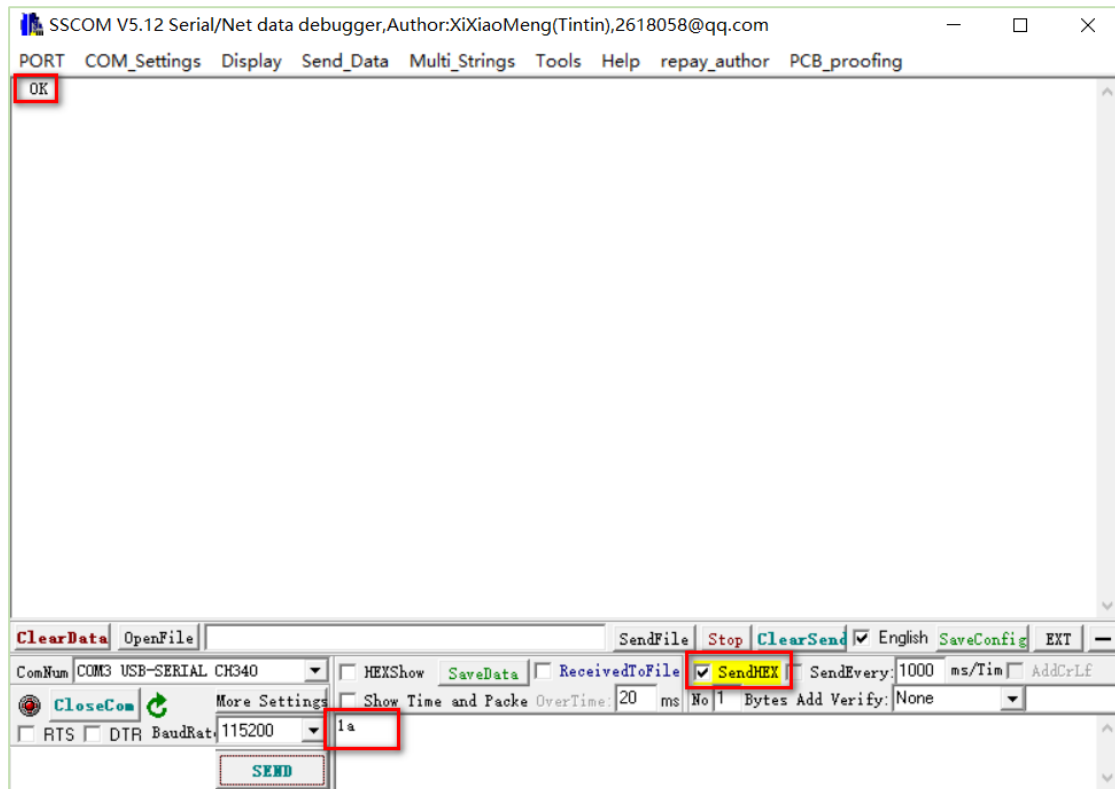
1. Run SSCOM software and connect the NR500 router via serial port, like below:



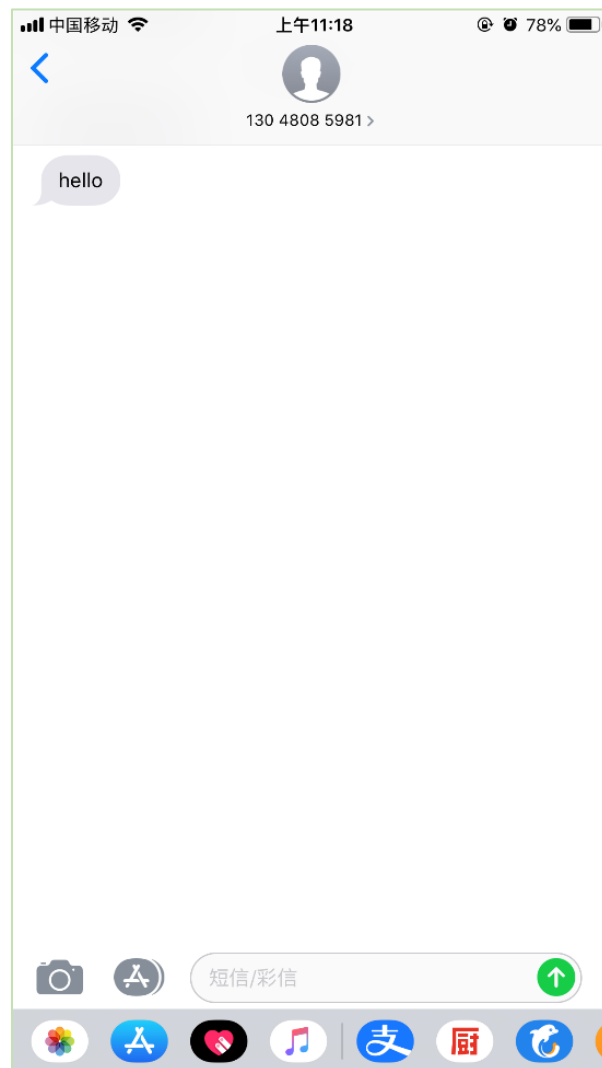
2. Send the SMS content “**hello**” to the receiver phone number “**15915802180**”.



3. Send the ending code “**1a**” with “**HEX**”:



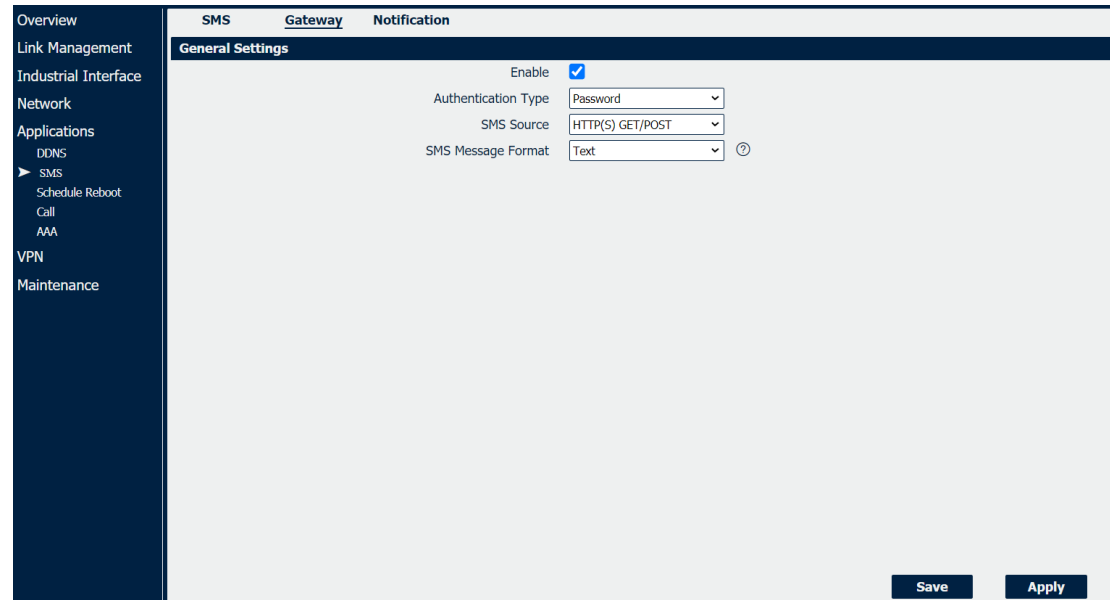
4. Test successfully, the mobile phone can receive the SMS message.



4. Test on Ethernet Port

4.1 NR500 Pro Configuration

1. Go to **Application>SMS>Gateway**, enable SMS Gateway feature like below:



The screenshot shows the configuration page for the SMS Gateway feature. The left sidebar contains a navigation menu with the following items: Overview, Link Management, Industrial Interface, Network, Applications (with sub-items: DDNS, SMS, Schedule Reboot, Call, AAA), VPN, and Maintenance. The main content area is titled 'General Settings' and has three tabs: SMS, Gateway (selected), and Notification. The settings are as follows:

Setting	Value
Enable	<input checked="" type="checkbox"/>
Authentication Type	Password
SMS Source	HTTP(S) GET/POST
SMS Message Format	Text

At the bottom right of the configuration area, there are two buttons: 'Save' and 'Apply'.

2. Click Save>Apply.

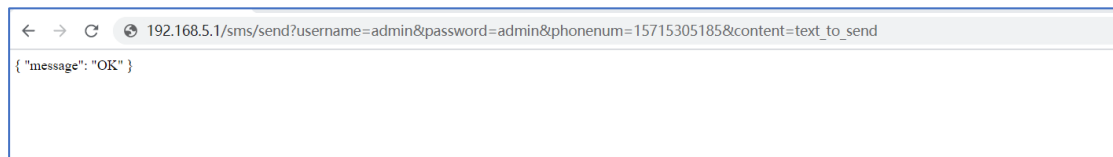
4.2 Testing

Please type below command on the browser, then will trigger the router to send the SMS out:

`http://192.168.5.1/sms/send?username=admin&password=admin&phonenum=15715305185&content=text_to_send`

“text_to_send” is the SMS content that can be defined accordingly.

1. Type the command on browser to trigger the SMS out:



2. Test successfully. The phone had received the SMS message:

