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## IP & SMS Alarm Communicator

### Quick Start Guide

#### Thank you for purchasing a Watchguard™ IP & SMS Alarm Communicator

This Quick Start Guide covers basic setup, installation and use of your communicator.

The WGSMSC is an IP and SMS alarm communicator with battery backup. It is compatible with most contact ID alarm panels. The communicator is able to send contact ID alarm events via SMS over the mobile network to up to 5 mobile devices. It can simultaneously communicate via IP (3G, 4G, Ethernet) to a compatible monitoring centre. Separately, the WGSMSC also supports PSTN pass-through.

#### Included Components

1 x WGSMSC Alarm Communicator Module

1 x 4G antenna

1 x USB cable

1 x DC adapter

1 x CD-ROM with configuration software

# 1. Using the WGSMSC as an SMS Communicator

## 1.1 Usage Overview

This section covers how to set up the WGSMSC for use as an SMS alarm communicator. In this configuration, the communicator can notify up to 5 users via SMS for events such as alarm activation and power loss. This turns your alarm into a self monitored alarm system that can be used inline with your monitoring service.

In this section, learn how to connect and configure your communicator via PC, set up which mobile numbers the communicator contacts, alarm events and messages sent in response and how to connect the communicator to the alarm panel.

## 1.2 Installation Requirements

Before installation, ensure the following are accounted for:

- One installed and active alarm panel (Watchguard™ WGAP864 recommended)
- One PC / laptop for communicator configuration via USB
- One active SIM card for SMS communication
- Mobile network connection

## 1.3 Product Diagram

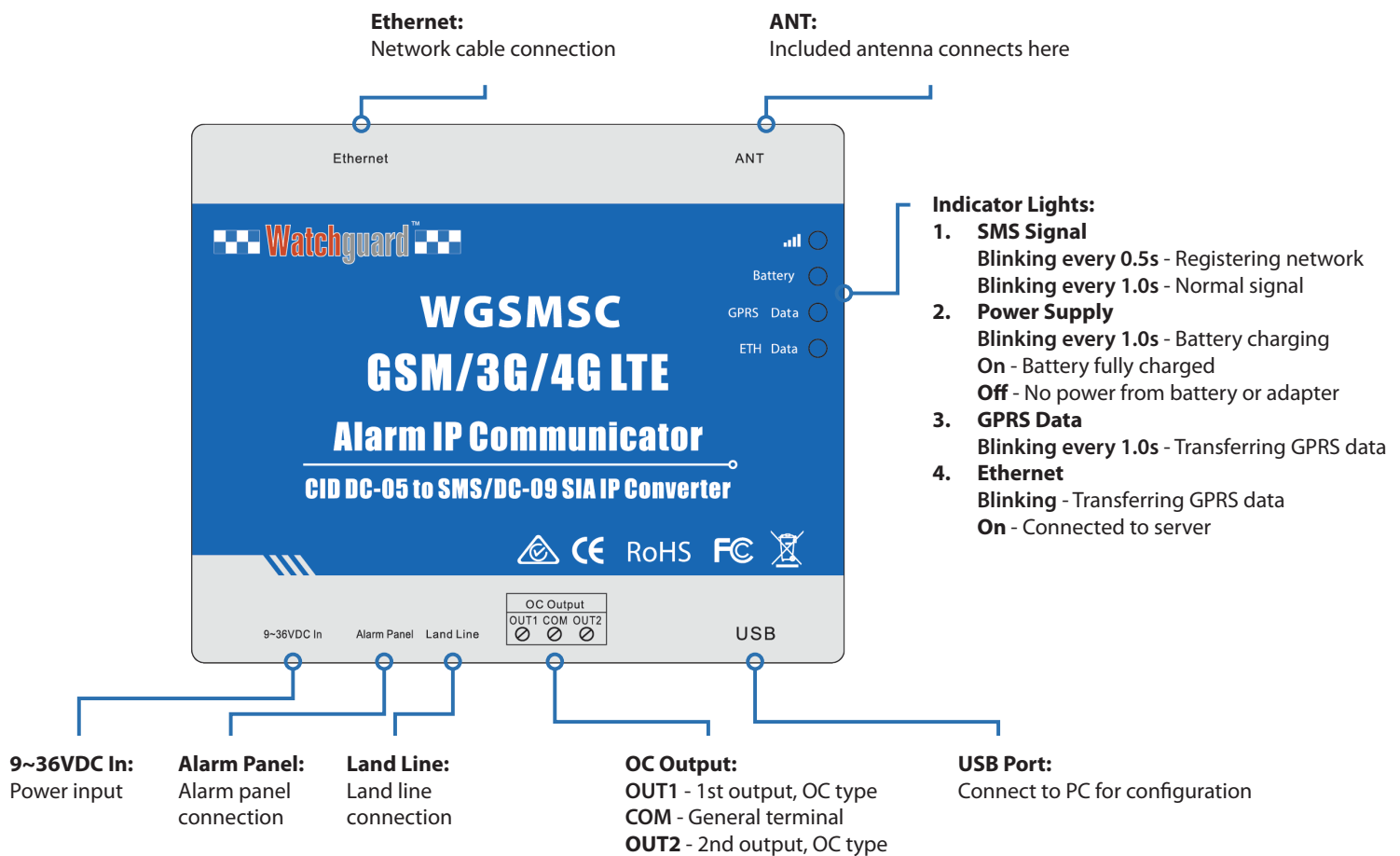


Fig. 1.3.1: WGSMSC diagram & connections

## 1.4 Configuration via PC

The WGSMSC is primarily configured via PC-USB connection with the included configuration software. The communicator can also be re-configured to an extent by SMS commands after initial setup is complete.

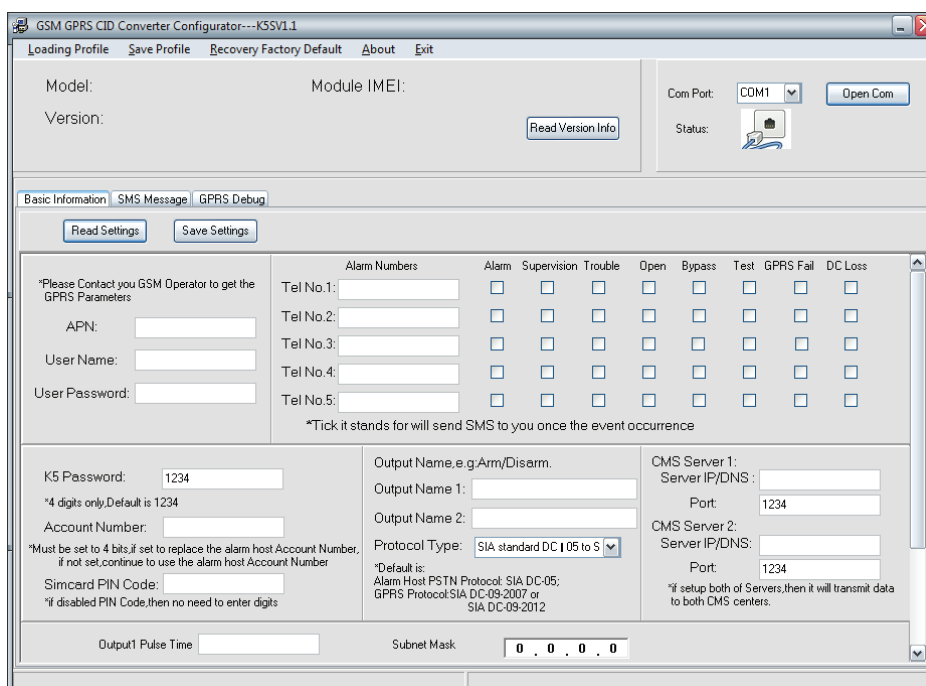
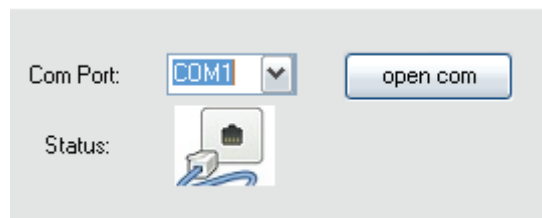


Fig. 1.4.1: WGSMSC Configuration Software - Basic Information Tab

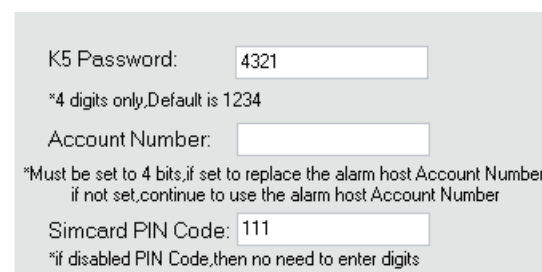
### 1.4.1 Connecting the WGSMSC to the PC

1. Power on the WGSMSC with the included adapter and connect it to the PC via the included USB cable.
2. Insert the included CD-ROM and copy **GSM 3G 4G Ethernet CommunicatorK5SV1.1.exe** from the .zip onto the PC.
3. Launch the program. It will open to the **Basic Information** tab by default.
4. At the top right of the configuration software, select a Com Port (eg. COM1) and press “Open Com” to confirm.



### 1.4.2 Password Settings

1. **Change the default SMS password**, under “K5 Password”. For future reference, write down this password in the provided box, as it is necessary for configuration via SMS.
2. If the SIM card being used for your WGSMSC has a PIN security code, enter that under “Simcard PIN Code”.
3. Account Number isn’t important for now and can be left as it is.



SMS Password

## 1.4 Configuration via PC (continued)

### 1.4.3 Mobile Alarm Settings

Alarm Numbers	Alarm	Supervision	Trouble	Open	Bypass	Test	GPRS Fail	DC Loss
Tel No.1: 0491 570 156	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tel No.2: 0491 570 157	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tel No.3: 0491 570 158	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tel No.4: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tel No.5: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Tick it stands for will send SMS to you once the event occurrence

1. **Add up to 5 mobile numbers to contact.** These are the numbers that will receive SMS messages when the selected alarm events are activated.
2. Check the notification events that you wish to be alerted of via SMS (*Refer to Fig. 1.2.4.*). Alarm and DC Loss are recommended.
3. Save all changes with the "Save Settings" button.

Alarm Event	Situation
Alarm	Contact ID Protocol Events Codes
Supervision	
Trouble	
Open	
Bypass	
Test	
GPRS Fail	GPRS message transmission failure
DC Loss	External DC power lost

Fig. 1.4.2: Alarm Events

### 1.4.4 SMS Message Settings

Now that mobile numbers and alarm events have been configured, SMS messages can be configured to send messages corresponding to alarm partitions/zones.

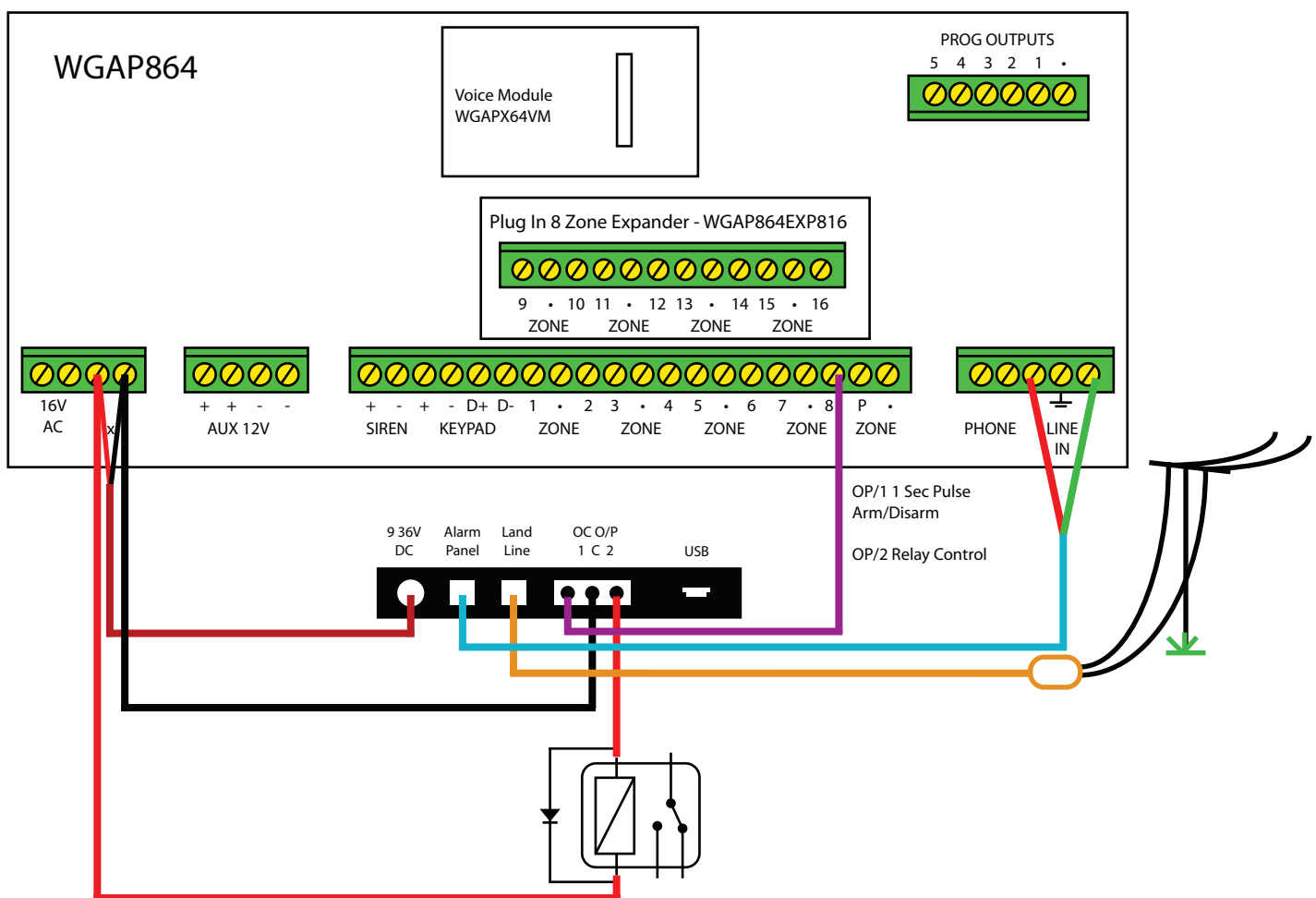
1. After saving all changes, select the **"SMS Message" tab**.
2. Enter each alarm partition and zone to be used for SMS alerts.
3. Enter appropriate names for each alarm zone. These names are used in SMS alert messages - if no name is entered, the message will be in illegible code. (*Pictured example: SMS alerts for 8 different alarm zones in the same partition, with each area and sensor type covered.*)
4. Save all changes with the "Save Settings" button.

SN	Partition	Zone	SMS Text Message(max.59)
00	1	01	Entrance - Front Door
01	1	02	Entrance - PIR
02	1	03	Hallway - PIR
03	1	04	Kitchen - Smoke Detector
04	1	05	Kitchen - Glass Break
05	1	06	Back - Back Door
06	1	07	Back - PIR
07	1	08	Yard - PIR

## 1.5 Alarm Panel Connection

Now that the communicator has been fully configured, it's ready to be connected to the alarm panel. For this section, the Watchguard™ Professional 8 Zone Alarm Panel (WGAP864) will be used as an example.

1. Unplug the communicator from the PC, then unscrew and open the alarm panel.
2. Insert the SIM card into the SIM slot.
3. Connect the communicator in-line with your alarm panel (refer to Fig. 1.4.4).
4. **For testing purposes, if you have a monitoring centre, do NOT connect the RJ11 cable yet.**
5. Attach the included external antenna to the ANT socket of the communicator.
6. Connect the communicator to a 9~36VDC power supply to turn it on.

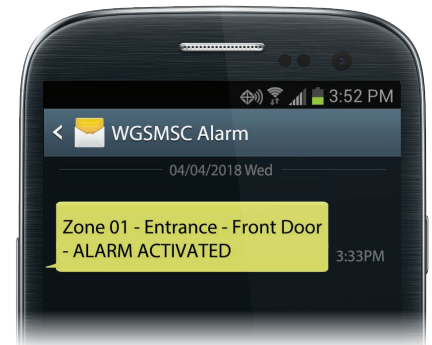


**Fig. 1.5.1: WGAP864 Alarm Connection Example**

## 1.6 Testing

The communicator will now be tested to ensure it powers on correctly, GSM connection is established, alarm events are functioning properly and SMS messages are being received.

1. Confirm the power light is turned on.
  - a. Steady on - Unit is on and internal battery is charged
  - b. Flashing 1s - Unit is on and battery is charging
  - c. Off - No power connected and battery isn't providing power
2. Confirm the GSM indicator moves from 0.5s flashing (registering to network) to 1s flashing (connection to network). If it is not, ensure the following:
  - a. The SIM card has been properly inserted.
  - b. The inserted SIM card is activated.
  - c. The GSM antenna is properly connected and within range.
4. Confirm the alarm communicator is functional by testing an alarm event. The communicator should not be connected to the landline for this step, or it could send a false alarm to your monitoring station.
  - a. Arm your alarm.
  - b. Trigger a known zone.
  - c. Wait to receive an SMS notification to your programmed phone(s) (This may take up to 1 minute depending on telephone carrier and signal strength Ensure the mobile phone also has adequate reception to receive SMS).
  - d. Once you've successfully received the SMS message, if you require use of landline for connection to monitoring centre, connect it to the communicator via Landline RJ11 port.



## 2. Using the WGSMS as a Contact ID (Ethernet/3G/4G) Communicator

### 2.1 Usage Overview

The WGSMS can also be used as a Contact ID to IP communicator, establishing a connection to your monitoring station via Ethernet, 3G and/or 4G connection. This is useful for buildings that have adopted NBN and those that no longer have access to a direct phone line connection.

### 1.2 Monitoring Station Requirements

To use the WGSMS communicator with a monitoring station, the monitoring station must have support for SIA DC09 protocol support.

For details on how to connect your WGSMS for monitoring stations, and for assistance in finding compatible monitoring stations, call us at **+61 2 45452598**

## 3. SMS Command Reference

### 3.1 SMS Command Overview

SMS commands can be sent to the SIM card of the WGS MSC for remote configuration.

*Note: Using the PC configuration software is always recommended, when possible.*

- All SMS commands must be fully CAPITALISED.
- Examples and Return SMS Message are for reference only; these will vary according to your own configurator setup.
- Password below is the default password (1234), replace this with the password you set in 1.4.2 Basic Information Settings.

#### 3.1.1 SMS Command Error

This error shows up when an invalid SMS format is sent. Double-check your password and command and try again.

SMS Command	Return SMS Message
-	SMS Format Error, Please check Caps Lock in Command!

#### 3.1.2 Change Password

This code changes the communicator's SMS password.

SMS Command	Return SMS Message
[CURRENT PASSWORD]+P+[NEW PASSWORD] <i>Example: 1234P4321</i>	4321, This is the New Password, please remember it carefully.

#### 3.1.3 Device Information

Refer to communicator specifications, current version, etc.

SMS Command	Return SMS Message
[PASSWORD]+EE <i>Example: 1234EE</i>	Model: WGS MSC Version: V 1.00 2018-04 IMEI: 867965029050313 GSM Signal Value: 30

#### 3.1.4 SMS Notification Numbers

Program the 5 mobile numbers for SMS notification

Action	SMS Command	Return SMS Message
Set mobile phone numbers	[PASSWORD]+A+[SERIAL#]+T+[PHONE#] <i>Example: 1234A3T13570810254</i>	Tel1: --- Tel2: --- Tel3: 13570810254 Tel4: --- Tel5: ---
List all numbers	[PASSWORD]+A <i>Example: 1234A</i>	Tel1: [PHONE#] Tel2: [PHONE#] Tel3: [PHONE#] Tel4: [PHONE#] Tel5: [PHONE#]
Delete existing number	[PASSWORD]+A+[SERIAL#] <i>Example: 1234A3</i>	Tel1: [PHONE#] Tel2: [PHONE#] Tel3: --- Tel4: [PHONE#] Tel5: [PHONE#]

## 3.1 SMS Command Overview (continued)

### 3.1.5 Program OC Outputs

Program alarm system OC outputs.

Note: Except for pulse output time, multiple serial numbers can be configured at once. Eg. 12 means 1st output and 2nd output.

Action	SMS Command	Return SMS Message
Set the name of the OC outputs	[PASSWORD]+DO+[SERIAL#]+T+[NAME] Example: 1234DO1Output 1 for Arm.	DO1: rename: Output 1 for Arm.
Check all OC outputs	[PASSWORD]+DO+[SERIAL#] Example: 1234DO1	DO1: Output 1 for Arm.
Delete existing OC output	[PASSWORD]+DO+[SERIAL#]+DEL Example: 1234DO1DEL	DO1: Output 1 for Arm.
Switch relay on	[PASSWORD]+DOC+[SERIAL#] Example: 1234DOC12	DO1: ON DO2: ON
Switch relay off	[PASSWORD]+DOO+[SERIAL#]+DEL Example: 1234DOO12	DO1: OFF DO2: OFF
Check current status	[PASSWORD]+DOE Example: 1234DOE	DO1: ON/OFF DO2: ON/OFF ---
Set pulse output time	[PASSWORD]+DOP+[SERIAL#]+[PULSETIME] Example: 1234DOP130 (Time is in seconds, max. 9999s)	DO1 Pulse Output Time: 30S
Check pulse output time	[PASSWORD]+DOT+[SERIAL#] Example: 1234DOT1	DO1 Pulse Output Time: 30S
Pulse output control	[PASSWORD]+DOP+[SERIAL#] Example: 1234DOT1	

### 3.1.6 Program GPRS IP Server & Port

Note: Only the 1st server IP can be programmed via SMS commands. Program the 2nd server IP via PC configurator.

Action	SMS Command	Return SMS Message
IP settings	[PASSWORD]+IP+[IP ADDRESS]+P+[PORT#] Example: 1234IP183.12.162.70P4005	Server: 182.12.162.70 Port: 4005
Check IP settings	[PASSWORD]+IP Example: 1234IP	
Delete existing IP settings	[PASSWORD]+IPDEL Example: 1234IPDEL	

### 3.1.7 GPRS Data Settings

Action	SMS Command	Return SMS Message
GPRS settings	[PASSWORD]+AP;[APN];[USERNAME];[IP P/W]# Example: 1234APeverywhere;esecure;password#	APN: everywhere User Name: esecure Password: password
Check GPRS settings	[PASSWORD]+AP Example: 1234AP	
Delete existing GPRS settings	[PASSWORD]+APDEL Example: 1234APDEL	



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