



SIM800 Series_Email _Application Note

GPRS Module

SIMCom Wireless Solutions Limited

Building B, SIM Technology Building, No.633, Jinzhong Road

Changning District, Shanghai P.R. China

Tel: 86-21-31575100

support@simcom.com

www.simcom.com

Document Title:	SIM800 Series_Email_Application Note
Version:	1.02
Date:	2020.6.15
Status:	Released

GENERAL NOTES

SIMCOM OFFERS THIS INFORMATION AS A SERVICE TO ITS CUSTOMERS, TO SUPPORT APPLICATION AND ENGINEERING EFFORTS THAT USE THE PRODUCTS DESIGNED BY SIMCOM. THE INFORMATION PROVIDED IS BASED UPON REQUIREMENTS SPECIFICALLY PROVIDED TO SIMCOM BY THE CUSTOMERS. SIMCOM HAS NOT UNDERTAKEN ANY INDEPENDENT SEARCH FOR ADDITIONAL RELEVANT INFORMATION, INCLUDING ANY INFORMATION THAT MAY BE IN THE CUSTOMER'S POSSESSION. FURTHERMORE, SYSTEM VALIDATION OF THIS PRODUCT DESIGNED BY SIMCOM WITHIN A LARGER ELECTRONIC SYSTEM REMAINS THE RESPONSIBILITY OF THE CUSTOMER OR THE CUSTOMER'S SYSTEM INTEGRATOR. ALL SPECIFICATIONS SUPPLIED HEREIN ARE SUBJECT TO CHANGE.

COPYRIGHT

THIS DOCUMENT CONTAINS PROPRIETARY TECHNICAL INFORMATION WHICH IS THE PROPERTY OF SIMCOM WIRELESS SOLUTIONS LIMITED. COPYING, TO OTHERS AND USING THIS DOCUMENT, ARE FORBIDDEN WITHOUT EXPRESS AUTHORITY BY SIMCOM. OFFENDERS ARE LIABLE TO THE PAYMENT OF INDEMNIFICATIONS. ALL RIGHTS RESERVED BY SIMCOM IN THE PROPRIETARY TECHNICAL INFORMATION, INCLUDING BUT NOT LIMITED TO REGISTRATION GRANTING OF A PATENT, A UTILITY MODEL OR DESIGN. ALL SPECIFICATION SUPPLIED HEREIN ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.

SIMCom Wireless Solutions Limited

Building B, SIM Technology Building, No.633 Jinzhong Road, Changning District, Shanghai P.R. China

Tel: +86 21 31575100

Email: simcom@simcom.com

For more information, please visit:

<https://www.simcom.com/download/list-863-en.html>

For technical support, or to report documentation errors, please visit:

<https://www.simcom.com/ask/> or email to: support@simcom.com

Copyright © 2020 SIMCom Wireless Solutions Limited All Rights Reserved.

About Document

Version History

Version	Date	Owner	What is new
V1.00	2013.08.01	Ping.Zhang	New version
V1.01	2016.11.17	Wenjie.Lai	Scope
V1.02	2020.06.15	Fan.Fang /Wenjie.Lai	All

Scope

This document can apply to SIM800 series modules with Email function.

Contents

About Document	3
Version History	3
Scope	3
Contents	4
1 Introduction	5
1.1 Purpose of the document	5
1.2 Related documents	5
1.3 Conventions and abbreviations	5
2 Email Introduction	6
2.1 Features	6
3 AT commands	7
4 Email Examples	8
4.1 Bearer profile	8
4.2 Send an Email	8
4.3 Send an Email with an attachment	9
4.4 Send a UTF-8 Email	10
4.5 Retrieve the Email	11
4.6 Delete the Email	12
4.7 Get the Email's size and unique-id	13

1 Introduction

1.1 Purpose of the document

This document presents the AT command of Email operation and application examples.

Developers could understand and develop application quickly and efficiently based on this document.

1.2 Related documents

[1] SIM800 Series_AT Command Manual

[2] SIM800 Series_TCPIP_Application Note

1.3 Conventions and abbreviations

Abbreviation	Description
GPRS	General Packet Radio Service
IP	Internet Protocol
EMAIL	Electronic Mail
SMTP	Simple Mail Transfer Protocol
POP3	Post Office Protocol 3

2 Email Introduction

This document presents Email features for SIM800 Series.

2.1 Features

- SIM800 Series supports to send an Email with an attachment via SMTP protocol. It also supports carbon copy (abbreviated Cc:) recipient and blind carbon copy (abbreviated Bcc:) recipient.
- SIM800 Series supports to retrieve and delete the Email via POP3 protocol, the Email may be with attachments.
- SIM800 Series supports all of POP3 commands but APOP. By these POP3 commands, you can get the specific Email's size and unique-id.
- SIM800 Series does not support that SMTP and POP3 operations are executed at the same time.

3 AT commands

Below is the email associated with AT commands, detailed information please refer to document [1].

Through these AT commands can achieve the following functions.

- Via the SMTP protocol to send e-mail with attachments.
- Through the POP3 protocol to accept or delete e-mail.
- To obtain the specified mail message (size and unique identifiers).

Command	Description
AT+EMAILCID	Set Email Bearer Profile Identifier
AT+EMAILTO	Set Timeout Value of SMTP/POP3 Server Response
AT+SMTPSRV	Set SMTP Server Address and Port
AT+SMTPAUTH	Set User Name and Password for SMTP Authentication
AT+SMTPFROM	Set Sender Address and Name
AT+SMTPRCPT	Set the Email Recipient(TO/CC/BCC) Address and Name
AT+SMTPSUB	Set the Email Subject
AT+SMTPEMAIL	Set the Email Body
AT+SMTPEMAIL	Set the Email Attachment
AT+SMTPEMAIL	Send the Email
AT+SMTPEMAIL	Transfer the Email Attachment
AT+SMTPEMAIL	Set the Email Charset
AT+POP3SRV	Set POP3 Server and Account
AT+POP3IN	Log In POP3 Server
AT+POP3NUM	Get Email Number and Total Size
AT+POP3LIST	Get the Specific Email Size
AT+POP3UIDL	Get the Specific Email Unique-id
AT+POP3CMD	Get Multi-line Response
AT+POP3READ	Read Multi-line Response
AT+POP3DEL	Mark the Specific Email to Delete
AT+POP3RSET	Unmark the Emails that Be Marked as Deleted
AT+POP3OUT	Log Out POP3 Server

4 Email Examples

There are some examples to explain how to use these commands.

4.1 Bearer profile

```
//Example of bearer profile
AT+SAPBR=3,1,"Contype","GPRS"           // Configure bearer profile 1
OK

AT+SAPBR=3,1,"APN","CMNET"
OK
AT+SAPBR=1,1                             // To open a GPRS context.
OK
AT+SAPBR=2,1                             // To query the GPRS context
+SAPBR:1,1,"10.89.193.1"

OK
AT+SAPBR=0,1                             // To close a GPRS context.
OK
+SAPBR 1: DEACT                          // GPRS context is released by network
```

4.2 Send an Email

```
//Example of sending an email
AT+EMAILCID=1                             //Set parameters of Email
OK

AT+EMAILTO=30
OK
AT+SMTPSRV="mail.sim.com",25             //Set SMTP server address and port
OK
AT+SMTPAUTH=1,"john","123456"           //Set user name and password
OK
AT+SMTPFROM="john@sim.com","john"       //Set sender address and name
```

```

OK
AT+SMTPRCPT=0,0,"john@sim.com","john" //Set the recipient(To:)
OK
AT+SMTPRCPT=1,0,"john@sim.com","john" //Set the recipient(Cc:)
OK
AT+SMTPRCPT=2,0,"john@sim.com","john" //Set the recipient(Bcc:)
OK
AT+SMTPSUB="Test" //Set the subject
AT+SMTTPBODY=19 //Set the body
DOWNLOAD
This is a new Email

OK
AT+SMTSEND //Send the Email
OK

+SMTSEND: 1

```

4.3 Send an Email with an attachment

```

//Example of send an email with an attachment
AT+EMAILCID=1 //Set parameters of Email
OK
AT+EMAILTO=30
OK
AT+SMTPSRV="mail.sim.com",25 //Set SMTP server address and port
OK
AT+SMTPAUTH=1,"john","123456" //Set user name and password
OK
AT+SMTPFROM="john@sim.com","john" //Set sender address and name
OK
AT+SMTPRCPT=0,0,"john@sim.com","john" //Set the recipient (To:)
OK
AT+SMTPRCPT=1,0,"john@sim.com","john" //Set the recipient (Cc:)
OK
AT+SMTPRCPT=2,0,"john@sim.com","john" //Set the recipient (Bcc:)
OK
AT+SMTPSUB="Test" //Set the subject
OK
AT+SMTTPBODY=19 //Set the body
DOWNLOAD
This is a new Email

```

```

OK
AT+SMTPTFILE=1,"test.txt",0           //Set the attachment
OK
AT+SMTPTSEND                           //Send the Email
OK
+SMTPTFT: 1,1360                       //URC indicates that the attachment may be
                                         send.1360 is the max length of data which can be
                                         sent at a time. It depends on the network status.
AT+SMTPTFT=100                         //SMTP client requests to send 100 bytes.
+SMTPTFT: 2,100                         Response will indicates that user must input 100
..... //Input data                     bytes for transferring now.

OK
+SMTPTFT: 1,1360                       //URC indicates that more data can be sent
AT+SMTPTFT=0                           //The attachment has been transferred completely.

OK
+SMTPTSEND: 1                          //URC indicates that the entire email has been
                                         send successfully

```

4.4 Send a UTF-8 Email

```

//Example of send a UTF-8 Email
AT+EMAILCID=1                          // Set parameters of Email
OK
AT+EMAILTO=30
OK
AT+SMTPTCS="UTF-8"                     // Set the mail charset
OK
AT+SMTPTSRV="mail.sim.com",25          // Set SMTP server address and port
OK
AT+SMTPTAUTH=1,"john","123456"        // Set user name and password
OK
AT+SMTPTFROM="john@sim.com","john"     // Set sender address and name
OK
AT+SMTPTRCPT=0,0,"john@sim.com","john" // Set the recipient(To:)
OK
AT+SMTPTRCPT=1,0,"john@sim.com","john" // Set the recipient(Cc:)
OK
AT+SMTPTRCPT=2,0,"john@sim.com","john" // Set the recipient(Bcc:)
OK

```

```
AT+SMTPSUB="54455354" // Set the subject
AT+SMTPBODY=40 // Set the body
DOWNLOAD
38546869732069732061206E657720456D61696
C

OK
AT+SMTPSEND // Send the Email
OK

+SMTPSEND: 1
```

4.5 Retrieve the Email

```
//Example of retrieve the Email
AT+EMAILCID=1 // Set parameters of Email
OK
AT+EMAILTO=30
OK
AT+POP3SRV="mail.sim.com","john","123456" / Set POP3 server and account
,110
OK
AT+POP3IN // Log in POP3 server
OK

+POP3IN: 1
AT+POP3NUM // Get Email number and total size
OK

+POP3NUM: 1,2,11124
AT+POP3LIST=1 // Get the specific Email's size
OK

+POP3LIST: 1,1,5556
AT+POP3CMD=4,1 // Retrieve the specific Email
OK

+POP3CMD: 1
AT+POP3READ=1460 / Get the Email content
+POP3READ: 1,1460
+OK
...
```

OK

AT+POP3READ=1460

+POP3READ: 1,1460

+OK

...

OK

AT+POP3READ=1460

// The Email's content is read completely

+POP3READ: 2,1183

+OK

...

OK

AT+POP3OUT

// Log out POP3 SERVER

OK

+POP3OUT: 1

4.6 Delete the Email

//Example of delete the Email

AT+EMAILCID=1

// Set parameters of Email

OK

AT+EMAILTO=30

OK

AT+POP3SRV="mail.sim.com","john","123456" // Set POP3 server and account

,110

OK

AT+POP3IN

// Log in POP3 server

OK

+POP3IN: 1

AT+POP3NUM

// Get Email number and total size

OK

+POP3NUM: 1,2,11124

AT+POP3DEL=1

// Mark the Email to delete

OK

+POP3DEL: 1

```
AT+POP3OUT // Log out POP3 SERVER
OK
+POP3OUT: 1
```

4.7 Get the Email's size and unique-id

```
//Example of get the Email's size and unique-id
AT+EMAILCID=1 // Set parameters of Email
OK
AT+EMAILTO=30
OK
AT+POP3SRV="mail.sim.com","john","123456" // Set POP3 server and account
,110
OK
AT+POP3IN // Log in POP3 server
OK
+POP3IN: 1
AT+POP3NUM // Get Email number and total size
OK
+POP3NUM: 1,2,35797
AT+POP3LIST=1 // Get the specific Email's size
OK
+POP3LIST: 1,1,16601
AT+POP3UIDL=1 // Get the specific Email's unique-id
OK
+POP3UIDL: 1,1,
AAAFOPdCAAav60+tkSFqRqk3/6ogog+g
AT+POP3OUT // Log out POP3 SERVER
OK
+POP3OUT: 1
```