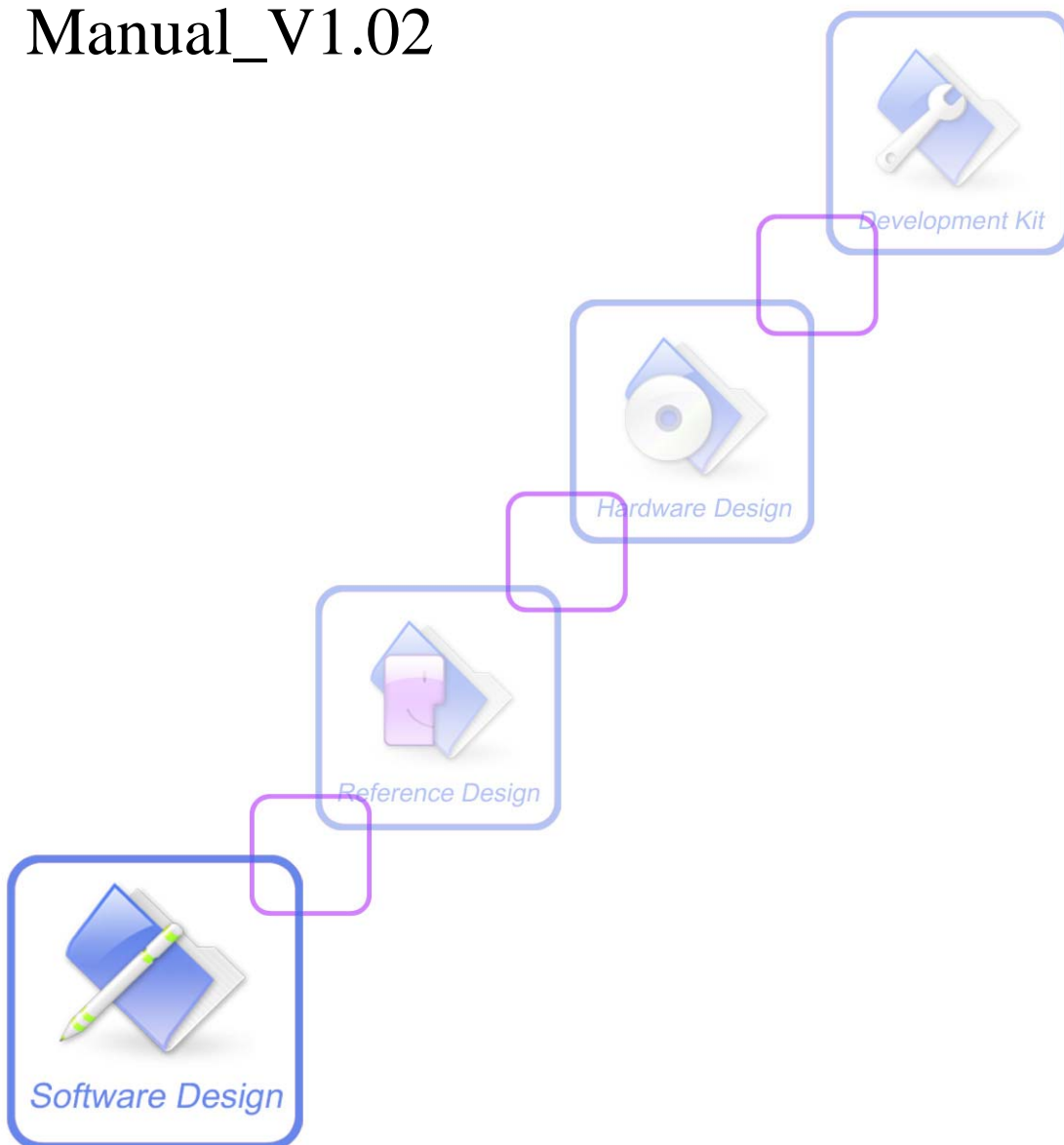




A company of SIM Tech

# SIM900\_Email\_AT Command Manual\_V1.02



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## Version History

Version	Chapter	What is new
V1.00	Origin	
V1.01	2.9 AT+SMTPFILE 2.11 AT+SMTPFT	Added new command Added new command
V1.02	2.12 AT+SMTPCS	Added new command

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# 1 Introduction

This document presents the AT command of Email operation for SIM900. This document can apply to the same series of the modules which contain Email function, like SIM900, SIM900D, SIM900B and SIM900A.

## 1.1 Features

1. SIM900 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.
2. SIM900 supports to retrieve and delete the Email via POP3 protocol, the Email may be with attachments.
3. SIM900 supports all of POP3 commands but APOP. By these POP3 commands, you can get the specific Email's size and unique-id.
4. SIM900 does not support that SMTP and POP3 operations are executed at the same time.

## 1.2 Reference

- [1] SIM900 AT Commands Set
- [2] SIM900\_TCPIP

## 1.3 Glossary

<b>GPRS</b>	General Packet Radio Service
<b>IP</b>	Internet Protocol
<b>EMAIL</b>	Electronic Mail
<b>SMTP</b>	Simple Mail Transfer Protocol
<b>POP3</b>	Post Office Protocol 3

## 2 AT commands

### 2.1 AT+EMAILCID

<b>AT+EMAILCID Set Email Bearer Profile Identifier</b>	
Test Command <b>AT+EMAILCID=?</b>	Response <b>+EMAILCID:</b> (range of supported <cid>s)  <b>OK</b>
	Parameters See Write Command
Read Command <b>AT+EMAILCID?</b>	Response <b>+EMAILCID:</b> <cid>  <b>OK</b>
	Parameters See Write Command
Write Command <b>AT+EMAILCID= &lt;cid&gt;</b>	Response  <b>OK</b> If error is related to ME functionality: <b>ERROR</b>
	Parameters <cid> bearer profile identifier refer to AT+SAPBR
Reference	Note

### 2.2 AT+EMAILTO

<b>AT+EMAILTO Set Timeout Value of SMTP/POP3 Server Response</b>	
Test Command <b>AT+EMAILTO=?</b>	Response <b>+EMAILTO:</b> (range of supported <timeout>s)  <b>OK</b>
	Parameter See Write Command
Read Command <b>AT+EMAILTO?</b>	Response <b>+EMAILTO:</b> <timeout>

	<p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Write Command <b>AT+EMAILTO=</b> <b>&lt;timeout&gt;</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>Parameter</p> <p><b>&lt;timeout&gt;</b> The timeout value of SMTP/POP3 server response, in 1 second unit.</p> <p>10-120 Default: 30(seconds)</p>
Reference	Note

### 2.3 AT+SMTPSRV

<b>AT+SMTPSRV</b>	<b>Set SMTP Server Address and Port</b>
<p>Test Command <b>AT+SMTPSRV=?</b></p>	<p>Response</p> <p><b>+SMTPSRV: &lt;smtpServerLength&gt;,(range of supported &lt;smtpPort&gt;s)</b></p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Read Command <b>AT+SMTPSRV?</b></p>	<p>Response</p> <p><b>+SMTPSRV: &lt;smtpServer&gt;,&lt;smtpPort&gt;</b></p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Write Command <b>AT+SMTPSRV=</b> <b>&lt;smtpServer&gt;[,&lt;smtpPort&gt;]</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>Parameter</p> <p><b>&lt;smtpServer&gt;</b> SMTP server address, string type. This parameter can be either:</p> <ul style="list-style-type: none"> <li>- IP address in the format: xxx.xxx.xxx.xxx</li> <li>- Host name to be solved with a DNS query</li> </ul>

	<p>&lt;smtpPort&gt; The SMTP port 1-65535 Default: 25</p> <p>&lt;smtpServerLength&gt; The max length of &lt;smtpServer&gt;</p>
Reference	Note

## 2.4 AT+SMTPAUTH

<b>AT+SMTPAUTH Set User Name and Password for SMTP Authentication</b>	
<p>Test Command <b>AT+SMTPAUTH=?</b></p>	<p>Response <b>+SMTPAUTH:</b> (range of supported&lt;authType&gt;s),&lt;userNameLength&gt;,&lt;passwordLength&gt;</p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Read Command <b>AT+SMTPAUTH?</b></p>	<p>Response <b>+SMTPAUTH:</b> &lt;authType&gt;,&lt;username&gt;,&lt;password&gt;</p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Write Command <b>AT+SMTPAUTH= &lt;authType&gt;[,&lt;user Name&gt;,&lt;password&gt;]</b></p>	<p>Response <b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>Parameter</p> <p>&lt;authType&gt; The type of SMTP authentication</p> <p>0 SMTP server does not request authentication. &lt;username&gt; and &lt;password&gt; must not be given.</p> <p>1 SMTP server requests authentication</p> <p>&lt;userName&gt; The user name for SMTP authentication.</p> <p>&lt;userNameLength&gt; The max length of &lt;userName&gt;.</p> <p>&lt;password&gt; The password for SMTP authentication.</p> <p>&lt;passwordLength&gt; The max length of &lt;password&gt;.</p>
Reference	Note



## 2.5 AT+SMTPFROM

<b>AT+SMTPFROM Set Sender Address and Name</b>									
Test Command <b>AT+SMTPFROM=?</b>	Response <b>+SMTPFROM: &lt;senderAddressLength&gt;,&lt;senderNameLength&gt;</b>  <b>OK</b>								
	Parameter See Write Command								
Read Command <b>AT+SMTPFROM?</b>	Response <b>+SMTPFROM: &lt;senderAddress&gt;,&lt;senderName&gt;</b>  <b>OK</b>								
	Parameter See Write Command								
Write Command <b>AT+SMTPFROM=&lt;senderAddress&gt;[,&lt;senderName&gt;]</b>	Response <b>OK</b> If error is related to ME functionality: <b>ERROR</b>								
	Parameter <table border="0"> <tr> <td><b>&lt;senderAddress&gt;</b></td> <td>The Email sender address,string type.</td> </tr> <tr> <td><b>&lt;senderAddressLength&gt;</b></td> <td>The max length of &lt;senderAddress&gt;</td> </tr> <tr> <td><b>&lt;senderName&gt;</b></td> <td>The Email sender name,string type.</td> </tr> <tr> <td><b>&lt;senderNameLength&gt;</b></td> <td>The max length of &lt;senderName&gt;</td> </tr> </table>	<b>&lt;senderAddress&gt;</b>	The Email sender address,string type.	<b>&lt;senderAddressLength&gt;</b>	The max length of <senderAddress>	<b>&lt;senderName&gt;</b>	The Email sender name,string type.	<b>&lt;senderNameLength&gt;</b>	The max length of <senderName>
<b>&lt;senderAddress&gt;</b>	The Email sender address,string type.								
<b>&lt;senderAddressLength&gt;</b>	The max length of <senderAddress>								
<b>&lt;senderName&gt;</b>	The Email sender name,string type.								
<b>&lt;senderNameLength&gt;</b>	The max length of <senderName>								
Reference	Note								

## 2.6 AT+SMTPRCPT

<b>AT+SMTPRCPT Set the Email Recipient(TO/CC/BCC) Address and Name</b>	
Test Command <b>AT+SMTPRCPT=?</b>	Response <b>+SMTPRCPT: (range of supported &lt;rcptType&gt;s),(range of supported &lt;index&gt;s),&lt;rcptAddressLength&gt;,&lt;rcptNameLength&gt;</b>  <b>OK</b>
	Parameter See Write Command

<p>Read Command <b>AT+SMTPRCPT?</b></p>	<p>Response [+SMTPRCPT: &lt;rcptType&gt;,&lt;index&gt;,&lt;rcptAddress&gt;,&lt;rcptName&gt;] [&lt;CR&gt;&lt;LF&gt;+SMTPRCPT: &lt;rcptType&gt;,&lt;index&gt;,&lt;rcptAddress&gt;,&lt;rcptName&gt;[...]]</p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Write Command <b>AT+SMTPRCPT=</b> <b>&lt;rcptType&gt;</b> <b>[,&lt;index&gt;</b> <b>[,&lt;rcptAddress&gt;</b> <b>[,&lt;rcptName&gt;]]]</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>Parameter</p> <p><b>&lt;rcptType&gt;</b> The type of recipient, the types of TO and CC are used to construct e-mail header in the field:"To:" or "Cc:".</p> <p>0 TO, Normal Recipient. 1 CC, Carbon Copy recipient. 2 BCC, Blind Carbon Copy recipient.</p> <p><b>&lt;index&gt;</b> Index of the type of recipient, decimal format</p> <p><b>&lt;rcptAddress&gt;</b> The Email recipient address.</p> <p><b>&lt;rcptName&gt;</b> The Email recipient name.</p> <p><b>&lt;rcptAddressLength&gt;</b> The max length of &lt;rcptAddress&gt;.</p> <p><b>&lt;rcptNameLength&gt;</b> The max length of &lt;rcptName&gt;.</p>
<p>Reference</p>	<p>Note</p> <ul style="list-style-type: none"> <li>● If only &lt;rcptType&gt; is given,it will delete all items of &lt;rcptType&gt;</li> <li>● If only &lt;rcptType&gt; and &lt;index&gt; are given,it will delete the &lt;index&gt; item of &lt;rcptType&gt;.</li> </ul>

## 2.7 AT+SMTPSUB

<b>AT+SMTPSUB</b>	<b>Set the Email Subject</b>
<p>Test Command <b>AT+SMTPSUB=?</b></p>	<p>Response <b>+SMTPSUB: &lt;subjectLength&gt;</b></p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Read Command <b>AT+SMTPSUB?</b></p>	<p>Response <b>+SMTPSUB: &lt;subject&gt;</b></p>

	<p><b>OK</b></p>
	<p>Parameter See Write Command</p>
<p>Write Command <b>AT+SMTPSUB= &lt;subject&gt;</b></p>	<p>Response</p> <p><b>OK</b> If error is related to ME functionality: <b>ERROR</b></p>
	<p>Parameter <b>&lt;subject&gt;</b> The Email subject, string type. It will be present in the header of the Email sent by SMTP client in the field: "Subject:". <b>&lt;subjectLength&gt;</b> The max length of &lt;subject&gt;.</p>
Reference	<p>Note</p> <ul style="list-style-type: none"> <li>● If the Email charset is not ASCII, &lt;subject&gt; must be in hexadecimal format.</li> </ul>

## 2.8 AT+SMTPBODY

<b>AT+SMTPBODY</b>	<b>Set the Email Body</b>
<p>Test Command <b>AT+SMTPBODY=?</b></p>	<p>Response <b>+SMTPBODY: &lt;bodyLength&gt;</b></p> <p><b>OK</b></p>
	<p>Parameter See Write Command</p>
<p>Execution Command <b>AT+SMTPBODY=</b> response "&gt;", then type data as Email body. tap CTRL+Z to save, tap ESC to cancel the operation</p>	<p>Response</p> <p><b>OK</b> If error is related to ME functionality: <b>ERROR</b></p>
	<p>Parameter <b>&lt;bodyLength&gt;</b> The max length of Email body.</p>
Reference	<p>Note</p> <ul style="list-style-type: none"> <li>● If the Email charset is not ASCII, the body of Email must be in hexadecimal format.</li> </ul>

## 2.9 AT+SMTPFILE

<b>AT+SMTPFILE Set the Email Attachment</b>	
Test Command <b>AT+SMTPFILE=?</b>	Response <b>+SMTPFILE:</b> (range of <fileType>s),<fileNameLength>,(range of <encodeType>s)  <b>OK</b>  Parameter See Write Command
Read Command <b>AT+SMTPFILE?</b>	Response <b>+SMTPFILE:</b> <fileType>,<fileName>,<encodeType>  <b>OK</b>  Parameter See Write Command
Write Command <b>AT+SMTPFILE=</b> <b>&lt;fileType&gt;[,&lt;fileNa</b> <b>me&gt;,&lt;encodeType&gt;]</b>	Response <b>OK</b> If error is related to ME functionality: <b>ERROR</b>  Parameter <b>&lt;fileType&gt;</b> The type of the Email attachment. 0 no attachment 1 attach a txt file 2 attach a binary file (bmp, mp3, video...) <b>&lt;fileName&gt;</b> The name of the Email attachment. <b>&lt;fileNameLength&gt;</b> The max length of <fileName>. <b>&lt;encodeType&gt;</b> Content-Transfer-Encoding used for attachment 0 “7bit” means data all represented as short lines of US-ASCII data 1 “base64” designed to represent arbitrary sequences of octets in a form that need not be humanly readable
Reference	Note <ul style="list-style-type: none"> <li>● If a txt file (&lt;fileType&gt;=1) is attached, &lt;encodeType&gt; must be 0.</li> <li>● If a binary file (&lt;fileType&gt;=2) is attached, &lt;encodeType&gt; must be 1.</li> </ul>

## 2.10 AT+SMTPSEND

<b>AT+SMTPSEND Send the Email</b>	
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<p>Test Command <b>AT+SMTPSEND=?</b></p>	<p>Response</p> <p><b>OK</b></p> <p>Parameter</p>																				
<p>Write Command <b>AT+SMTPSEND</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If send successfully or not, return: <b>+SMTPSEND: &lt;code&gt;</b></p> <p>Parameter</p> <table border="0"> <tr> <td><b>&lt;code&gt;</b></td> <td>The result of sending Email.</td> </tr> <tr> <td>1</td> <td>The Email has been sent successfully.</td> </tr> <tr> <td>61</td> <td>Network error.</td> </tr> <tr> <td>62</td> <td>DNS resolve error</td> </tr> <tr> <td>63</td> <td>SMTP TCP connection error.</td> </tr> <tr> <td>64</td> <td>Timeout of SMTP server response</td> </tr> <tr> <td>65</td> <td>SMTP server response error</td> </tr> <tr> <td></td> <td>Not authentication</td> </tr> <tr> <td>67</td> <td>Authentication failed. SMTP user name or password may be not right.</td> </tr> <tr> <td>68</td> <td>Bad recipient.</td> </tr> </table>	<b>&lt;code&gt;</b>	The result of sending Email.	1	The Email has been sent successfully.	61	Network error.	62	DNS resolve error	63	SMTP TCP connection error.	64	Timeout of SMTP server response	65	SMTP server response error		Not authentication	67	Authentication failed. SMTP user name or password may be not right.	68	Bad recipient.
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68	Bad recipient.																				
<p>Reference</p>	<p>Note</p>																				

## 2.11 AT+SMTPPFT

<b>AT+SMTPPFT</b>	<b>Transfer the Email Attachment</b>
<p>Test Command <b>AT+SMTPPFT=?</b></p>	<p>Response</p> <p><b>OK</b></p> <p>Parameter See Write Command</p>
<p>Execution Command <b>AT+SMTPPFT=&lt;reqLength&gt;</b></p>	<p>Response</p> <p>When the URC below is reported, the attachment can be transferred: <b>+SMTPPFT: 1,&lt;maxLength&gt;</b></p> <p>If <b>&lt;reqLength&gt;</b> is not 0 and send data successfully: <b>+SMTPPFT: 2,&lt;cnfLength&gt;</b> ..... <b>//Input data</b></p>

	<p><b>OK</b></p> <p>If <b>&lt;reqLength&gt;</b> is not 0 and send data unsuccessfully:  <b>+SMTPFT: 2,&lt;cnfLength&gt;</b>  ..... //Input data</p> <p><b>ERROR</b></p> <p>If <b>&lt;reqLength&gt;</b> is 0,it indicates that transferring the attachment have finished:  <b>OK</b></p> <p>If error is related to ME functionality:  <b>ERROR</b></p> <p>If some error occur:  <b>+SMTPSEND: &lt;code&gt;</b></p>
	<p>Parameter</p> <p><b>&lt;reqLength&gt;</b> Requested number of data bytes(0-&lt;maxLength&gt;) to be transmitted</p> <p><b>&lt;cnfLength&gt;</b> Confirmed number of data bytes to be transmitted</p> <p><b>&lt;maxLength&gt;</b> The max length of data can be sent at a time. It depends on the network status.</p> <p><b>&lt;code&gt;</b> See AT+SMTPSEND</p>
Reference	<p>Note</p> <ul style="list-style-type: none"> <li>● <b>&lt;reqLength&gt;</b> can not be greater than <b>&lt;maxLength&gt;</b>.</li> <li>● When “+SMTPFT: 1,&lt;maxLength&gt;” is reported, then use AT+SMTPFT=&lt;reqLength&gt; to send data.</li> </ul>

## 2.12 AT+SMTPCS

<b>AT+SMTPCS Set the Email Charset</b>	
Test Command <b>AT+SMTPCS=?</b>	<p>Response  <b>+SMTPCS: &lt;charsetLength&gt;</b></p> <p><b>OK</b></p>
	<p>Parameter  See Write Command</p>
Read Command <b>AT+SMTPCS?</b>	<p>Response  <b>+SMTPCS: &lt;charset&gt;</b></p> <p><b>OK</b></p>

	Parameter See Write Command
Write Command <b>AT+SMTPCS= &lt;charset&gt;</b>	Response <b>OK</b> If error is related to ME functionality: <b>ERROR</b>
	Parameter <b>&lt;charset&gt;</b> The Email charset, string type. It shows which charset the subject and the body are encoded in. If <b>&lt;charset&gt;</b> is not ASCII but UTF-8 or other, the subject and the body must be in hexadecimal format (e.g. "TEST" should be converted to "54455354"). The default charset is ASCII. <b>&lt;charsetLength&gt;</b> The max length of <b>&lt;charset&gt;</b> .
Reference	Note

### 2.13 AT+POP3SRV

<b>AT+POP3SRV</b>	<b>Set POP3 Server and Account</b>
Test Command <b>AT+POP3SRV=?</b>	Response <b>+POP3SRV: &lt;pop3ServerLength&gt;,&lt;userNameLength&gt;,&lt;passwordLength&gt;,(range of supported &lt;pop3Port&gt;s)</b> <b>OK</b>
	Parameter See Write Command
Read Command <b>AT+POP3SRV?</b>	Response <b>+POP3SRV: &lt;pop3Server&gt;,&lt;userName&gt;,&lt;password&gt;,&lt;pop3Port&gt;</b> <b>OK</b>
	Parameter See Write Command
Write Command <b>AT+POP3SRV= &lt;pop3Server&gt;, &lt;userName&gt;, &lt;password&gt; [,&lt;pop3Port&gt;]</b>	Response <b>OK</b> If error is related to ME functionality: <b>ERROR</b>
	Parameter <b>&lt;pop3Server&gt;</b> POP3 server address, string type. This parameter can be either:

	<ul style="list-style-type: none"> <li>- IP address in the format: xxx.xxx.xxx.xxx</li> <li>- Host name to be solved with a DNS query</li> </ul> <p><b>&lt;userName&gt;</b> The user name to log in POP3 server, string type.</p> <p><b>&lt;password&gt;</b> The password to log in POP3 server, string type.</p> <p><b>&lt;pop3Port&gt;</b> The port of POP3 server. 1-65535 Default: 110</p> <p><b>&lt;pop3ServerLength&gt;</b> The max length of &lt;pop3Server&gt;.</p> <p><b>&lt;userNameLength&gt;</b> The max length of &lt;userName&gt;.</p> <p><b>&lt;passwordLength&gt;</b> The max length of &lt;password&gt;.</p>
Reference	Note

## 2.14 AT+POP3IN

AT+POP3IN	Log In POP3 Server
Test Command <b>AT+POP3IN=?</b>	<p>Response</p> <p><b>OK</b></p> <p>Parameter</p>
Execution Command <b>AT+POP3IN</b>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If logging in POP3 server or not, return: <b>+POP3IN: &lt;code&gt;</b></p> <p>Parameter</p> <p><b>&lt;code&gt;</b> The result of logging in POP3 server</p> <ul style="list-style-type: none"> <li>1 Log in POP3 server successfully</li> <li>61 Network error</li> <li>62 DNS resolve error</li> <li>63 POP3 tcp connection error</li> <li>64 Timeout of POP3 server response</li> <li>65 POP3 server response error</li> <li>66 POP3 server rejects to log in</li> <li>67 Incorrect user name</li> <li>68 Incorrect user name or password</li> </ul>
Reference	Note



## 2.15 AT+POP3NUM

<b>AT+POP3NUM</b> <b>Get Email Number and Total Size</b>	
Test Command <b>AT+POP3NUM=?</b>	Response
	<b>OK</b>
	Parameter
Execution Command <b>AT+POP3NUM</b>	Response
	<p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If POP3 server issues a positive response: <b>+POP3NUM: 1,&lt;totalNumber&gt;,&lt;totalSize&gt;</b></p> <p>If POP3 server issues a negative response: <b>+POP3NUM: 0</b></p> <p>If some error occur: <b>+POP3OUT: &lt;code&gt;</b></p>
	Parameter
	<p><b>&lt;totalNumber&gt;</b>    The Email number on the POP3 server, decimal format.</p> <p><b>&lt;totalSize&gt;</b>        The total size of all Email and the unit is in byte.</p> <p><b>&lt;code&gt;</b>            The result of logging out POP3 server</p> <p>          1            Normally log out POP3 server</p> <p>          61          Network error</p> <p>          62          DNS resolve error</p> <p>          63          POP3 tcp connection error</p> <p>          64          Timeout of POP3 server response</p>
Reference	Note

## 2.16 AT+POP3LIST

<b>AT+POP3LIST</b> <b>Get the Specific Email Size</b>	
Test Command <b>AT+POP3LIST=?</b>	Response
	<b>+POP3LIST: (range of supported &lt;msgNumber&gt;s)</b>
	<b>OK</b>
	Parameter
	See Write Command

<p>Write Command <b>AT+POP3LIST=</b> <b>&lt;msgNumber&gt;</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If POP3 server issues a positive response: <b>+POP3LIST: 1,&lt;msgNumber&gt;,&lt;size&gt;</b></p> <p>If POP3 server issues a negative response: <b>+POP3LIST: 0</b></p> <p>If some error occur: <b>+POP3OUT: &lt;code&gt;</b></p> <hr/> <p>Parameter</p> <p><b>&lt;msgNumber&gt;</b> The message number of Email.</p> <p><b>&lt;size&gt;</b> The size of Email <b>&lt;msgNumber&gt;</b> and the unit is in byte.</p> <p><b>&lt;code&gt;</b> The result of logging out POP3 server</p> <ul style="list-style-type: none"> <li>1 Normally log out POP3 server</li> <li>61 Network error</li> <li>62 DNS resolve error</li> <li>63 POP3 tcp connection error</li> <li>64 Timeout of POP3 server response</li> </ul>
<p>Reference</p>	<p>Note</p>

## 2.17 AT+POP3UIDL

<b>AT+POP3UIDL</b>	<b>Get the Specific Email Unique-id</b>
<p>Test Command <b>AT+POP3UIDL=?</b></p>	<p>Response</p> <p><b>+POP3UIDL: (range of supported &lt;msgNumber&gt;s)</b></p> <p><b>OK</b></p> <hr/> <p>Parameter</p> <p>See Write Command</p>
<p>Write Command <b>AT+POP3UIDL=</b> <b>&lt;msgNumber&gt;</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If POP3 server issues a positive response: <b>+POP3UIDL: 1,&lt;msgNumber&gt;,&lt;uid&gt;</b></p> <p>If POP3 server issues a negative response: <b>+POP3UIDL: 0</b></p> <p>If some error occur:</p>

	<p><b>+POP3OUT: &lt;code&gt;</b></p> <p>Parameter</p> <p><b>&lt;msgNumber &gt;</b> The message number of Email .</p> <p><b>&lt;UID&gt;</b> The Email unique-id, the unique-id is an arbitrary server-determined string, consisting of 1 to 70 characters in the range 0x21 to 0x7E, which uniquely identifies a message within a maildrop and which persists across sessions.</p> <p><b>&lt;code&gt;</b> The result of logging out POP3 server</p> <ul style="list-style-type: none"> <li>1 Normally log out POP3 server</li> <li>61 Network error</li> <li>62 DNS resolve error</li> <li>63 POP3 tcp connection error</li> <li>64 Timeout of POP3 server response</li> </ul>
Reference	Note

## 2.18 AT+POP3CMD

<b>AT+POP3CMD</b>	<b>Get Multi-line Response</b>
<p>Test Command</p> <p><b>AT+POP3CMD=?</b></p>	<p>Response</p> <p><b>+POP3CMD:</b> (range of supported <b>&lt;cmdType&gt;</b>s),(range of supported <b>&lt;msgNumber&gt;</b>s),(range of supported <b>&lt;lineNumber&gt;</b>s)</p> <p><b>OK</b></p> <p>Parameter</p> <p>See Write Command</p>
<p>Write Command</p> <p><b>AT+POP3CMD= &lt;cmdType&gt; [,&lt;msgNumber&gt; [,&lt;lineNumber&gt;]]</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If POP3 server issues a positive response: <b>+POP3CMD: 1</b></p> <p>If POP3 server issues a negative response: <b>+POP3CMD: 0</b></p> <p>If some error occur: <b>+POP3OUT: &lt;code&gt;</b></p> <p>Parameter</p> <p><b>&lt;cmdType&gt;</b> The values that supported POP3 user command</p> <ul style="list-style-type: none"> <li>1 List command</li> </ul> <p>The “List” command returns a multi-line “scan listing”. For each message on the maildrop list of the server the POP3</p>

service returns a line containing the message number and its size in bytes. A final “dotline” will be printed at the end of the “scan listing“. If there are no messages on the maildrop list of the server, the POP3 service returns a positive response, i.e. It does not issue an error response, but the “scan listing” will be empty. In either case,each scan listing will be finished by so-called “dotline”, i.e. a new line with just a single dot. <msgNumber> and <lineNumber> must not be given.

2 Uidl command

The “Uidl” command returns a multi-line “unique-id Listing”. For each message on the maildrop list of the Server the POP3 service returns a line containing the message number and its unique-id. A final “dotline” will be printed at the end of the “unique-id listing” If there are no messages on the maildrop list of the server. The POP3 service returns a positive response, i.e. It does not issue an error response, but the “unique-id listing” will be empty. In either case, each unique-id listing will be finished by so-called “dotline”, i.e.a new line with just a singledot. <msgNumber> and <lineNumber> must not be given.

3 Top command

The command retrieves the number of lines of the message’s body from the POP3 server’s maildrop list. The POP3 server sends the headers of the message, the blank line separating the headers from the body, and then the number of lines of the message’s body. If the number of lines requested by The POP3 client is greater than the number of lines in the body, then the POP3 server sends the entire message. If no such message exists on the server the POP3 service issues an error response to the user. Each email will be finished by a so-called “dotline”, i.e.a new line with just a single dot. <msgNumber> and <lineNumber> must be given.

4 Retrieve command

The command retrieves the related message from the POP3 server’s maildrop list. If no such message exists on the server the POP3 service issues an error response to the user. Each email will be finished by a so-called “dotline”, i.e. a new line with just a single dot. <msgNumber> must be given.

<msgNumber> The message number of Email.

<lineNumber> The number of lines of the message body.

	<p><b>&lt;code&gt;</b> The result of logging out POP3 server</p> <ul style="list-style-type: none"> <li>1 Normally log out POP3 server</li> <li>61 Network error</li> <li>62 DNS resolve error</li> <li>63 POP3 tcp connection error</li> <li>64 Timeout of POP3 server response</li> </ul>
Reference	<p>Note</p> <ul style="list-style-type: none"> <li>● After sending these POP3 commands and POP3 server issuing a positive response, you can get the response by AT+POP3READ.</li> </ul>

## 2.19 AT+POP3READ

AT+POP3READ	Read Multi-line Response
<p>Test Command</p> <p><b>AT+POP3READ=?</b></p>	<p>Response</p> <p><b>+POP3READ:</b> (range of supported <b>&lt;reqLength&gt;</b>s)</p> <p><b>OK</b></p> <p>Parameter</p> <p>See Write Command</p>
<p>Write Command</p> <p><b>AT+POP3READ= &lt;reqLength&gt;</b></p>	<p>Response</p> <p>If the data of response not to be read completely: <b>+POP3READ: 1,&lt;cnfLength&gt;</b></p> <p>If the data of response to be read completely: <b>+POP3READ: 2,&lt;cnfLength&gt;</b></p> <p>If some data need to be read,the URC below is reported: <b>+POP3READ: 3,&lt;dataLength&gt;</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If some error occur: <b>+POP3OUT: &lt;code&gt;</b></p> <p>Parameter</p> <p><b>&lt;reqLength&gt;</b> Requested number of data bytes (1-1460) to be read</p> <p><b>&lt;cnfLength&gt;</b> Confirmed number of data bytes to be read, which may be less than <b>&lt;reqLength&gt;</b>. 0 indicates that no data can be read.</p> <p><b>&lt;dataLength&gt;</b> Received number of data bytes.</p> <p><b>&lt;code&gt;</b> The result of logging out POP3 server</p> <ul style="list-style-type: none"> <li>1 Normally log out POP3 server</li> <li>61 Network error</li> <li>62 DNS resolve error</li> <li>63 POP3 tcp connection error</li> <li>64 Timeout of POP3 server response</li> </ul>

	69 Read data timeout
Reference	<p>Note</p> <ul style="list-style-type: none"> <li>● Other AT commands (but AT+POP3OUT) can not be executed until the data of response are read completely.</li> <li>● If &lt;confLength&gt; is less than &lt;reqLength&gt;, you should wait for a URC “+POP3READ: 3,&lt;dataLength&gt;” reported. Then you may continue to read data by AT+POP3READ.</li> <li>● If the module has some unread data, the URC “+POP3READ: 3,&lt;dataLength&gt;” is reported every once in a while. After some time, these data are not still read, the module will quit the POP3 process.</li> </ul>

## 2.20 AT+POP3DEL

<b>AT+POP3DEL Mark the Specific Email to Delete</b>	
Test Command <b>AT+POP3DEL=?</b>	Response <b>+POP3DEL:</b> (range of supported <msgNumber>s)  <b>OK</b>
	Parameter See Write Command
Write Command <b>AT+POP3DEL= &lt;msgNumber&gt;</b>	Response  <b>OK</b> If error is related to ME functionality: <b>ERROR</b> If POP3 server issues a positive response: <b>+POP3DEL: 1</b> If POP3 server issues a negative response: <b>+POP3DEL: 0</b> If some error occur: <b>+POP3OUT: &lt;code&gt;</b>
	Parameter <b>&lt;msgNumber&gt;</b> The message number of Email <b>&lt;code&gt;</b> The result of logging out POP3 server 1 Normally log out POP3 server 61 Network error 62 DNS resolve error 63 POP3 tcp connection error 64 Timeout of POP3 server response
Reference	Note <ul style="list-style-type: none"> <li>● The POP3 server marks the Email as deleted. Any future reference</li> </ul>

to the message-number associated with the Email in a POP3 command generates an error. The POP3 server does not actually delete the Email until the POP3 client logs out POP3 server and closes the session normally.

## 2.21 AT+POP3RSET

<b>AT+POP3RSET</b>		<b>Unmark the Emails that Be Marked as Deleted</b>	
Test Command <b>AT+POP3RSET=?</b>	Response		
	<b>OK</b>		
	Parameter		
Execution Command <b>AT+POP3RSET</b>	Response		
	<p><b>OK</b></p> <p>If error is related to ME functionality: <b>ERROR</b></p> <p>If POP3 server issues a positive response: <b>+POP3RSET: 1</b></p> <p>If POP3 server issues a negative response: <b>+POP3REST: 0</b></p> <p>If some error occur: <b>+POP3OUT: &lt;code&gt;</b></p>		
	Parameter		
	<b>&lt;code&gt;</b>	The result of logging out POP3 server	
	1	Normally log out POP3 server	
	61	Network error	
	62	DNS resolve error	
	63	POP3 tcp connection error	
	64	Timeout of POP3 server response	
Reference	Note		

## 2.22 AT+POP3OUT

<b>AT+POP3OUT</b>		<b>Log Out POP3 Server</b>	
Test Command <b>AT+POP3OUT=?</b>	Response		
	<b>OK</b>		
	Parameter		

<p>Execution Command <b>AT+POP3OUT</b></p>	<p>Response</p> <p><b>OK</b></p> <p>If error is related to ME functionality:</p> <p><b>ERROR</b></p> <p>If the process is completed, return:</p> <p><b>+POP3OUT: &lt;code&gt;</b></p> <hr/> <p>Parameter</p> <p><b>&lt;code&gt;</b>    The result of logging out POP3 server</p> <ul style="list-style-type: none"> <li>1    Normally log out POP3 server</li> <li>61   Network error</li> <li>62   DNS resolve error</li> <li>63   POP3 tcp connection error</li> <li>64   Timeout of POP3 server response</li> </ul>
<p>Reference</p>	<p>Note</p>



### 3 Examples

SIM900 module provides some AT commands that achieve the following function.

1. Send an Email without attachment via SMTP protocol.
2. Retrieve and delete the Email via POP3 protocol.
3. Get the specific Email's information (size and unique-id).

#### 3.1 Bearer profile

Demonstration	Syntax	Expert Results
Configure bearer profile 1	AT+SAPBR=3,1,"Contype","GPRS"	OK
	AT+SAPBR=3,1,"APN","CMNET"	OK
To open a GPRS context.	AT+SAPBR=1,1	OK
To query the GPRS context	AT+SAPBR=2,1	+SAPBR:1,1,"10.89.193.1"
		OK
To close a GPRS context.	AT+SAPBR=0,1	OK
GPRS context is released by network		+SAPBR 1: DEACT

#### 3.2 Send an Email

Demonstration	Syntax	Expert Results
Set parameters of Email	AT+EMAILCID=1	OK
	AT+EMAILTO=30	OK
Set SMTP server address and port	AT+SMTPSRV="mail.sim.com",25	OK
Set user name and password	AT+SMTPAUTH=1,"john","123456"	OK
Set sender address and name	AT+SMTPEFROM="john@sim.com", ,"john"	OK
Set the recipient(To:)	AT+SMTPCPT=0,0,"john@sim.co m","john"	OK

Set the recipient(Cc:)	AT+SMTPRCPT=1,0,"john@sim.com","john"	OK
Set the recipient(Bcc:)	AT+SMTPRCPT=2,0,"john@sim.com","john"	OK
Set the subject	AT+SMTPSUB="Test"	OK
Set the body	AT+SMTPBODY >This is a new Email	OK
Send the Email	AT+SMTSEND	OK  +SMTSEND: 1

### 3.3 Send an Email with an attachment

Demonstration	Syntax	Expert Results
Set parameters of Email	AT+EMAILCID=1	OK
	AT+EMAILTO=30	OK
Set SMTP server address and port	AT+SMTPSRV="mail.sim.com",25	OK
Set user name and password	AT+SMTPAUTH=1,"john","123456"	OK
Set sender address and name	AT+SMTPFROM="john@sim.com", ,"john"	OK
Set the recipient (To:)	AT+SMTPRCPT=0,0,"john@sim.com", ,"john"	OK
Set the recipient (Cc:)	AT+SMTPRCPT=1,0,"john@sim.com", ,"john"	OK
Set the recipient (Bcc:)	AT+SMTPRCPT=2,0,"john@sim.com", ,"john"	OK
Set the subject	AT+SMTPSUB="Test"	OK
Set the body	AT+SMTPBODY >This is a new Email	OK
Set the attachment	AT+SMTPFILE=1,"test.txt",0	OK
Send the Email	AT+SMTSEND	OK

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.		+SMTPPFT: 1,1360
SMTP client requests to send 100 bytes. Response will indicates that user must input 100 bytes for transferring now.	AT+SMTPPFT=100	+SMTPPFT: 2,100 ..... //Input data OK
URC indicates that more data can be sent		+SMTPPFT: 1,1360
The attachment has been transferred completely.	AT+SMTPPFT=0	OK
URC indicates that the entire email has been send successfully		+SMTPSEND: 1

### 3.4 Send a UTF-8 Email

Demonstration	Syntax	Expert Results
Set parameters of Email	AT+EMAILCID=1	OK
	AT+EMAILTO=30	OK
Set the mail charset	AT+SMTPCS="UTF-8"	OK
Set SMTP server address and port	AT+SMTPSRV="mail.sim.com",25	OK
Set user name and password	AT+SMTPAUTH=1,"john","123456"	OK
Set sender address and name	AT+SMTPFROM="john@sim.com" ,"john"	OK
Set the recipient(To:)	AT+SMTPRCPT=0,0,"john@sim.co m","john"	OK
Set the recipient(Cc:)	AT+SMTPRCPT=1,0,"john@sim.co m","john"	OK
Set the recipient(Bcc:)	AT+SMTPRCPT=2,0,"john@sim.co m","john"	OK
Set the subject	AT+SMTPSUB="54455354"	OK
Set the body	AT+SMTPBODY >546869732069732061206E6577204	OK

	56D61696C	
Send the Email	AT+SMTSEND	OK  +SMTSEND: 1

### 3.5 Retrieve the Email

Demonstration	Syntax	Expert Results
Set parameters of Email	AT+EMAILCID=1	OK
	AT+EMAILTO=30	OK
Set POP3 server and account	AT+POP3SRV="mail.sim.com","john", "123456",110	OK
Log in POP3 server	AT+POP3IN	OK  +POP3IN: 1
Get Email number and total size	AT+POP3NUM	OK  +POP3NUM: 1,2,11124
Get the specific Email's size	AT+POP3LIST=1	OK  +POP3LIST: 1,1,5556
Retrieve the specific Email	AT+POP3CMD=4,1	OK  +POP3CMD: 1
Get the Email content	AT+POP3READ=1460  ...  AT+POP3READ=1460	+POP3READ: 1,1460 +OK ... OK +POP3READ: 1,1460 +OK ... OK
The Email's content is read completely	AT+POP3READ=1460	+POP3READ: 2,1183 +OK ...

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

### 3.6 Delete the Email

Demonstration	Syntax	Expert Results
Set parameters of Email	AT+EMAILCID=1	OK
	AT+EMAILTO=30	OK
Set POP3 server and account	AT+POP3SRV="mail.sim.com","john","123456",110	OK
Log in POP3 server	AT+POP3IN	OK +POP3IN: 1
Get Email number and total size	AT+POP3NUM	OK +POP3NUM: 1,2,11124
Mark the Email to delete	AT+POP3DEL=1	OK +POP3DEL: 1
Log out POP3 SERVER	AT+POP3OUT	OK +POP3OUT: 1

### 3.7 Get the Email's size and unique-id

Demonstration	Syntax	Expert Results
Set parameters of Email	AT+EMAILCID=1	OK
	AT+EMAILTO=30	OK
Set POP3 server and account	AT+POP3SRV="mail.sim.com","john","123456",110	OK

Log in POP3 server	AT+POP3IN	OK  +POP3IN: 1
Get Email number and total size	AT+POP3NUM	OK  +POP3NUM: 1,2,35797
Get the specific Email's size	AT+POP3LIST=1	OK  +POP3LIST: 1,1,16601
Get the specific Email's unique-id	AT+POP3UIDL=1	OK  +POP3UIDL: 1,1, AAAFOpdC AAAv60+tkSFqRqk3/6ogog+g
Log out POP3 SERVER	AT+POP3OUT	OK  +POP3OUT: 1

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