



HTTP API V3.0

Integrate our HTTP API tool to be used in your custom designed system. HTTP API allows you to get a gateway for bulk SMS messaging, or become a bulk SMS provider.

Abstract

This document is intended for users/developers who wish to develop applications using the HTTP SMS Gateway for sending SMS messages. The gateway can be accessed by HTTP/HTTPS API through submitting values using GET or POST method to the API Server.

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1. Introduction

HTTP SMS Test Gateway can be used in various ways:

- Using HTTP/HTTPS API will give the ability to submit values by GET method using COM component in the applications.
- Using Test Web Interface.

The test gateway with HTTP/HTTPS API can be used to send various types of SMS messages. Including: simple text messages, Unicode messages, ring tones, and operator logos. This document gives a detailed explanation of using the gateway through HTTP/HTTPS protocol.

NOTE: Accessing gateway through HTTP/HTTPS protocol is one of the best and fastest ways to deliver SMS messages.

2. Authentication

In order to deliver a message, the gateway needs to authenticate whether the request is coming from a valid source with valid login details.

This authentication is done using various parameters such as:

- **Username:** Username of the account.
- **Password:** Password of the account.

Username and password are provided to the client after registration is made for the HTTP/HTTPS API option.

3. Single Messaging – Interface I

For sending any type of SMS messages, the gateway requires the message to be sent using various parameters, including username and password for authentication purposes. All the parameters need to be sent via HTTP/HTTPS API using the GET method. The number of parameters required depends upon the type of SMS messages. Table 1 shows the HTTP/HTTPS API parameters.

Table 1: HTTP / HTTPS API Parameters

Parameter name	Parameter value	Description
Username	it1232	Username of the account
Password	Abc9999	Password of the account
Mno	60188xxxxx	Destination mobile no.
Msg	Welcome to SMS technologies.	Message to be sent
Sid	Your sender	Sender Id/From clause in the SMS message.
Fl	0	Flash message Indicator (0/1)
Mt	0	Message type: Text, Unicode

For sending non-batch SMS messages the following Test Gateway URL needs to be accessed with the required parameters as shown in the weblink below:

<https://api.1s2u.io/bulksms?username=yourusername&password=yourpassword&mno=12345678900&sid=sender&msg=testdlr&mt=0&fl=0>

The customer would get the following response values for sending messages as per described in Table 2.

Table 2: Response messages from HTTP/ HTTPS API

Inputs	Return values
Messages sent successfully.	OK: b1a42c47-1a66-4358-bd26-cddf1930e321 Value returned It can be retained for generating CDR reports.
Message not sent.	Error Code (See more details about this response in the appendix)

Note: The response does not have any correlation with specific gateways. The timestamp response code can be used to compare the CDR reports that are supported by the gateway. More details about HTTP/HTTPS parameters can be found in [the following section](#).

4. Message parameters in-detail

4.1 Username (username)

The username parameter value is passed for authentication purposes. The username is provided to the client when registration is made via HTTP/HTTPS API option for sending SMS messages through our gateway. The username (user) parameter cannot be more than 20 characters long and can only contain alphabets and numbers with no spaces.

4.2 Password Parameter (password)

The password parameter value is also passed in combination with the username for authentication purposes. The password is provided to the client along with the username when registration is done with our website for sending SMS messages through our gateway. The password (pass) parameter cannot have more than 20 characters, and only can contain alphabets and numbers with no spaces.

4.3 Mobile Number Parameter (mno)

The mobile number parameter refers to the destination mobile number in which the message is to be sent. However, the mobile number is required to be in a specific format. Any error in this parameters' values would lead to non-delivery of the message. The phone number must contain only digits together with the country code. It should not contain any other symbols such as (+) sign. Instead of plus sign, please put (00). In addition, the phone number must be valid, and supported by the Test Gateway (Coverage Area), as shown in [this link](#).

4.4 Message Parameter (msg)

The message parameter refers to the actual message that is to be sent to the destination mobile number (mno). The behavior of the message parameter differs depending on the type of message being sent. The message parameter may consist of up to 160 characters belonging to the following set: A...Z, a...z, 0...9, blank spaces, and Meta characters \ (line feed).

Due to restrictions in the HTTP/HTTPS protocol format, the following special Characters must be encoded in order not to collide with reserved HTTP/HTTPS characters. Character must be encoded as described in table 3.

Table 3: HTTP/HTTPS API encoding code format

Character	Hexa-decimal Encoded String
&	%26
+	%2B
%	%25
#	%23
=	%3D
Enter	%0A

For simple text messages, the message can contain numbers, alphabets, spaces and certain special characters. However, the message can contain a maximum of 160 characters, including spaces.

- In case of Unicode messaging, the message can contain only numbers in the form of Unicode digits. Further, it can be a maximum of 69 characters i.e. 69 x 4 Unicode digits for each character = 276 digits.
- In case of binary messaging, the message can contain only a valid 8-bit data string. The binary message can be a maximum of 140 characters only (i.e. one SMS). However, Ring tones, operator logos and Pictures that exceed one SMS can also be sent in form of concatenated SMS messages.

4.5 Sender Id (Sid)

The sender Id parameter refers to the message dispatcher or from clause (THE SENDER), from whom the message is sent. The sender ID can either be a valid international number up to sixteen characters long, or an eleven characters alphanumeric string. The sender ID is an optional clause.

- In case the sender ID is not specified, the SMSC number is sent as the sender ID to the destination number.
- In case of binary messages, the sender ID is encoded in the 8-bit binary data string, and hence not required to be sent.
- Sender ID, in case of text messaging, can only be made up to alphabets and digits. It cannot contain any special characters such as (-, +) etc.

4.6 Flash Message (fl)

Flash message parameter (as shown in Table 4) indicates whether the message will be flashed on the destination mobile number (mno). It can contain only the values (0 or 1). Default value for this parameter is 0. When the flash parameter is sent as 1 (fl=1), the SMS message is flashed on the destination mobile.

Table 4: HTTP/HTTPS Flash message parameters

Value	Description
0	Don't flash message.
1	Flash message on destination mobile screen.

4.7 Message Type (mt)

Message Type is a flag sent to the Test Gateway to identify the type of messages being sent. The default value of message type is 0, which refers to text message. It is based on this parameter that the Test Gateway classifies the type of messages being sent and forwarded it accordingly. The message type parameter can contain any of the following values as shown in Table 5.

Table 5: HTTP/HTTPS Message type parameters

Value	Description
0	Simple text message
1	Unicode Message

5. SMS Examples – Interface I

5.1 Sending single text message

The following link shows an example of a message send using the HTTP API. You should see something like figure 1 in your browser.

Formula:

<https://api.1s2u.io/bulksms?username=yourusername&password=yourpassword&mno=12345678900&sid=sender&msg=testdlr&mt=0&fl=0>

Figure 1: Single Messaging using HTTP API

5.2 Sending to multi numbers

You can send to multi numbers with the API by using comma between the mobile numbers (max 30 number per session). An example of sending multi numbers can be accessed in the following link. And you should see something like figure 2.

<https://api.1s2u.io/bulksms?username=yourusername&password=yourpassword&mno=12345678900,11222338844,124367888&sid=sender&msg=testdir&mt=0&fl=0>

Note: To avoid spamming messages our system will ignore and remove the duplicates numbers which sent in the same request per session.

Figure 2: Multi-number messaging using HTTP API

5.3 Sending single text flash message

An example of sending text flash messages can be accessed in the following link. And you should see something like Figure 3.

Formula:

<https://api.1s2u.io/bulksms?username=yourusername&password=yourpassword&mno=12345678900&sid=sender&msg=testdlr&mt=0&fl=1>

Figure 3: Single text flash message using HTTP API

5.4 Sending single Arabic/Unicode text message

An example of sending text flash messages can be accessed in the following link. And you should see something like Figure 4.

<https://api.1s2u.io/bulksms?username=yourusername&password=yourpassword&mno=12345678900&sid=sender&msg=627062D00200641064A0020062E062F0645062900200631063306270626064400200627064406%20470627062%20A06410020062706&mt=1&fl=0>

Figure 4: Single Arabic/Unicode text message using HTTP API

6. Get Credits API

Check your credits balance through Get Credits API. Customize and integrate all your website's monetary analysis into your system simply by forwarding your username and password parameter to the API. For example:

<https://api.1s2u.io/checkbalance?user=yourusername&pass=yourpassword>

Parameters:

Table 6: Get Credits API Parameters

Parameters	Value	Description
USER	User	Your account username
PASS	Pass	Your account password

Response Code:

Table 7: Response code from Get Credits API

Return values
00 Invalid username or password
0 or remaining balance

Note: You can check your balance 2 time in each 1 m , calling the API in higher speed will block your request and server error will be rise.

7. Conclusion

Accessing gateway through HTTP/HTTPS protocol is one of the best and fastest ways to deliver SMS messages. Using our services, you will guarantee the reach of bulk SMS messages to all around the world as mentioned in the [Coverage Area](#)

Feel free to contact us at any time, we will be very happy to serve you 😊.

APPENDIX A

Error Codes

Table 6 shows the Possible values for status_code are:

Table 8: HTTP/HTTPS Gateway Status codes

Error Code	Description
0000	Service Not Available or Down Temporary
OK: b1a42c47-1a66-4358-bd26-cddf1930e321	Message sent successfully.
0005	Invalid server
0010	Username not provided.
0011	Password not provided.
00	Invalid username/password.
0020 / 0	Insufficient Credits
0030	Invalid Sender ID
0040	Mobile number not provided.
0041	Invalid mobile number.
0042	Network not supported.
0050	Invalid message.
0060	Invalid quantity specified.
0066	Network not supported

NOTE: Only the above-defined validations are performed at the server side. All other validations for any parameter are required to be handled at the client side explicitly. For example: The mobile number is not validated at the sever end for containing any characters other than numbers or for not being in the international format. In case of Unicode messaging, if the value of message type parameter (mt) is sent as 0 instead of 1, then the message would be sent as simple text message and not Unicode, since no such validation is performed at the server end.

Table 9: API Rate Limit

To protect the platform from being overloaded 1s2u API applies rate limits for its SMS API. The default request rate limit is 30 requests per second per username. (can be adjusted upon request) with a special API endpoint, and can reach up to 150 requests (Custom Plan) per second per IP address The API will reject all requests exceeding this rate limit with 429 Too Many Requests HTTP Status. You can retry the request after 1 second.