# Alibaba Cloud IoT Platform

Pricing

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# **Generic conventions**

Table -1: Style conventions

Style	Description	Example
•	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	Danger: Resetting will result in the loss of user configuration data.
A	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning informatio n, supplementary instructions, and other content that the user must understand.	• Notice: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus , page names, and other UI elements.	Click OK.
Courier font	It is used for commands.	Run the cd /d C:/windows command to enter the Windows system folder.
Italics	It is used for parameters and variables.	bae log listinstanceid Instance_ID
[] or [a b]	It indicates that it is a optional value, and only one item can be selected.	ipconfig[-all -t]

Style	Description	Example
	It indicates that it is a required value, and only one item can be selected.	<pre>swich {stand   slave}</pre>

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# 1 Messaging fees

IoT Platform charges messaging fees. The messaging fee is calculated based on the number of messages and has no minimum charge.

### **Billing items**

The billing items may vary depending on the service version. For more information about billing items, see the following table. For billable operations, see the appendix in this documentation.

Item	Description	IoT Platform Basic	IoT Platform Pro
Messaging fee	Messages sent from devices by calling the Pub operation	$\checkmark$	$\checkmark$
(Device)	Requests sent from devices by calling the RPC operation	$\checkmark$	$\checkmark$
	RRPC responses sent from devices to the server	$\checkmark$	$\checkmark$
	Messages received by devices by calling the Sub operation	$\checkmark$	$\checkmark$
	Messages sent and received by devices by calling TSL model related operations	-	$\checkmark$
Messaging fee (Server)	Messages sent from the server by calling the Pub and PubBroadcast operations	$\checkmark$	$\checkmark$
	RPC responses sent from the server to devices	$\checkmark$	$\checkmark$
	Messages sent from the server by calling the RRPC operation	$\checkmark$	$\checkmark$
	Messages sent from the server by calling sub-device related operations	$\checkmark$	$\checkmark$
	Messages sent from the server by calling device shadow related operations	$\checkmark$	-

Item	Description	IoT Platform Basic	IoT Platform Pro
	Messages sent from the server by calling TSL model related operations	-	$\checkmark$
Free messages	<ul> <li>Connect</li> <li>Connect Ack</li> <li>Disconnect</li> <li>PingReq</li> <li>PingResp</li> <li>Publish ACK</li> <li>Subscribe</li> <li>Subscribe ACK</li> <li>Unsubscribe</li> <li>Unsubscribe Ack</li> <li>Messages forwarded by the rules engine</li> </ul> Note: You can use the rules engine to forward messages for free. However, fees are charged when you transfer data to other cloud services.	√	

### **Billing method**

### **Tiered pricing**

Messages N (per Month)	Unit price (Dollar/1,000,000 Messages)	
$N \leqslant 1,000,000$	0	
$1,000,000 < N \le 100,000,000$	0.5	
100,000,000 < N ≤ 1,000,000,000	0.4	
1,000,000,000 < N	0.3	

### **Billing details**

• Fees are calculated based on the number of messages. For more information about billing items, see the preceding table.

 The first 1 million messages are free of charge for each month. The free quota takes effect at 00:00:00 on the first day of each month. Unused quota cannot be carried over to the next month. The fees are calculated when the number of messages exceeds 1 million for each month.

How to count messages

- If a message is less than or equal to 512 bytes in size, the message is counted as one billable message.
- If a message is more than 512 bytes in size, the message is counted as two or more billable messages.
- To calculate the number of billable messages, divide the message size into bytes by 512, and round the resulting value up to the nearest integer.

#### **Billing dates**

- · The messaging fee is calculated and charged on a daily basis.
- Fees are rounded up to the nearest cent.



This document is for reference only. Refer to your bill for accurate information.

Appendix: Billable operations

Operation		IoT Platform Basic	IoT Platform Pro
Billable operation	s (Device)		
MQTT Publish	IOT_CMP_OTA_Start		$\checkmark$
	IOT_CMP_OTA_Get_Config	$\checkmark$	$\checkmark$
	IOT_CMP_OTA_Request_Image		$\checkmark$
	IOT_CMP_Send		$\checkmark$
	IOT_MQTT_Publish		$\checkmark$
	IOT_OTA_ReportVersion		$\checkmark$
	IOT_OTA_RequestImage		$\checkmark$
	IOT_OTA_ReportProgress	$\checkmark$	$\checkmark$
	IOT_OTA_GetConfig	$\checkmark$	$\checkmark$

Operation		IoT Platform Basic	IoT Platform Pro
	IOT_Shadow_Construct	$\checkmark$	$\checkmark$
	IOT_Shadow_RegisterAttribute	√	$\checkmark$
	IOT_Shadow_Push	$\checkmark$	√
	IOT_Shadow_Push_Async	$\checkmark$	$\checkmark$
	IOT_Shadow_Pull	√	$\checkmark$
	IOT_Subdevice_Register	$\checkmark$	$\checkmark$
	IOT_Subdevice_Unregister	$\checkmark$	$\checkmark$
	IOT_Subdevice_Login	$\checkmark$	$\checkmark$
	IOT_Subdevice_Logout	√	√
	IOT_Gateway_Get_TOPO	$\checkmark$	$\checkmark$
	IOT_Gateway_Get_Config	$\checkmark$	$\checkmark$
	IOT_Gateway_Publish_Found_List	√	$\checkmark$
	IOT_Gateway_Publish	$\checkmark$	$\checkmark$
	IOT_Gateway_RRPC_Response	$\checkmark$	$\checkmark$
	linkkit_answer_service	-	$\checkmark$
	linkkit_invoke_raw_service	-	$\checkmark$
	linkkit_trigger_event	-	$\checkmark$
	linkkit_invoke_fota_service	-	$\checkmark$
	linkkit_invoke_cota_get_config	-	√
	linkkit_invoke_cota_service	-	$\checkmark$
CoAP Send	IOT_CoAP_SendMessage	$\checkmark$	$\checkmark$
HTTP Send	IOT_HTTP_SendMessage	√	√
You can call these	IOT_CMP_Register	√	$\checkmark$
operations for free. However, you may be charged for receiving messages.	IOT_MQTT_Subscribe	√	$\checkmark$
	IOT_Gateway_Subscribe	√	$\checkmark$
	IOT_Gateway_RRPC_Register	$\checkmark$	$\checkmark$
Billable operations	(server)		
Pub		$\checkmark$	$\checkmark$

Operation	IoT Platform Basic	IoT Platform Pro
PubBroadcast	$\checkmark$	$\checkmark$
RRpc	$\checkmark$	$\checkmark$
DeleteDevice When you delete a sub-device, the /sys/{productKey}/{ deviceName}/thing/delete message is triggered.	$\checkmark$	$\checkmark$
DisableThing When you disable a sub-device, the /sys/\${productKey}/ \${deviceName}/thing/disable message is triggered.	$\checkmark$	$\checkmark$
EnableThing When you enable a sub-device, the /sys/\${productKey}/\${ deviceName}/thing/enable message is triggered.	$\checkmark$	$\checkmark$
NotifyAddThingTopo When you add a topological relationship, the /sys/\${ productKey}/\${deviceName}/thing/topo/add/notify message is triggered.	$\checkmark$	$\checkmark$
UpdateDeviceShadow	$\checkmark$	-
InvokeThingService When you invoke a service provided by a device, the /sys /\${productKey}/\${deviceName}/thing/service/\${tsl. service.identitier} message is triggered.	-	$\checkmark$
InvokeThingsService When you invoke multiple services provided by multiple devices, the /sys/{productKey}/{deviceName}/thing/service/ {tsl.service.identitier} message is triggered.	-	$\checkmark$
SetDeviceProperty When you set properties for a device, the /sys/\${ productKey}/\${deviceName}/thing/service/property/ set message is triggered.	-	$\checkmark$
SetDevicesProperty When you set properties for multiple devices, the /sys/{ productKey}/{deviceName}/thing/service/property/set message is triggered.	-	$\checkmark$

### 2 Device access fees

The device access fee is calculated based on the duration that devices are connected to IoT Platform. These fees are not charged if a device is connected to IoT Platform over CoAP or HTTP, or if the device is a sub-device within a topological relationship. The device access fee supports the Pay-As-You-Go billing method and has no minimum charge fee.

#### **Billing method**

### **Billing details**

- $\cdot\,$  Fees are calculated based on the duration of the connection in minutes.
  - The duration starts when a device successfully connects to IoT Platform and ends when the device disconnects from IoT Platform. This time period is the duration of the connection.
- The duration is calculated by minutes. If the duration of the connection is less than one minute, the duration is calculated as one minute.
  - For example, if a device gets connected to IoT Platform at 18:23:35 2019-01-21 and disconnects from IoT Platform at 18:24:10 on the same day, the duration is calculated as two minutes.
- If a device connects to and disconnects from IoT Platform multiple times within one minute, the duration is calculated as one minute.

For example, if a device gets connected to IoT Platform at 18:23:15 2019-01-21, disconnects at 18:23:35, reconnects to IoT Platform at 18:23:40, and disconnects at 18:23:59 again on the same day, the duration is one minute. The device connects to and disconnects from IoT Platform multiple times within one minute. The duration is calculated as one minute.

 The first 1 million minutes for each month are free of charge. The free quota takes effect at 00:00:00 on the first day of each month. Unused quota cannot be carried over to the next month. The fees are calculated when the duration exceeds 1 million minutes for the month.

Pricings

Duration (Minutes/Month)	Unit price (Dollar/1,000,000 Minutes)
$N \leqslant 1,000,000$	0
1,000,000 < N	0.3

### **Billing dates**

- $\cdot\;$  The device access fee is calculated and charged on a daily basis.
- Fees are rounded up to the nearest cent.



Note:

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# 3 Billing examples

#### Example 1

Suppose you have 10,000 devices connected to IoT Platform eight hours a day. Every minute, each device sends out one message that is less than 0.5 KB in size. In this example, assume that one month has 30 days.

The fees are calculated as follows:

· Messaging fee

Messages sent per month: 60 \* 8 \* 30 \* 10,000 = 144 million

For each month, the first 1 million messages are free of charge. The following 99 million messages are charged at 0.5 dollars per 1 million messages. The following 44 million messages are charged at 0.4 dollars per 1 million messages. The messaging fee is: 1 \* 0 + 99 \* 0.5 + 44 \* 0.4 = USD 67.1.

Device access fee

Time that devices are online per month: 60 \* 8 \* 30 \* 10,000 = 144 million minutes

For each month, the first 1 million minutes are free of charge. The following minutes are charged at 0.3 dollars per 1 million minutes. The device access fee is: 1 \* 0 + 143 \* 0.3 = USD 42.9.

• The total monthly fee is: 67.1 + 42.9 = USD 110.

#### Example 2

Suppose you have 10,000 devices connected to IoT Platform eight hours a day. Every minute, each device sends out one message that is less than 0.5 KB in size and receives one message that is 0.4 KB in size. In this example, assume that one month has 30 days.

The fees are calculated as follows:

#### · Messaging fee

Messages sent per month: 60 \* 8 \* 30 \* 10,000 = 144 million

Messages received per month: 60 \* 8 \* 30 \* 10,000 = 144 million

Total messages per month: 144 million + 144 million = 288 million

For each month, the first 1 million messages are free of charge. The following 99 million messages are charged at 0.5 dollars per 1 million messages. The following 188 million messages are charged at 0.4 dollars per 1 million messages. The messaging fee is: 1 \* 0 + 99 \* 0.5 + 188 \* 0.4 =USD 124.7.

Device access fee

Time that devices are online per month: 60 \* 8 \* 30 \* 10,000 = 144 million minutes

For each month, the first 1 million minutes are free of charge. The following minutes are charged at 0.3 dollars per 1 million minutes. The device access fee is: 1 \* 0 + 143 \* 0.3 = USD 42.9.

• The total monthly fee is: 124.7 + 42.9 = USD 167.6

#### Example 3

Suppose you have 10,000 devices connected to IoT Platform eight hours a day. Every minute, each device sends out one message that is 0.6 KB in size and receives one message that is 0.4 KB in size. In this example, assume that one month has 30 days.

The fees are calculated as follows:

· Messaging fee

Messages sent per month: 60 \* 8 \* 30 \* 10,000 \* 2 = 288 million

Messages received per month: 60 \* 8 \* 30 \* 10,000 = 144 million

Total messages per month: 288 million + 144 million = 432 million

For each month, the first 1 million messages are free of charge. The following 99 million messages are charged at 0.5 dollars per 1 million messages. The following 332 million messages are charged at 0.4 dollars per 1 million messages. The messaging fee is: 1 \* 0 + 99 \* 0.5 + 332 \* 0.4 =USD 182.3.

### • Device access fee

Time that devices are online per month: 60 \* 8 \* 30 \* 10,000 = 144 million minutes.

- For each month, the first 1 million minutes are free of charge. The following minutes are charged at 0.3 dollar per 1 million minutes. The device access fee is: 1 \* 0 + 143 \* 0.3 = USD 42.9.
- The total monthly fee: 182.3 + 42.9 = USD 225.2.