



帝宝支付
DIBAO PAY

INTRODUCTION

This manual provides a detailed description of the API, Following the instructions will enable your company's technical department to have a detailed understanding of the system for development, maintenance and management personnel, It can make the merchant's technicians understand the interface of the system more quickly.

The technical staff should have basic knowledge of the following:

1. Understand the website transmission (http/https) settings and online troubleshooting.
2. Know all kinds of back-end languages.
3. Understand the basic concepts of information security.
4. Understand Json and post format.

Version history

2020-12-10	V.0.0.1	Frist
2020-12-28	V.0.1.1	Optimization
2020-01-12	V.1.1.1	Page decorate
2020-02-08	V.1.2.1	Increase new payment mode
2020-03-10	V.2.1.1	Add FAQ for document
2020-04-21	V.2.5.3	Add detailed LOG
2020-05-02	V.3.2.4	Change file style
2021-07-20	V3.2.5	Interbank banking support increased

BEFORE INTERFACING

1. Please contact the business manager before the docking to obtain the following information:
 - i. Get the login account and account verification method of the merchant backstage.
 - ii. API location, merchant ID, and secret key can be queried in the background. The query method is as follows:
 - iii. sign in the background merchants - System Management -> channel information see "API location", "Merchant ID", "keys Key".

Reminder: The test environment will be opened at the beginning of the connection, and any orders in the test environment will not be counted into the accounts. If the merchant confirms to go online, please inform the relevant personnel to apply for conversion to a formal environment.

2. Docking matter

- Method: POST
- content-type: form-data
- Notify callback method: POST
- Notify callback content-type: form-data
- Character encoding : UTF-8
- The data returned after calling the API are all: JSON
- All parameters are case sensitive
- Although the floating-point number type is used, when the actual API receives it, the two decimal places will be automatically rounded off, and the value will be converted to an integer.
- The purpose of the time stamp is to increase the illegibility of the digital signature, please use the number of seconds of the current time to bring it in. Example: 1586312712
- Please bring all the parameters listed in this document unless otherwise specified. (even if the parameters are blank, they need to be brought in and signed.)

DIGITAL SIGNATURE

A STEP OF SIGN

1. All parameters except the sign field are sorted according to the ascii code of the field name from small to large, a to z.
2. Use the format of QueryString, that is, key1=value1&key2=value2... is spliced together, and the secret key Key (&key=XXXXXX) is spliced at the end.
3. Use the MD5 signature function to perform signature operations on the signed string.
4. Get the signature result string and convert all of it to uppercase.
5. Add the data signature result string to the parameter sign transmission.

FRIENDLY REMINDER

- The parameters involved in the signature must be exactly the same as the parameters of the final transmission, and the data at the time of sending must be the same as the data before the signature.
- All transmitted data must be included in the signature list.
- The parameter with a blank string must also be signed.
- Do not include blanks, line breaks, branch symbols before and after the character string, the system will automatically clear them, and the signature verification will fail.
- The Json of the returned result should not be decode before verification. Please keep the Json string status for signature calculation.

PAYMENT BUSINESS

Request location

/pay

Request parameters

Parameter name	Status	Parameters	Description
Merchant ID	Str(5)	uid	Merchant ID
Order Number	Str(32)	orderid	Unique order number generated by the merchant platform
Payment type	Int	channel	For parameter values, see the attachment "Payment Type"
Notify address	Str(100)	notify_url	The string starting with http/https, after the payment is completed, the payment result will be notified to the merchant system as a parameter in the form of a POST request
Synchronous return address	Str(100)	return_url	The string starting with http/https, after the payment is completed, back to the merchant page in the form of a GET request
Amount	Float	amount	Merchant submitted amount
Client IP	Str(40)	userip	Merchant member IP address
Timestamp	Int	timestamp	GMT timestamp
Customize	Str(100)	custom	Return as it is (empty string must also be transmitted)
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value
*Bank Code	Int	bank_id	See note below

Please check with business manager what banks are available.

When using a bank type payment method, you can use this parameter to skip the bank selection page at the cashier.

But if you don't use it, please don't bring this parameter. o

Return paramete

Parameter name	Status	Parameters	Description
Status code	Int	status	For parameter values, check the attachment "Status Code"
Reply information	object	result	Return a JSON string when the status code is "successful"
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value

Reply information

Parameter name	Status	Parameters	Description
Transaction number	Long	transactionid	Unique order number generated by the product
Link of payment	Str	payurl	Open the link to make payment

Do not use official payment screen parameters

If it is a bank type payment method, remember to add in the bank number, otherwise it is invalid.

When using, please take the above parameter sequence as the main body and add the following parameters.

But if you don't use it, please don't add this parameter. °

Parameter name	Status	Parameters	Description
Payment parameters	Int	path_type	2 : Not use payment screen

Back to parameters

Parameter name	Status	Parameters	Description
Status code	Int	status	For parameter values, check the attachment "Status Code"
Reply information	object	result	Return a JSON string when the status code is "successful"
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value

Reply information

Parameter name	Status	Parameters	Description
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Transaction	Long	transactionid	Unique order number generated by the product
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number			
Transaction postscript	Int	mark	Please ask the customer to fill in this parameter in the postscript position for getting points
Amount	float	points	The transaction amount
Account name of the payee	Str(50)	bank_account	Account name of the payee
Beneficiary's bank account	Str(20)	bank_no	Beneficiary's bank account
QRCode Link	Str	qrcode_url	Only available for peer scan code transfer

PAID ON YOUR BEHALF BUSINESS

Request location

</applyfor>

Request parameters

Parameter name	Status	Parameters	Description
Merchant ID	Str(5)	uid	Merchant ID
Order number	Str(32)	orderid	Unique order number generated by the merchant platform
Payment type	Int	channel	For parameter values, see the attachment "Paid on your behalf Type"
Notify address	Str(100)	notify_url	The string starting with http/https, after the payment is completed, back to the merchant page in the form of a POST request
Amount	Float	amount	Merchant submitted amount
Client IP	Str(40)	userip	Merchant member ip address
Timestamp	Int	timestamp	GMT timestamp
Customize	Str(100)	custom	Return as it is (empty string must also be transmitted)
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value
Merchant ID	Str(5)	uid	Merchant ID
Real name	Str(30)	user_name	If you need to use the "real name system", then bring this parameter.
Paying on behalf of type 712, please continue to bring the following parameters			
Account name of the payee	Str(50)	bank_account	Account name of the payee
Beneficiary's bank account	Str(20)	bank_no	Beneficiary's bank account
Bank code	Int	bank_id	For parameter values, please refer to the appendix "Bank code"
Province of the bank	Str(20)	bank_province	Province of the bank
City of bank	Str(20)	bank_city	City of bank

Branch of the bank	Str(20)	bank_sub	Branch of the bank
Back to parameters			
Parameter name	Status	Parameters	Description
Status code	Int	status	For parameter values, check the attachment "Status Code"
Reply information	object	result	Return a JSON string when the status code is "successful"
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value
Reply information			
Parameter name	Status	Parameters	Description
Transaction number	Long	transactionid	Unique order number generated by the product

NOTIFY

Back to parameters

Parameter name	Status	Parameters	Description
Status code	Int	status	For parameter values, check the attachment "Status Code" This status code also represents "order status"
Reply information	object	result	Return a JSON string when the status code is "successful"
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value

Reply information

Parameter name	Status	Parameters	Description
Transaction number	Long	transactionid	Unique order number generated by the product
Order number	Str(32)	orderid	Unique order number generated by the merchant platform
Amount	Float	amount	Amount submitted by the merchant, in the range of two decimal places
Real amount	Float	real_amount	The amount actually deposited/deducted from the merchant, in the range of two decimal places
Customize	Str(100)	custom	Return as it is (empty string must also be transmitted)

Friendly remainder

- When composing sign, only deal with the two parameters of status and result (all as strings), do not add sign to encryption
- Do not decode the JSON data of result into an object. Please add the received Json String directly into the verification.
- The status code represents the transaction status of this transaction order, please use this as the basis for the success of the transaction
- It must be ensured that there are no characters on the asynchronous notification page and address (notify_url), such as spaces, HTML tags, parameters, and prompt messages that indicate abnormalities in the development system, etc.
- The conversion between servers, unlike the page re-directed synchronization notification that can be displayed on the page, this conversion method is invisible. After the program is executed, the page cannot be re-directed.
- The notification will not be issued until the payment is completed.
- Do not use filtering and blocking for this address, cookies, sessions, etc., this page will become invalid and no data can be obtained.
- The server runs in a provisioned manner, and the web page could be able to accessed.
- After the merchant system receives the asynchronous notification, it must pass the verification (the sign verification) to ensure that the payment notification is from us.
- After the program is executed, be sure to return "success" (without double quotes, case sensitive), otherwise we will repeat the asynchronous notification three times.

ORDER LIST

Request location

/orderquery

Request parameters

Parameter name	Status	Parameters	Description
Merchant ID	Str(5)	uid	Merchant ID
Timestamp	Int	timestamp	GMT timestamp
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value

Specific search parameters

- According to different usage methods, please add the following parameters by yourself and add them to the above parameters.
- But if you don't use it, please don't bring this parameter.

Parameter name	Status	Parameters	Description
Order number	Str(20)	orderid	Order number generated by the merchant platform
Page number	Int	page	At most 20 data will be returned each time, and the page number will be switched if it exceeds
Rows	Int	row	The maximum number of rows of data returned each time allows 1 to 1000 rows
Start time	Str(19)	start	The start time of the query interval
End Time	Str(19)	end	The cut-off time of the query interval
Time condition	Int	date_type	Search according to different time types, 0: according to the order creation time, 1: according to the modification time

Back to parameters

Parameter name	Status	Parameters	Description
Status code	Int	status	For parameter values, check the attachment "Status Code"

Reply information	object	result	Return a JSON string when the status code is "successful"
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value
Reply information			
Parameter name	Status	Parameters	Description
Transaction number	Long	transactionid	Unique order number generated by the product
Order number	Str(32)	orderid	Unique order number generated by the merchant platform
Payment Type/ Paid on your behalf Type	Int	channel	For parameter values, check the appendix "Payment Type" and " Paid on your behalf Type"
Amount	Float	amount	Amount submitted by the merchant, in the range of two decimal places
Real amount	Float	real_amount	The actual amount of the merchant process, the range is two decimal places
Status	int	status	<p>0: Not processed</p> <p>1: The transaction is successful</p> <p>2: Processing</p> <p>3: Transaction failed</p> <p>4: Operation failed</p> <p>5: Bill of lading failed</p> <p>Operation failure is a unique status of 907 payment. The usual status means that the member account cannot be logged in, the member's transfer information is incorrect, and the member's balance is insufficient.</p>
Founding time	Str(19)	bdate	Transaction order creation time
Modified time	Str(19)	cdate	Last modification time of transaction order

Friendly remainder

- If only uid, timestamp and sign are added, the first page of the hour and 20 data will be searched by default
- Only adding orderid (in the case of non-empty string) will ignore the parameters of time, page number, and number of rows (just bring in uid, timestamp, sign, orderid), and only search for specific transaction orders
- All time-related formats are: (Y-m-d h:i:s) 2020-01-01 00:00:00

The reply data in the return parameter is composed of ordered objects, and the data format is as follows:

```
{
  "status":10000, "result":{
    "totalCount": "210",
    "page": "1",
    "row": "2",
    "count": 2,
    "data": {
      "0": {
        "transactionid": "123",
        "orderid": "123",
        "channel": "921",
        "amount": "102110.00",
        "real_amount": "102100.00",
        "status": "1",
        "bdate": "2020-12-02 20:58:15",
        "cdate": "2020-12-31 20:59:22"
      },
      "1":{
        "transactionid": "456",
        "orderid": "456",
        "channel": "921",
        "amount": "20000000.00",
        "real_amount": "19800000.00",
        "status": "0",
        "bdate": "2020-12-31 22:34:22",
        "cdate": "2020-12-31 22:51:15"
      }
    }
  },
  "sign": "123"
}
```

CHECK BALANCES

Request location

[/getpoints](#)

Request parameters

Parameter name	Status	Parameters	Description
Merchant ID	Str(5)	uid	Merchant ID
Timestamp	Int	timestamp	GMT timestamp
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value

Return parameter

Parameter name	Status	Parameters	Description
Status code	Int	status	For parameter values, check the attachment "Status Code"
Reply information	object	result	Return a JSON string when the status code is "successful"
Digital signature	Str(32)	sign	32-bit uppercase MD5 signature value

Reply information

Parameter name	Status	Parameters	Description
Balance	Float	points	Merchant's current balance

FREQUENTLY ASKED QUESTION OF INTERFACING

BLANK PARAMETER SETTING FORMAT DESCRIPTION

The blank parameter refers to the "blank in the form of a string", as long as the key exists in the final output (key:value), and the value is brought into an empty string.

WHAT PARAMETERS MAKE UP MD5?

In addition to sign, all data to be transmitted must be included in the data signature (md5).

THE RECEIVED CALLBACK PARAMETER IS BLANK

Please check that the location of the received parameter is correct, the platform uses the POST form-data key-value format to send the data.

WHAT PARAMETERS SHOULD I USE TO SIGN WHEN NOTIFY CALLBACK?

In addition to sign, all data to be transmitted must be included in the data signature (md5).

EXAMPLE OF DATA RETURNED BY CALLING PAYMENT OR PAYMENT API:

When the call is **successful**:

Obtained return Json:

```
{"status":10000,"result":{"transactionid":"6839","payurl":"http://pay.pay.test.com/pay?p=eyJpdil6lkM5YlpQaHMrMkcwSFQySHM3NGNYU1E9PSIsInZhbHVlIjoiaY91Skk3eXROOGNhNHhkY2RybDhRQT09liwibWFjIjoiN2NjNzEzNjUzNmI1YmVjZGVjN2ViN2RiNWY3YWU3OTI0ODk4ZDZmOTMzYTU0YTgwNDdlYWVmMzJiODc1NWl0ZCJ9","points":"100000"},"sign":"7BD6DE085065A6C7C440281C2A620843"}
```

Check the signature without decoding the result Json (if it has been decoded, please transfer the result data back to the Json String):

\$dataString =

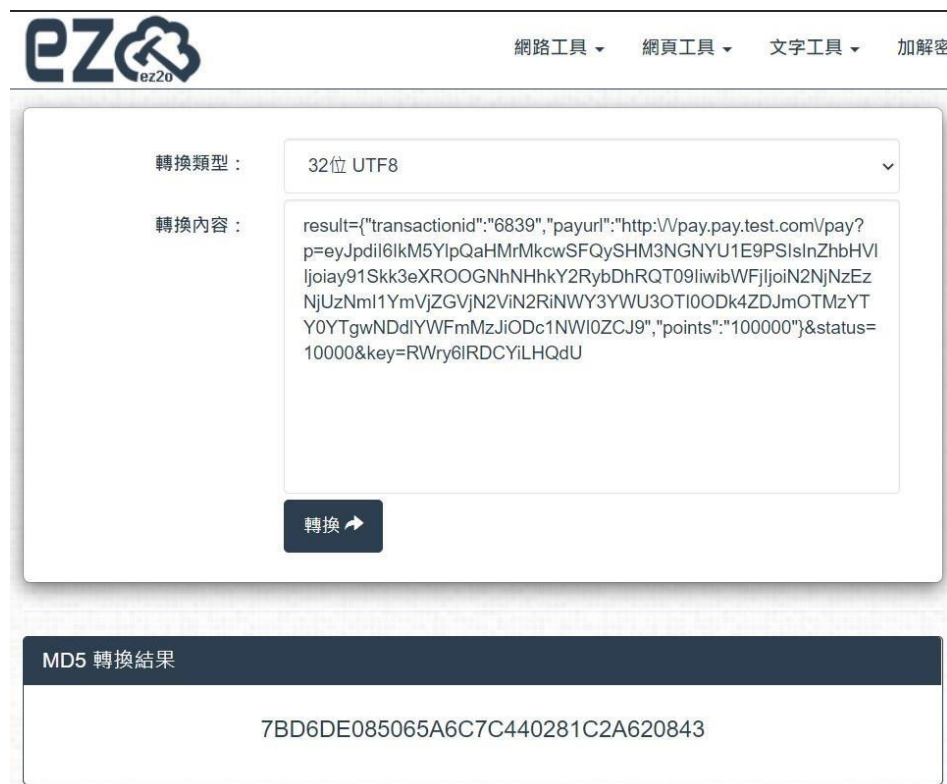
```
'result={"transactionid":"6839","payurl":"http://pay.pay.test.com/pay?p=eyJpdil6lkM5YlpQaHMrMkcwSFQySHM3NGNYU1E9PSIsInZhbHVlIjoiaY91Skk3eXROOGNhNHhkY2RybDhRQT09liwibWFjIjoiN2NjNzEzNjUzNmI1YmVjZGVjN2ViN2RiNWY3YWU3OTI0ODk4ZDZmOTMzYTU0YTgwNDdlYWVmMzJiODc1NWl0ZCJ9","points":"100000"}';
```

\$dataString .= '&status=10000';

\$dataString .= '&key=RWry6lRDCYiLHQdU';

Comparison sign

7BD6DE085065A6C7C440281C2A620843 == 7BD6DE085065A6C7C440281C2A620843



The screenshot shows the ez20 website's MD5 hashing tool. At the top, there's a navigation bar with the ez20 logo and links for '網路工具', '網頁工具', '文字工具', and '加解密'. The main interface has a '轉換類型' (Conversion Type) dropdown set to '32位 UTF8'. The '轉換內容' (Conversion Content) text area contains a long JSON string representing a payment transaction. Below the text area is a '轉換' (Convert) button with a right-pointing arrow. At the bottom, a dark blue header reads 'MD5 轉換結果' (MD5 Conversion Result), and the result '7BD6DE085065A6C7C440281C2A620843' is displayed in a white box.

EXAMPLE OF DATA SENT BY NOTIFY CALLBACK API:

The data is sent in the form of POST form-data key to value

In the case of a **successful order** callback:

Get information:

status: 10000

result:

```
{"transactionid":3086,"orderid":"202009302020001","amount":"150000.00","real_amount":"148500.00","custom":""}
```

sign: 1904CC34BBB4E466FAB758F8F5338830

Check the signature without decoding the result Json:

\$dataString =

```
'result={"transactionid":3086,"orderid":"202009302020001","amount":"150000.00","real_amount":"148500.00","custom":""}';
```

```
$dataString .= '&status=10000';
```

```
$dataString .= '&key=60acDfa2R1l2xF9L';
```

Comparison sign

```
1904CC34BBB4E466FAB758F8F5338830 ==1904CC34BBB4E466FAB758F8F533883
```



The screenshot shows the ez2o website's MD5 hash calculator. At the top, there's a navigation bar with the ez2o logo and links for '網路工具', '網頁工具', '文字工具', and '加解密'. The main interface has a '轉換類型' (Conversion Type) dropdown set to '32位 UTF8'. The '轉換內容' (Conversion Content) text area contains a JSON string: `result={\"transactionid\":3086,\"orderid\":\"202009302020001\",\"amount\":\"150000.00\",\"real_amount\":\"148500.00\",\"custom\":\"\"}&status=10000&key=60acDfa2R1l2xF9L`. Below this is a '轉換' (Convert) button with a right arrow. The results section, titled 'MD5 轉換結果', displays the hash: `1904CC34BBB4E466FAB758F8F5338830`.

In the case of a **failed callback order**:

Get information:

status: 30916

result:

```
{"transactionid":3088,"orderid":"202009302020003","amount":"150000.00","real_amount":0,"custom":""}
```

sign: AB428DF2ABD0581D98477CD3AC723DBD

Check the signature without decoding the result Json:

```
$dataString =
```

```
'result={\"transactionid\":3088,\"orderid\":\"202009302020003\",\"amount\":\"150000.00\",\"real_amount\":0,\"custom\":\"\"}';
```

```
$dataString .= '&status=30916';
```

```
$dataString .= '&key=60acDfa2R1l2xF9L';
```

Comparison sign

AB428DF2ABD0581D98477CD3AC723DBD == AB428DF2ABD0581D98477CD3AC723DBD



網路工具 ▾

網頁工具 ▾

文字工具 ▾

加解密

轉換類型：

32位 UTF8 ▾

轉換內容：

```
result=
{"transactionid":3088,"orderid":"202009302020003","amount":"150000.00","real_amount":0,"custom":""}&status=30916&key=60acDfa2R1I2xF9L
```

轉換 ➡

MD5 轉換結果

AB428DF2ABD0581D98477CD3AC723DBD

PAYMENT TYPE OF VIETNAM

Code	Description
907	Online Bank
908	Bank Transfer
909	Scan code to pay(908 has 909 built in, no need to connect 909 unless needed)
921	Zalo Pay
923	Momo Pay
925	Viettel Pay

PAID ON YOUR BEHALF TYPE OF VIETNAM

Code	Description
712	Vietnam bank Paid on your behalf business

BANK CODE OF VIETNAM

Code	Description
1548	VIB
1549	VPB
2001	BIDV
2002	VietinBank (CTG)
2003	SHB
2004	ABBANK
2005	AGRIBANK
2006	Vietcombank
2007	Techcom
2008	ACB
2009	SCB
2011	MBBANK
2012	EIB
2020	STB
2031	DongABank
2032	GPBank
2033	Saigonbank
2034	PG Bank
2035	Oceanbank
2036	NamABank
2037	TPB
2038	HDB

2039	VAB
2040	OCB
2041	SEABANK
2044	MARITIME BANK(MSB)
2045	VIETBANK
2046	BVB (bao viet)
2047	CAKE
2048	CBBANK
2049	CIMB
2050	DBS
2051	HSBC
2053	IVB
2054	KIEN LONG BANK
2056	NCB
2058	PBVN
2059	PVCOMBANK
2062	VIET CAPITAL BANK
2063	VRB
2064	WOORI

STATUS CODE

Code	Description
10000	Success
Parameter verification failed	
20001	Wrong mode sent
20002	Unacceptable content-type
20003	No parameters received
20004	Parameter abnormal
20005	Did not get a business name
20041	No sign
20042	sign does not match
20091	Currency disabled
20092	Permission disabled
20093	Merchant disabled
20094	Transaction type disabled
20095	Platform API line disabled
20096	Merchant API line disabled
20097	Merchant node API disabled
21011	Did not get the merchant platform order number
21012	Merchant platform order number length is less than 1 character
21013	Merchant platform order number is longer than 32 characters

21014	Duplicate merchant platform order number
21016	Did not get payment type
21017	Payment type is not digital
21018	Payment type does not exist
21019	Payment type is not enabled
21020	Wrong payment type
21021	No callback link
21022	Callback link length is greater than 100 characters
21026	Did not get the guide link
21027	Guide link length is greater than 100 characters
21031	Did not get the amount
21032	Amount is not a number
21033	Amount is less than the minimum limit
21034	Amount is more than the maximum limit
21035	The amount is more than the maximum transaction amount in a single day
21036	Did not get the client IP
21037	Client IP is longer than 40 characters
21041	No time stamp
21042	Timestamp is not a number
21046	Did not get the postscript
21047	The postscript is more than 100 words in length
21071	The starting time is more than 19 words

21072	The format of the start time is wrong
21076	The end time is more than 19 words
21077	The format of the end time is wrong
21081	The number of pages is not a number
21086	The number of rows is not a number
21087	Number of rows is less than 1
21088	Number of rows is more than 1000
21101	No beneficiary account opening name
21102	The payee's account opening name is less than 1 words
21103	The payee's account opening name is longer than 50 words
21106	No beneficiary bank account
21107	Beneficiary's bank account number is less than 1 word
21108	Beneficiary's bank account number is longer than 20 words
21111	Did not get bank code
21112	Bank number is not a number
21113	Bank number does not exist
21114	Bank number is not activated
21115	The bank code is wrong
21116	No bank branch
21117	The bank branch is less than 1 word
21118	The bank branch is longer than 20 words
21121	No bank branch province

21122	The bank branch province is less than 1
21123	The bank branch province is longer than 20 words
21126	No bank branch city
21127	The bank branch city is less than 1
21128	The bank branch city is longer than 20 words
21136	IP not allowed
21141	Did not get IFSC
21142	IFSC is longer than 20 words
Data processing failed	
30001	Merchant does not exist
30002	The merchant has not opened this transaction channel
30003	The merchant has not set this transaction channel
30004	The merchant has not opened this transaction type
30011	Failed to create transaction order
30016	The transaction order does not exist
30020	The merchant's balance is insufficient
30021	The platform's API does not support this currency
30100	Payment channel blocked
Order failed status	
30901	Order expired
30906	Login failed
30907	Insufficient balance

30911	Verification failed
30912	Real name failed
30916	Transaction failed
30921	Transaction timeout
System block	
90001	In maintenance
90091	Too many API IP conversions
90092	API IP is in the blacklist
90093	No payment screen mode is provided
90901	Payment channel returns the wrong format
90902	Payment channel does not return results
90903	Payment channel return failed
90904	Payment channel has no return link
90905	Payment channel return link is empty
90906	Payment channel transaction failed
99999	Not this API