

# Electronic Invoicing for China Baiwang API Document

This document is about API provided by iFlow deployed in CPI. It is designed to receive data from backend system and sent them to Baiwang Cloud Platform.

## Outgoing invoice

This API supports invoice operation through Baiwang Cloud Platform

1. Open Invoices
2. Cancel Invoices
3. Query Invoices

Version 1.0.0

## Open invoice

Request details:

API Endpoint: [https://<cpi\\_tenant>/http/china/v1/baiwang/sendinvoice](https://<cpi_tenant>/http/china/v1/baiwang/sendinvoice)

Methods: *POST*

Action: *open*

Sample request:



OpenInvoiceReque  
st.txt

Data Mapping Detail:

Field	Description	Source	Calculation	Data Type	Length
serialNo	开票流水号, 唯一标志开票请求	VATInvoice->Invoices->Header->gtdnmbr		String	50
taxationMode	征税方式: 0: 普通征税, 2: 差额征税	deductibleAmount	If "deductibleAmount" is greater than 0, then it is "0". Otherwise, it is "2".	String	1
invoiceType	0: 正数发票 (蓝票) 1: 负数发票 (红票)	VATInvoice->Invoices->Header->netvalue	If "netvalue" is greater than 0, then it is "0". Otherwise, it is "1".	String	1
invoiceTypeCode	发票种类编码, 004: 增值税专用发票, 007: 增值税普通发票, 026: 增值税电子发票	VATInvoice->Invoices->Header->invctype	004: 增值税专用发票 -> invctype: 0 (VAT Invoice) 007: 增值税普通发票 -> invctype: 1 (Normal Invoice)	String	3
invoiceSpecialMark	特殊票种标记, 00: 普通发票.	Default value "00".		String	2
sellerTaxNo	销方单位税号	VATInvoice->Control->taxnumber		String	20
invoiceTerminalCode	开票点编码	VATInvoice->Control->termid		String	30
buyerName	购方单位名称	VATInvoice->Invoices->Header->buyername	SubString the value from 0 to 80 if the original length is greater than 80	String	80
buyerAddressPhone	购方地址及电话	VATInvoice->Invoices->Header->buyeraddrtel		String	100
buyerBankAccount	购方开户行及账号	VATInvoice->Invoices->Header->buyerbank		String	100
originalInvoiceCode	原发票代码(开红票时传入)	VATInvoice->Invoices->Header->buyerbank	SubString the value from 0 to 12 if the original length is greater than 12	String	12
originalInvoiceNo	原发票号码(开红票时传入)	VATInvoice->Invoices->Map->invccode	SubString the value from 0 to 8 if the original length is greater than 8	String	8
notificationNo	通知单编号	VATInvoice->Invoices->Map->incvnmbr		String	20
drawer	开票人	VATInvoice->Control->issuer	SubString the value from 0 to 8 if the original length is greater than 8 and "invoiceTypeCode" is equal to "026"	String	电子发票8位, 其他发票16位
deviceType	设备类型 0: 税控服务器, 1: 税控盘, 3: 凯盛盒子	VATInvoice->Control->ukeytype		String	1
taxDiskNo	税控盘编号	VATInvoice->Control->ukeyserid		String	12
autoSplit	开票超过限额自动拆分, 默认不拆分	Default value "false".		boolean	0
buyerTaxNo	购方单位税号	VATInvoice->Invoices->Header->buvertaxregnmbr		String	20
checker	复核人	VATInvoice->Control->reviewer	SubString the value from 0 to 8 if the original length is greater than 8 and "invoiceTypeCode" is equal to "026"	String	电子发票8位, 其他发票16位
payee	收款人	VATInvoice->Control->receiver	SubString the value from 0 to 8 if the original length is greater than 8 and "invoiceTypeCode" is equal to "026"	String	电子发票8位, 其他发票16位
invoiceListMark	清单标志: 0: 无清单 1: 带清单	VATInvoice->Invoices->Header->isgoodslist		String	17
deductibleAmount	扣除额	VATInvoice->Invoices->Header->item->deductions	Loop and add "deductions" in all item.	double	13
invoiceTotalPrice	合计金额	VATInvoice->Invoices->Header->netvalue		double	13
invoiceTotalTax	合计税额	VATInvoice->Invoices->Header->taxamount		double	13
invoiceTotalPriceTax	价税合计	VATInvoice->Invoices->Header->netvalue	Add "netvalue" and "taxamount" in head	double	13
signatureParameter	签名值参数, 默认为: 0000004282000000	"0000004282000000"		String	40
goodsCodeVersion	商品编码版本号	VATInvoice->Control->matlversion	SubString the value from 0 to 10 if the original length is greater than 10	String	10
remarks	备注	VATInvoice->Invoices->Header->note	SubString the value from 0 to 168 if the original length is greater than 168	String	168
goodsLineNo	明细行号	Calculated by iFlow	The current position of this item in the list.	String	4
goodsLineNature	发票行性质, 0: 正常行 1: 折扣行 2: 被折扣行	VATInvoice->Invoices->Header->item->netvalue VATInvoice->Invoices->Header->item->discamount	"0" for item without discount. "1" for item generated for discount item. "2" for the original item with discount. (GTI would sent a item with discount. In this case, an new discount item will be generated after the mapping.)	String	1
goodsDiscountLineNo	折扣行对应行号	Calculated by iFlow	The goodsLineNo of original item for the newly generated discount item.	String	10
goodsCode	商品编码	VATInvoice->Invoices->Header->item->matlcode	SubString the value from 0 to 40 if the original length is greater than 40.	String	40
goodsName	商品名称	VATInvoice->Invoices->Header->item->matldesc		String	80
goodsTotalPrice	金额	VATInvoice->Invoices->Header->item->netvalue		double	13
goodsTaxRate	税率	VATInvoice->Invoices->Header->taxrate		double	13
goodsTotalTax	税额	VATInvoice->Invoices->Header->item->taxamount		double	13
priceTaxMark	含税标志: 0: 不含税 1: 含税	Default value "0".		String	1
freeTaxMark	零税率标识: 空代表无, 1: 出口免税和其他免税优惠政策, 2: 不征增值税, 3: 普通零税率	VATInvoice->Invoices->Header->item->zerotaxflag	1: 出口免税和其他免税优惠政策 -> zerotaxflag: 0/1 2: 不征增值税 -> zerotaxflag: 2 3: 普通零税率 -> zerotaxflag: 3	String	1
preferentialMark	是否使用优惠政策 0: 未使用, 1: 使用	VATInvoice->Invoices->Header->item->discountflag		String	1
goodsSpecification	规格型号	VATInvoice->Invoices->Header->item->matlspec		String	36
goodsUnit	计量单位	VATInvoice->Invoices->Header->item->unitofmsrdesc	SubString the value from 0 to 14 if the original length is greater than 14.	String	14
goodsQuantity	商品数量	VATInvoice->Invoices->Header->item->billdqty		double	10
goodsPrice	商品单价	VATInvoice->Invoices->Header->item->unitprice		double	20
vatSpecialManagement	增优惠政策类型	VATInvoice->Invoices->Header->item->discountnote		String	200



## Outgoing Data Mapping.xlsx

Response details:

Success response:

<ResponseMessage>

<method>open</method>

<taxnumber>9150000747150426A</taxnumber>

<Result>

<gtdnmbr>90024089</gtdnmbr>

<successcode>000000</successcode>

```

<message>数据已成功接收</message>
<detailmessage/>
<Invoice>
  <invccode></invccode>
  <invnmbr></invnmbr>
</Invoice>
</Result>
</ResponseMessage>

```

Parameter	Name	Type	Length	Description
method				Operation for invoice
taxnumber	税号			
gtdnmbr	发票流水号			
successcode	返回代码	String	6	Succ: "000000" Error from Baiwang: "1*****" Error from CPI: "2*****"
message	返回信息	String		
detailmessage	详情	String		错误详细信息
invccode	发票代码	String	12	
invnmbr	发票号码	String	8	

#### Failed Response:

```

<ResponseMessage>
  <method>open1</method>
  <taxnumber>91500000747150426A</taxnumber>
  <Result>
    <gtdnmbr></gtdnmbr>
    <successcode>200001</successcode>
    <message>不支持的操作类型</message>
    <detailmessage>操作为空或不支持的操作类型，目前支持的类型为 open 和
cancel</detailmessage>
    <Invoice>
      <invccode/>
      <invnmbr/>
    </Invoice>
  </Result>
</ResponseMessage>

```

#### Cancel invoice

Request details:

API Endpoint: [https://<api\\_tenant>/http/china/v1/baiwang/sendinvoice](https://<api_tenant>/http/china/v1/baiwang/sendinvoice)

Methods: *POST*

Action: *cancel*

Sample request:



CancelInvoiceRequest.txt

## Data Mapping Detail:

Field	Description	Source	Calculation	Data Type	Length
deviceType	设备类型 0:税控服务器, 1:税控盘, 3:税控盒子	VATInvoice->Control->ukeytype		String	1
taxDiskNo	税控盘编号	VATInvoice->Control->ukeyserid		String	12
invoiceInvalidType	0: 空白票作废, 1: 已开票作废	Default value "1".		String	1
sellerTaxNo	纳税人识别号	VATInvoice->Control->taxnumber		String	20
invoiceTypeCode	发票种类编码, 004:增值税专用发票, 007:增值税普通发票, 026: 增值税电子发票	VATInvoice->Invoices->Map->invctype		String	3
invoiceTerminalCode	开票点编码	VATInvoice->Control->termid		String	30
invoiceCode	发票代码	VATInvoice->Invoices->Map->invccode	SubString the value from 0 to 12 if the original length is greater than 12	String	12
invoiceNo	发票号码	VATInvoice->Invoices->Map->invcnmbr	SubString the value from 0 to 8 if the original length is greater than 8	String	8
invoiceInvalidOperator	作废人	VATInvoice->Control->issuer		String	32



Outgoing Data  
Mapping.xlsx

Response details:

*Success response:*

```
<ResponseMessage>
  <method>cancel</method>
  <taxnumber>91500000747150426A</taxnumber>
  <Result>
    <gtdnmbr>90024089</gtdnmbr>
    <successcode>000000</successcode>
    <message>发票已成功作废</message>
    <detailmessage/>
    <Invoice>
      <invccode>1500000001</invccode>
      <invnibr>56871329</invnibr>
      <InvoiceInvalidDate>20200115105619</InvoiceInvalidDate>
    </Invoice>
  </Result>
</ResponseMessage>
```

Parameter	Name	Type	Length	Description
InvoiceInvalidDate	发票作废日期	String	32	格式: yyyyMMddHHmmss

*Failed Response:*

```
<ResponseMessage>
  <method>cancel</method>
  <taxnumber>91500000747150426A</taxnumber>
  <Result>
    <gtdnmbr>90024089</gtdnmbr>
    <successcode>100006</successcode>
    <message>远程服务错误</message>
    <detailmessage>调用[发票作废]接口失败, 所传发票类型与需要作废的发票类型不一致!
  </detailmessage>
  <Invoice>
    <invccode>1500000001</invccode>
    <invnibr>56871329</invnibr>
  </Invoice>
</Result>
</ResponseMessage>
```

## Query invoice

Request details:

API Endpoint: [https://<cpi\\_tenant>/http/china/v1/baiwang/queryinvoice](https://<cpi_tenant>/http/china/v1/baiwang/queryinvoice)

Methods: *POST*

Action: *query*

Sample request:



QueryInvoiceReque  
st.txt

Data Mapping Detail:

Field	Description	Source	Calculation	Data Type	Length
sellerTaxNo	纳税人识别号	VATInvoice->Control->taxnumber		String	20
serialNo	开票流水号, 唯一标志开票请求	VATInvoice->Invoices->Header->gtdnmbr		String	50



Outgoing Data  
Mapping.xlsx

Response details:

*Success response:*

```
<ResponseMessage>
  <method>query</method>
  <taxnumber>9150000747150426A</taxnumber>
  <Result>
    <gtdnmbr>90004106</gtdnmbr>
    <successcode>000000</successcode>
    <message>发票已成功查询</message>
    <detailmessage/>
    <Invoice>
      <invccode>150000001</invccode>
      <invnmb>56871325</invnmb>
      <invcdte>2020-01-14 00:00:00</invcdte>
      <invcstats>00</invcstats>
    </Invoice>
  </Result>
</ResponseMessage>
```

Parameter	Name	Type	Length	Description
invcdte	开票日期	String	32	
invcstats	发票状态	String	10	11:待开,12:开具中,04:待开作废,00 开具成功,03 已开作废,01 部分红冲,02 全额红冲

*Failed Response:*

```
<ResponseMessage>
  <method>query</method>
  <taxnumber>9150000747150426A</taxnumber>
```

```

<Result>
  <gtdnmbr>90004107</gtdnmbr>
  <successcode>100006</successcode>
  <message>远程服务错误</message>
  <detailmessage>调用[发票状态查询]接口失败, 未查询到流水号对应的开票信息!</detailmessage>
  <Invoice>
    <invccode/>
    <invnmbr/>
  </Invoice>
</Result>
</ResponseMessage>

```

## Success Code List

### 1. Success (000000)

### 2. Baiwang Error (1\*\*\*\*\*)

100000	缺少参数	请检测输入参数的正确性
100001	参数取值范围错误	检查参数的值
100002	token 失效或者无效	重新登录获取 token
100003	appKey 错误或无访问权限	联系运营
100005	请求过于频繁	默认一个 app 最大并发为 10, 请控制并发或者联系运营
100006	远程访问错误	业务错误, 一般是业务参数写错了, 请检查
100007	无效的签名	注意 sign 参数的正确性
100008	系统内部超时	请重试三次
100009	超过系统最大容流量	请控制并发或者过段时间重试
100010	请求超时	请重试三次
60	未知错误	具体分析

### 3. CPI Error (2\*\*\*\*\*)

#### GTI Send Invoice Outgoing Receiver

200001: 操作为空或不支持的操作类型, 目前支持的类型为 open 和 cancel

200002: 发票请求中, 税号不能为空, 请确保 taxnumber 不为空

200003: 开具请求中, 发票流水号不能为空, 请确保 gtdnmbr 不为空

200004: 作废请求中, 发票代码或发票号码不能为空, 请确保 invccode 和 invcnmbr 不为空

200005: 开具请求为红普票, 发票代码或发票号码不能为空, 请确保 invccode 和 invcnmbr 不为空

200006: 开具请求为红专票, 红票通知单号不能为空, 请确保 rednotenmbr 不为空

200007: XML 格式错误, <Item>节点不能为空

200008: XML 格式错误, 找不到<Control>节点

200009: XML 格式错误, 找不到<Invoices>节点下的<Map>节点

200010: XML 格式错误, 找不到<Invoices>节点下的<Header>节点

200013: XML 字段错误, 发票总税额必须为数字且不能为空

200014: XML 字段错误, 发票总金额必须为数字且不能为空

### *Baiwang Query Tax Invoice*

200001: 操作为空或不支持的操作类型, 目前支持的类型为 query

200002: 发票请求中, 税号不能为空, 请确保 taxnumber 不为空

200003: 查询请求中, 发票流水号不能为空, 请确保 gtdnmbr 不为空

200012: 发票正在开具中, 请稍后再查询

### *CPI Exception in All iflows*

299999: CPI 运行时发生异常