

# API Gateway Document

## I. Get Token

### 1. Request Method & URL

- URL: `http://IP:PORT /api/electricityGateway/api/login`
- Method: Post

### 2. Request body

Parameter	Data Type	Description
username	string	Username for the gateway system
password	string	Password for the username specified

### 3. Response

Parameter	Data Type	Description
token	string	Token used to access and request resource from gateway system.
Expires_in	number	Token expiration time in second

### 4. Example

Url	<code>http://IP:PORT /api/electricityGateway/api/login</code>
Request body	<pre>{   "username": "username",   "password": "password@123" }</pre>
Response	<pre>{   "token":   "eyJhbGciOiJIUzI1NiJ9.eyJzdWIiOiJjZXZlbnIsInVzZXJuYW11Ijoic2V2ZW   4iLCJpcCI6IjA6MDowOjA6MDowOjA6MSIsImp0aSI6IjYzc2NmI4MjM   xNTRhMjhiYzI4OGQyZjA0OGExMGQ4IiwiaWF0IjoxNzc4MjI2MTIwLC   JuYmYiOiJlZ3NzgyMjYxMjAsImV4cCI6MTc3ODIzMjE1MH0.Oapr-5-g_2   hQio_pCLdgJzILR UcI8Es9GgOaWDJs1Uw",   "expires_in": 6000 }</pre>

## II. Get E-Bill Data

### 1. Request Method & URL

- URL: `http://IP:PORT /api/electricityGateway/api/ebill`
- Method: Post

### 2. Auth

Bearer Token	Token from login response
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### 3. Request body

Parameter	Data Type	Description
yearMonth	string	Bill date. Format “YYYYMM”

Account_no	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
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#### 4. Response

Parameter	Data Type	Description
masterBill	json	Bill balance details
tariffLists	array	Meter details
lastPayment	json	Last payment details
accounts	json	Account details
tariffDetails	array	Tariff list detail
linkQr	string	Link for QR Code
Member	string	Member

#### 5. Example

Url	http://IP:PORT /api/electricityGateway/api/ebill
Request body	<pre>{   "yearMonth": "202604",   "account_no": "0100376372" }</pre>
Response	<pre>{   "masterBill": {     "billAmountInMonth": "1093964",     "totalBillAmount": "1093964",     "masterBillId": "77622430",     "penalty": "0",     "billType": "1",     "discount": "0",     "tax": "99451",     "billDate": "08/04/2026",     "bankName": "",     "meterRent": "56000",     "groupAccount": "",     "billMonth": "04/2026",     "customerDebt": "0",     "rate": "",     "exDate": "",     "bankNo": "",     "currency": "",     "basic": "994513",     "billNo": "D19_77622430/2026"   },   "tariffLists": [     {       "lossCharge": null,       "lossAmount": null,       "tType": "1",       "lastReading": "38277",       "lMethod": "O",       "multiplier": "1", </pre>

```

"consumption": "742",
"meterPhase": "1601229230 (3 Phase 5/100A)",
"currentReading": "39019",
"meterRent": null,
"meterId": "1601229230",
"saver": "0",
"cMethod": "O"
}
],
"billType": "1",
"member": "SEVEN",
"lastPayment": {
  "dueDate": "18",
  "paymentDate": "23/03/2026",
  "paymentAmount": "904720"
},
"accounts": {
  "lastName": "XXXXXX",
  "licenseNo": "3365/ກສອ",
  "districtCode": "02",
  "routId": "252",
  "groupAccount": "",
  "customerType": "1",
  "billMonth": "04/2026",
  "streetName": "ໜອງດ້ວງໃຕ້",
  "branchTel": "021 243565",
  "accountNo": "00376372",
  "provice": "ນະຄອນຫຼວງວຽງຈັນ",
  "supplyType": "T1",
  "floor": "1",
  "issueDate": "03/ 06/ 2025",
  "billNo": "D19_77622430/2026",
  "customerAddress": "XXXXXXXXXX",
  "walkOrder": "1300",
  "districtName": "ເມືອງສີໂຄດຕະບອງ",
  "branchName": "ໄຟຟ້າສາຂານະຄອນຫຼວງ 1",
  "billDate": "08/04/2026",
  "dispatchAddress": "XXXXXXXXXX",
  "tinNo": "120643276944",
  "branchCode": "01",
  "firstName": "XXX XXXXX",
  "tariffName": "ທີ່ຢູ່ອາໄສ 0,4KV",
  "supplyDesc": "ທີ່ຢູ່ອາໄສ",
  "customerTel": "XXXXXX",
  "subDistrict": "ມ. 0203",
  "customerNo": "0373303"
},
"env": "bs2000",
"tariffDetails": [
  {
    "stepCons": "25",
    "appliedTariff": "T1",
    "money": "14075",

```

	<pre> "endCons": "25", "stepRate": "563", "miniCharge": "N", "startCons": "0" }, { "stepCons": "125", "appliedTariff": "T1", "money": "81000", "endCons": "150", "stepRate": "648", "miniCharge": "N", "startCons": "26" }, { "stepCons": "150", "appliedTariff": "T1", "money": "172050", "endCons": "300", "stepRate": "1147", "miniCharge": "N", "startCons": "151" }, { "stepCons": "100", "appliedTariff": "T1", "money": "141000", "endCons": "400", "stepRate": "1410", "miniCharge": "N", "startCons": "301" }, { "stepCons": "100", "appliedTariff": "T1", "money": "151900", "endCons": "500", "stepRate": "1519", "miniCharge": "N", "startCons": "401" }, { "stepCons": "242", "appliedTariff": "T1", "money": "378488", "endCons": "1000", "stepRate": "1564", "miniCharge": "N", "startCons": "501" }, { "stepCons": "0", "appliedTariff": "T1", "money": "0", "endCons": "1500", "stepRate": "1628", "miniCharge": "N", </pre>
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<pre>"startCons": "1001" }, {   "stepCons": "0",   "appliedTariff": "T1",   "money": "0",   "endCons": "0",   "stepRate": "1696",   "miniCharge": "N",   "startCons": "1501" } ], "linkQr": "https://res.cloudinary.com/dra1xjisd/image/upload/v1749625010/VTP1_dfpo9c.png" }</pre>
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◆ masterBill

ຄ່າປ່າລຸງຮັກສາ	penalty	meterRent	18,600
ສ່ວນຫລຸດ: 50%		discount	336,317
ອາກອນມູນຄ່າເພີ່ມ 10%	tax * 100 / basic	tax	35,492
ລວມເງິນໃບເດືອນ:		billAmountInMonth	390,408
ໜີ້ຄ້າງ່າຍ:		customerDebt	0
ລວມເງິນຕ້ອງຈ່າຍທັງໝົດ:		totalBillAmount	390,408


ຈຳນວນເງິນເປັນໂຕໜັງສື: ສາມແສນເກົ້າໝື່ນສີ່ຮ້ອຍແປດກີບຖ້ວນ

ໃບອະນຸຍາດ & ໃບອະນາດ

## ❖ lastPayment

ລວມເງິນຕ້ອງຈ່າຍທັງໝົດ: 390,408  
 ຈຳນວນເງິນເປັນໂຕໜັງສື: ສາມແສນເກົ້າໝື່ນສີ່ຮ້ອຍແປດກີບຖ້ວນ  
 ວັນທີຈ່າຍສຸດທ້າຍ: 25/03/2026 ຈຳນວນເງິນຈ່າຍສຸດທ້າຍ: 360,828 ← paymentAmount  
 ກະລຸນາຈ່າຍກ່ອນວັນທີ: 03 ຂອງທຸກປີຕໍ່ມາ  
 dueDate ← paymentDate

◆ accounts



## ໃບເກັບເງິນ / Tax Invoice

### ອາກອນມູນຄ່າເພີ່ມ VAT

**ສັດວິສາຫະກິດໄຟຟ້າລາວ**  
**ELECTRICITE DU LAOS**

ສາຂາ: ໄຟຟ້າສາຂາພະຄອນຫຼວງ 2

ເລກປະຈຳຕົວຜູ້ເສຍອາກອນ: 10000000000000000000


ໂທ: 021 650474

ເລກທີໃບແຈ້ງຄ່າໄຟຟ້າ: D19\_77954526/2026

ວັນທີພະລິດໃບແຈ້ງຄ່າໄຟຟ້າ: 23/04/2026

E-Bill by SEVEN

ປະຈຳເດືອນ: 04/2026



tinNo

branchName

branchTel

billNo

billDate

firstName

lastName

customerTel

billMonth

customerNo

accountNo

supplyDesc

tariffName

groupAccount

customerAddress

dispatchAddress

rouitld

walkOrder

ຊື່ ແລະ ນາມສະກຸນຜູ້ໃຊ້ໄຟ: [Redacted]

ບ່ອນຢູ່ຜູ້ໃຊ້ໄຟ: [Redacted], ນະຄອນຫຼວງວຽງຈັນ

ບ່ອນສົ່ງໃບແຈ້ງຄ່າໄຟ: [Redacted], ນະຄອນຫຼວງວຽງຈັນ

ໂທ: XXXXXXXXXX

ອີເມວ: [Redacted]

ເລກໜັບໜື່ມໄຟ

ຕົວບັນທຶກ

ເລກຄຳນີ້

ວິທີຈັດ

ເລກຄຳກ່ອນ

ວິທີຈັດ

ຕົວຄນ

ພະລັງງານຂົນສົ່ງໃນເດືອນ

ເສັ້ນທາງຈັດໄຟ: [Redacted]

ລຳດັບເຮືອນຈັດໄຟຟ້າ: 0000

ຈະເອົາຫນ່ວຍໂພມປ່ຽນແທນໃຫ້ໂດຍລູກຄ້າບໍ່ໄດ້ຈ່າຍເງິນເພີ່ມ.

licenseNo ບອະນຸຍາດນໍາໃຊ້ ສະບານອງໄຟໃຫ້ພໍ່ ບໍລິການໄວ ມີຄວາມຢຸດໄພ ຊົມໃຊ້ໃຫ້ເກີດຜົນ  
ເຄື່ອງປັ້ນທີ່ການຂາຍສິນຄ້າແລະບໍລິການ ລັດວິສາຫະກິດ ໄຟຟ້າລາວ ຫາຍດ່ວນໄຫ: 1199 ພັດທະນາໂດຍ  
ເລກທີ: 3366/ກສອ , ລົງວັນທີ: 03/ 06/ 2025 issueDate billNo ລັດວິສາຫະກິດ ໄຟຟ້າລາວ  
No: D19\_77954526/2026

❖ tariffDetails

startCons	endCons	stepCons	stepRate	money
ລາຍລະອຽດ	ພະລັງງານໃຊ້ໃນເດືອນ	ລາຄາ	ເງິນຄ່າໃຊ້ໄຟ	
0 ~ 25	25	563		14,075
26 ~ 150	125	648		81,000
151 ~ 300	150	1,147		172,050
301 ~ 400	100	1,410		141,000
401 ~ 500	100	1,519		151,900
501 ~ 1000	72	1,564		112,608
1001 ~ 1500	0	1,628		0
>= 1501	0	1,696		0
ຄ່າເກັບລາຄາຈັດສາ				18,600

ລາຍລະອຽດ	ພະລັງງານໃຊ້ໃນເດືອນ	ລາຄາ	ເງິນຄ່າໃຊ້ໄຟ	
ຈຳນວນເງິນຄ່າຂອງ	0	0		11,260
0 ~ 25	0	563		0

miniCharge = 'M'

❖ `tariffLists`

ໂທ: XXXXXXXXXX	ສາວ: tType = '1'	saver	IMethod	cMethod	ເສັ້ນທາງຈົດໄຟ: 3	ລຳດັບເຮືອນຈົດໄຟຟ້າ: 1	
ເລກໜັບໄຟ	ຕົວບັນທຶກ	ເລກຄັ້ງນີ້	ວິທີຈັດ	ເລກຄັ້ງກ່ອນ	ວິທີຈັດ	ຕົວຄູນ	ພະລັງງານຊົມໃຊ້ໃນເດືອນ
ADX13281565 (1 Phase 5/80A)	0	1758	0	1758	0	1	0
memterPhase	currentReading	lastReading	multiplier	consumption			
ສາວ: tType = '2'							ລຳດັບເຮືອນຈົດໄຟຟ້າ: 1
ເລກໜັບໄຟ	ຕົວບັນທຶກ	ເລກຄັ້ງນີ້	ວິທີຈັດ	ເລກຄັ້ງກ່ອນ	ວິທີຈັດ	ຕົວຄູນ	ພະລັງງານຊົມໃຊ້ໃນເດືອນ
1501260900 (3 Phase 20/5A)	0	3954	0	3879	0	800	60,000
Loss Charge 0.86 %	lossCharge					consumption	516
ເລກໜັບໄຟ	ຕົວບັນທຶກ	ເລກຄັ້ງນີ້	ວິທີຈັດ	ເລກຄັ້ງກ່ອນ	ວິທີຈັດ	ຕົວຄູນ	ພະລັງງານຊົມໃຊ້ໃນເດືອນ
tType = '3'	meterRent	lossAmount					
Minimum Charge 30.00 % (1000kVA)	ຍົກເວັ້ນ	if consumption = 0				consumption	0

### III. E-Bill Base64

## 1. Request Method & URL

- URL: `http://IP:PORT /api/electricityGateway/api/ebill-base64`
- Method: Post

## 2. Auth

Bearer Token	Token from login response
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### 3. Request body

Parameter	Data Type	Description
yearMonth	string	Bill date. Format “YYYYMM”
Account_no	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.

## 4. Response



member	string	Member
createDate	string	Bill date. Format “YYYYMMDD”
bankAccountNo	string	Bank account number
bankAccountName	string	Bank account name
bankAccountCcy	string	Bank currency code like LAK, USD, THB....
status	string	Status (A = Active, C = Closed)
Percent	string	Percentage for payment.

## 5. Example

Url	http://IP:PORT /api/electricityGateway/api/autopayment/register
Request body	{ "reference ": "SEVENXXXXXX", "bankAccountName": "XXXXXXXXXX", "accountNo": "01000XXXXX", "bankAccountNo": "XXXXXXXXX", "bankAccountCcy": "LAK" }
Response	{ "customerId": "A260510000XXX", "accountNo": "01000XXXXX", "cusName": "XXXXXXXXX", "providerCode": "01", "member": "SEVEN", "createDate": "20260510", "bankAccountNo": "XXXXXXXXX", "bankAccountName": "XXXXXXXXX", "bankAccountCcy": "LAK", "percent": "100", "status": "A" }

## V. Update auto payment

### 1. Request Method & URL

- URL: http://IP:PORT /api/electricityGateway/api/autopayment/updateCustomer
- Method: Post

### 2. Auth

Bearer Token	Token from login response
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### 3. Request body

Parameter	Data Type	Description
reference	string	Unique reference number
accountNo	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
bankAccountNo	string	Bank account number
bankAccountName	string	Bank account name
bankAccountCcy	string	Bank currency code like LAK, USD, THB....
Status	string	Status (A = Active, C = Closed)



#### 4. Response

Parameter	Data Type	Description
customerId	string	The identification code is generated by the gateway's API.
accountNo	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
providerCode	string	Branch code in the EDL system
member	string	Member
createDate	string	Bill date. Format "YYYYMMDD"
bankAccountNo	string	Bank account number
bankAccountName	string	Bank account name
bankAccountCcy	string	Bank currency code like LAK, USD, THB....
status	string	Status (A = Active, C = Closed)
Percent	string	Percentage for payment.

#### 5. Example

Url	http://IP:PORT /api/electricityGateway/api/autopayment/updateCustomer
Request body	{ "reference ": "SEVENXXXXXX", "bankAccountName": "XXXXXXXXXX", "accountNo": "01000XXXXX", "bankAccountNo": "XXXXXXXXXX", "bankAccountCcy": "LAK" "status": "C" }
Response	{ "customerId": "A260510000XXX", "accountNo": "01000XXXXX", "cusName": "XXXXXXXXXX", "providerCode": "01", "member": "SEVEN", "createDate": "20260510", "bankAccountNo": "XXXXXXXXXX", "bankAccountName": "XXXXXXXXXX", "bankAccountCcy": "LAK", "percent": "100", "status": "C" }

## VI. Query customer in auto payment

### 1. Request Method & URL

- URL: http://IP:PORT /api/electricityGateway/api/autopayment/queryCustomer
- Method: Post

### 2. Auth

Bearer Token	Token from login response
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### 3. Request body

Parameter	Data Type	Description
reference	string	Unique reference number
accountNo	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
customerId	string	Customer id from api gateway
bankAccountNo	string	Bank account name

#### 4. Response

Parameter	Data Type	Description
customerId	string	The identification code is generated by the gateway API.
accountNo	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
providerCode	string	Branch code in the EDL system
createDate	string	Bill date. Format "YYYYMMDD"
bankAccountNo	string	Bank account number
bankAccountName	string	Bank account name
bankAccountCcy	string	Bank currency code like LAK, USD, THB....
status	string	Status (A = Active, C = Closed)
Percent	string	Percentage for payment.

#### 5. Example

Url	http://IP:PORT /api/electricityGateway/api/autopayment/queryCustomer
Request body	<pre>{   "reference": "SEVENXXXXXX",   "accountNo": "01000XXXXX",   "customerId": "XXXXXX",   "bankAccountNo": "XXXXXXXXXX" }</pre>
Response	<pre>[   {     "customerId": "A260510000XXX",     "accountNo": "01000XXXXX",     "createDate": "20260510",     "providerCode": "EDL_VT_CAPITAL",     "bankAccountNo": "XXXXXXXXXXXX",     "bankAccountName": "XXXXXXXXXXXXXXXX",     "bankAccountCcy": "LAK",     "percent": "100",     "stt": "A"   } ]</pre>

## VII. Query payment in auto payment

### 1. Request Method & URL

- URL: http://IP:PORT /api/electricityGateway/api/autopayment/queryPayment
- Method: Post

## 2. Auth

Bearer Token	Token from login response
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## 3. Request body

Parameter	Data Type	Description
reference	string	Unique reference number
accountNo	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
customerId	string	Customer id from api gateway
bankAccountNo	string	Bank account name

## 4. Response

Parameter	Data Type	Description
customerId	string	The identification code is generated by the gateway API.
accountNo	string	Account no in billing system, The leftmost two digits of the account number denote the branch code, the subsequent eight digits signify the original account.
providerCode	string	Branch code in the EDL system
createDate	string	Bill date. Format “YYYYMMDD”
bankAccountNo	string	Bank account number
bankAccountName	string	Bank account name
bankAccountCcy	string	Bank currency code like LAK, USD, THB....
status	string	Status (A = Active, C = Closed)
Percent	string	Percentage for payment.

## 5. Example

Url	http://IP:PORT /api/electricityGateway/api/autopayment/queryPayment
Request body	<pre>{   "reference": "SEVENXXXXXX",   "accountNo": "01000XXXXX",   "customerId": "XXXXXX",   "bankAccountNo": "XXXXXXXXXX" }</pre>

Response	[ <pre>       {         "customerId": "A251225000XXXX",         "accountNo": "0100XXXX",         "payMonth": "04/2026",         "transactionReference": "XXXXXXX",         "txnDate": "2026-04-17 10:02:02",         "providerCode": "EDL_VT_CAPITAL",         "amount": "152406.00",         "bankAccountNo": "XXXXXXX",         "bankAccountName": "XXXXXXX",         "bankAccountCcy": "LAK",         "percent": "100"       },       {         "customerId": "A251225000XXX",         "accountNo": "0100XXXX",         "payMonth": "03/2026",         "transactionReference": "XXXXXXX",         "txnDate": "2026-03-17 09:02:12",         "providerCode": "EDL_VT_CAPITAL",         "amount": "85403.00",         "bankAccountNo": "XXXXXXX",         "bankAccountName": "XXXXXXXXXX",         "bankAccountCcy": "LAK",         "percent": "100"       }     ]       </pre>
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# VIII. Branch

ID	Code	Name
02	EDL_VIENTIANE	ແຂວງ ວຽງຈັນ
03	EDL_KHAMMUANE	ແຂວງ ຄຳມ່ວນ
04	EDL_SAVANNAKETH	ແຂວງ ສະຫວັນນະເຂດ
05	EDL_CHAMPASAK	ແຂວງ ຈຳປາສັກ
06	EDL_SALAVAN	ແຂວງ ສາລະວັນ
07	EDL_BOLIKHAMXAY	ແຂວງ ບໍລິຄຳໄຊ
08	EDL_HUAPHANH	ແຂວງ ຫົວພັນ
09	EDL_BOKEO	ແຂວງ ບໍ່ແກ້ວ
10	EDL_LAUNGPRABANG	ແຂວງ ຫຼວງພະບາງ
11	EDL_XAYYABOULY	ແຂວງ ໄຊຍະບູລີ
12	EDL_XIENGKHUANG	ແຂວງ ຊຽງຂວາງ
13	EDL_OUDOMXAY	ແຂວງ ອຸດົມໄຊ
14	EDL_LUANGNAMTHA	ແຂວງ ຫຼວງນ້ຳທາ
15	EDL_PHONGSALY	ແຂວງ ຝັງສາລີ
16	EDL_ATTAPUE	ແຂວງ ອັດຕະປື
17	EDL_SEKONG	ແຂວງ ເຊກອງ

18	EDL_XAYSOMBOUN	ແຂວງ ໄຊສົມບູນ
19	EDL_VT_CAPITAL	ນະຄອນຫຼວງວຽງຈັນ
20		
01		

#### IX. Response Code Detail

No	Response Code	Description
1	00	Operation Success
2	301	Cannot process
3	302	Out of Service
4	303	Can't get external connection
5	304	Can't get data from external service
6	305	Invalid parameter
7	306	No permission
8	307	Can't generate new token
9	308	Please check token from external service
10	309	Please check internal database
11	310	Please check external service
12	311	Token not allow
13	312	Invalid provider
14	313	The account_no is required
15	314	The yearMonth is required
16	315	No Data
17	316	Duplicate account number
18	317	Account not found
19	318	CustomerId not found
20	319	Duplicate reference
21	320	Already paid
22	321	Can't connect database
23	322	This E-Bill cannot be viewed.