

# Prepaid Power Energy Management System V2.0

# Manual



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# Abstract

'Acrel Remote Prepaid Power Energy Management System ' is the electricity selling management system newly developed by Acrel Co.,Ltd. The system can connect single phase electronic prepaid energy meter DDSY-1352 and three phase prepaid electronic energy meter DTSY-1352. The software is mainly for electricity management and automatic meter reading, including computer, DPU, printer and other integrated system. The system is mainly used for electricity meters parameter settings, commercial electricity selling management and electricity use management. It has good human-computer interface, with simple and convenient operation. It can achieve the remote constant operating and monitoring of property management company. It can effectively count and manage data and take effective security measures for the data safety.It is easy to install. It is the ideal product for power management department, commercial plaza, residential area and other management department. It can improve the management level and solve the problem of difficult charging. Besides the function of charge problem solution, the software can connect 'Acrel' energy measuring meters and provide the function of remote automatic meter reading and targeted energy consumption query report. It provides power basis for whole environment energy consumption analysis, energy use comparison and safety electricity use.

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# 1. System configuration

## 1.1. Equipment management

## 1.1.1. Buildings settings

This function is for the maintenance of one or several electricity unit collections, like the unit taking buildings as collections. It provides 'add', 'delete', 'query', 'export print' and other operations.

Buildings settings page is shown as picture 1-1-1, the filling form of new building information shown as picture 1-1-2 will pop up when user clicks 'add' button, after filling in the building name and remark, the new buildings adding operation will be finished by clicking 'save' button.

It should be noticed that building name is only the code, and only digital data can be filled in, the building description can be written in the remark.

Yelcome, administration Personal settings System	Configuration User Manageme	nt Sales Management Meter report c	enter	Acrel Remote Prepaid Power Ma
Gateway settings 🧮 N	Neter settings 🧮 Building s	etting 🧮 Default parameter settings	Login role settings 📃 Operator	setting
	Equipment Managemen	4	Role setting	
Welcome × Building setting	×			
StartTime 12 June ,2 Keywords Check All Add	D18 - EndTime 12 Delete Print	June ,2018 - Selea	Last Next [ 1 /	1 ] [Each 50C / Total 2 ]
Create time	Build No	Remark		
2015-03-19 13:53:14	3	3		
2015-02-03 16:49:52	2	2		
. 10141210103133	•	•		

Picture1-1-1

lew rec	ord	Save	Cancel
Creator a	administrator	Create time	2018-06-12 14:26:43
Build No			
Remark			

## Picture1-1-2

If the existing buildings record needs to be modified, the user should double click the appointed record shown as picture 1-1-1, and then enter details page shown as picture 1-1-2, after modifying building name or remark, the modification operation will be finished by clicking 'save' button.

Before executing 'delete' and 'export print', please choose the record that needs to be deleted or export printed, the user only needs to click box when choosing the record and the system will automatically tick the box. (picture shown as below)

Check All	Add Delete	Krim.	
Create time	Build No	Remark	
2015-03-19 13:53:14	3	3	
2015-02-03 16:49:52	2	2	
2014-12-18 16:31:35	1	1	

Picture1-1-3



## 1. 1. 2. **DPU settings**

It can maintain all DPU information, including DPU 'add', 'revise', 'delete', 'query' and 'export print', the operating process can refer 1.1.1.

	ndarbueur, wanasewe	nt			vote secturg	
Welcome × Meter settings	× Gateway settings ×					
Start date 12 June , 2 Keywords	018 v End date	2 June ,2018 <del>v</del>	Search		Last Next [ 1 / 1	] [Each 50C / Total 3 ]
Create time	Management machine numder	Building name	Floor id	IP address	Port	Remark
2018-06-12 14:30:11	020103	2	1	192.168.11.254	4003	
2018-06-12 14:30:11	020102	2	1	192.168.11.254	4002	
2018-06-12 14:30:11	020201	2	2	192.168.11.254	4001	

The user interface is as below picture:

Information maintenance page is shown as below, the properties include building name, floor, number in the floor, IP, TCP port and remark, the user can click magnifying icon on the right of the building name, and choose buildings that need to be appointed in the pop-up building select list. It should be noticed that floor, number in the floor and TCP port can only be filled with integers.

Ľ	A	lc	re	<b>)</b> *	
安	科	瑞	电	气	

Gateway ID     D00000     Name of building     Baud rate       Floor     00     Number in the floor     00       IP     TCP port     0     Parity bit	
Floor     00     Data bits       IP     TCP port     0   Parity bit	
IP TCP port 0 Parity bit	
If it is a virtual serial port mode, set the TCP portto -1 and fill in the serial port parameters in the IP.       Stop bit         For example: COM1;9600; 8; NONE; 1, which represent the serial port number, baud rate, databits, parity bits, Stop bit, pay attention to the semicolon is punctuation in English       Stop bit	8
Remark	

### 1. 1. 3. Electricity meter settings

This function is used for maintaining information of all electricity meters, equally also providing the function of 'add','delete','query' and 'export print',besides,considering there will be more electricity meters, it also supports 'batch import' operation and it will be more convenient for the operator to add electricity meters.

About 'Add', 'delete', 'query' and 'export print' operations, please refer operating process in 1.1.1.

About batch import operation, please see electricity meters settings page shown as below picture 1-1-4, the user only needs to click 'batch import' button above the list and then choose local excel about electricity meters that needs to be imported. It should be noticed that please fill in the excel in accordance with the template (picture 1-1-5 shown as below) and then import the excel.



Welrome × Meter se	Equip	ment Management			Ro	le setting		
Start date 12 Jun	e ,2018 v	End date 12	une ,2018 <del>-</del>	Search				
Select al Ad	d Delete	Export print	Batch Import	Test SN6	La	st Next [ 1 / 1 ] [Eau	ch 50C / Total 44 ]	
Create time	MeterID	Communication ma	anagement machine numl	ber Room id	Model	Whether PostPay meter	CT transformation ratio	Remark
2018-06-12 14:30:11	020103031E	020103		453	DTSF1355	True	1	
2018-06-12 14:30:11	020103031D	020103		452	DTSF1354	True	1	
2018-06-12 14:30:11	020103031C	020103		451	DTSF1353	True	1	
2018-06-12 14:30:11	020103031B	020103		450	DTSF1352	True	1	
2018-06-12 14:30:11	020103031A	020103		449	ACR220	True	1	
2018-06-12 14:30:11	0201030319	020103		448	PZ42	True	1	
2018-06-12 14:30:11	0201030318	020103		447	DDSY	Fabe	1	
2018-06-12 14:30:11	0201030317	020103		446	DDSY	False	1	
2018-06-12 14:30:11	0201030316	020103		445	DDSY	Fabe	1	
2018-06-12 14:30:11	0201030315	020103		444	DDSY	Fabe	1	
2018-06-12 14:30:11	020102020E	020102		336	DDSY	False	1	
2018-06-12 14:30:11	0201020200	020102		335	DDSY	False	1	

# Picture1-1-4

	;=   ♥ ♥ ଯ ♥	☑ 导入.xls	× -	F 💌				•
	H6 -	R fx						
	A	В	C	D	E	F	G	
1	通讯管理机编号	IP	通讯端口	串口号	表地址	户号	型号	
_2	020304	192.168.11.127	1111	1	1	301	DDSY	
3	020304	192.168.11.127	1111	1	2	302	DDSY	
4	020304	192.168.11.127	1111	1	3	303	DDSY	
5	020304	192.168.11.127	1111	1	4	304	DDSY	
6	020304	192.168.11.127	1111	1	5	305	DDSY	. =
7	020304	192.168.11.127	1111	1	6	306	DDSY	
8	020304	192.168.11.127	1111	1	7	307	DDSY	
9	020304	192.168.11.127	1111	1	8	308	DDSY	_
10	020304	192.168.11.127	1111	1	9	309	DDSY	
11	020304	192.168.11.127	1111	1	10	310	DDSY	_
12	020304	192.168.11.127	1111	1	11	311	DDSY	
13	020304	192.168.11.127	1111	1	12	312	DDSY	
14	020304	192.168.11.127	1111	1	13	313	DDSY	
15	020304	192.168.11.127	1111	1	14	314	DDSY	
16	020304	192.168.11.127	1111	1	15	315	DDSY	
17	020304	192.168.11.127	1111	1	16	316	DDSY	
_18	020304	192.168.11.127	1111	1	17	317	DDSY	
19	020304	192.168.11.127	1111	1	18	318	DDSY	
14 4	···   Sheet1	Sheet2 Sh	eet3 🦯 -					



## 1.2. Default parameter settings

For the convenience of follow-up action, this function provides some default settings for general parameters, mainly including 'default power threshold', ' time interval of automatic meter reading', 'default alarm amount', 'hoarding amount upper limit',

'default electricity price' and so on. Page of the function is as below, click 'save' button after filling in all the information.



Default power threshold: this vale will be taken in for overload threshold alarm settings when user opens the account.

Time interval of collecting meter reading: it is used for setting time interval of automatic meter reading in meter reading system and it is measured by minutes.

Default alarm amount: this value will be taken in for meter remaining amount alarm settings;

Hoarding amount upper limit: this value will be taken in for setting upper limit of recharge amount.

Default electricity price: this value will be taken in for electricity price settings when user opens the account.

SMS sending settings: Financial No. 1 will receive SMS of alarm amount, arrearages of every user after financial SMS number is filled in.

Basic para	meter settings		SMS sending settings
Defau	ult power threshold(W)	54001	Financial SMS sending number 1
Set o	copy time interval(Min)	30	Financial SMS sending number 2
Def	fault alarm amount1(\$)	100	
Def	fault alarm amount2(\$)	0.2	
Ho	arding amount limit(\$)	100000	
	Default price(\$)	1.25	
		Save	Cancel



## 1.3. Permission settings

## 1. 3. 1. Role settings

This function consists of two parts: 'login role settings' and 'operator settings'.

Login role settings is mainly for maintaining different properties or responsibilities of different operators, like 'electricity seller', 'system administrator' and other roles. And different operators have different permissions, this function page is as below picture 1-3-1.

Click 'add' button entering page shown as below picture 1-3-2, scene number and name in the picture represent responsibility and authority of the role, all the information can be added by means of custom and manual . Click 'save' or 'modify' button after filling in all information.

For 'add', 'delete', 'query' and 'export print' operation please refer to process in 1.1.1.

		Equipme	ent Managemen	t		
Welcome ×	Meter settings	× Gateway setting	နာ × Defaul	t parameter settings	Login role setting	5 ×
StartTime	12 June ,2	018 💌 🚺 E	ndTime 12	! June ,2018 🔻	Select	
Keywords						
Check All	Add	Delete	Print		Ĩ.	
Create time		Role name		Remark		
2015-08-20 13:2	3:35	Engineer				
2015-03-12 13:5	2:30	Saler				
1900-01-01 00:0	0:00	Administartor				

Picture1-3-1



SceneSN	SceneName	Update	Export	Additional permissions 1	Additional permissions 2	Additional permissions 3	Additional permissions 4
a .							

Picture1-3-2

Ro	le name Saler	·		1	1.0000000000000000000000000000000000000	1.0000000000000000000000000000000000000	1.0000000000000000000000000000000000000	1.0.000
	SceneSN	SceneName	Update	Export	Additional permissions 1	Additional permissions 2	Additional permissions 3	Additional permissions 4
•	201	Open account						
	202	Cancellation						
	301	Add Charge						
*								

Picture1-3-3

Operator settings is used for maintaining information of the operators, the function includes operators' add, delete, query and export print operations.

New add page is shown as below picture 1-3-5,login name,operator,name, password,operator role,selection,remark and other information can be filled in

the table. Please maintain the login role before choosing the operator role. Click the magnifying icon and the role list appears. Role selection operation can be finished



by clicking appointed record in the list.

For 'add', 'delete', 'query' and 'export print' operation please refer to process in

1.1.1.

Welcome × Operator	Equipment M setting × Login role settings	anagement X		Role setting	
Start date 12 June Keywords 2000 Add	, 2018 🔻 🗌 End da	te 12 June ,2018 ¥	Search	Last Next [ : /	1 ] [Each 50C / Total 1 ]
Create time	Creator	Login name	Operator full name	Operator name	Remark
2014-12-17 08:35:20	administrator	admin	administrator	Administartor	

# Picture1-3-4

Creator	administrator	Create time	2018-06-12 14:34:57
Login name		Operator name	
Password		Operator role selection	
Remark			

# Picture1-3-5



Keywords:		Search
RoleName	CreateTime	Remark
Administartor	1900-01-01 00:00:00	
Engineer	2015-08-20 13:23:35	
Saler	2015-03-12 13:52:30	

## 1. 3. 2. **Personal settings**

It mainly provides the operation of password change and user switch for current user.The password change is for the change of current login account. The personal operations interface is shown as below:

Personal settings Syste		Configuration User Management		ent Sales Ma	Sales Management Meter		
Password modif	Eication	Operator	switching	Check the op	peration lo	e	
Security Settings		Operator sw	itching	Operation			
Welcome ×					0.4000 <del>7</del> .		

The interface of password revising is as below:

Old password:	
New password:	
eenter password:	



# 2. User management

#### 2.1. User account opening

This function is mainly for user's information maintenance, including add, modify, user query and export print. For convenience, the system can enter user interface by two ways. Firstly, the user can enter account opening interface by clicking 'add new account' button in the shortcut function of welcome page, and the interface is shown as below picture 2-1. Secondly, the user can enter the account opening interface by clicking menu button on the top, as shown in below picture 2-2, user account opening menu of user management module, and the user can enter the account opening interface by clicking the button.

Personal settings System C Password modification Security Settings Welcome ×	Operator Switching Operator switching Operator switching	nagement S g E Check Op	ales Management k the operation lo veration log	Meter report center
Password modification Security Settings Welcome	Operator switching Operator switching	g E Check	k the operation lo peration log	6
Security Settings	Operator switching	Op	eration log	
Welcome ×				
		Quick function		
	Add new	A	dd new	
	electricity	a	ccount	
Charge	c	Open an accou	nt	
	D 4 1	C1		
	Datch		narge	
	operation	Da	aily	
			eport	
Batch pro	cessing I	Report		
	1			

# Picture 2-1



Picture 2-2

New accounts interface is shown as below picture 2-3, user relative information can be filled in the table, including user number, user name, query password, telephone, address, remark and so on.

The user can also add and delete relative user meters, and the select box shown as



below picture 2-4 will pop up when user clicks 'new user meter' button. The meter select list will pop up when user clicks magnifying icon on the right of the meter id, and the user can choose meter id by clicking appointed record of meter select list, at last, the user can click 'save' button to finish 'new user meter' adding operation.

One user meter can be connected to one or several user meters, after filling in all information shown as picture 2-3, the user can click 'save' button to finish 'account opening', the page will pop up shown as below page and the account opening operation can be finished by clicking 'confirm and download' button.

	administrator				
User ID	000001	UserName			
ry password		Tel			
Address					
Remark					
Meter ID	RoomID	Accumulated electricity purchase/water amount	Electricity purchase/water	ectric/wate meter	See more

# Picture 2-3

After clicking new user meter, the user can click 'get the current amount of the meter' reading the current remaining amount of the energy meter, it will be convenient for user to transfer current remaining amount to new meter before



opening account.Please notice that when the user needs to transfer the amount of original meter to the new meter,the recharge amount filling in 'first time recharge(USD)' table should be equal to 'original table amount transferred' plus actual payment amount.

'Allowed maximum', 'electricity price' and 'power threshold' are also from allocated parameters of 'default parameter settings', and every meter setting can be personalized.

🕄 🛛 User details			= 0 ×		
Meterid		Get the cu th	rrent amount of e meter		
RoomID		Original table amount transferred	0		
First time recharge	0	Power threshold (W)	54001		
Allowed maximum	0	Point price(S)	1.25		
Alarm amount 1(5)	100	Peak price(S)	1.25		
Alarm amount 2(\$)	0.2	Flat price(\$)	1.25		
Electricity type	Commercial electricity 👻	Valley price(5)	1.25		
Accumulated electricity p	0	Alarmameunt 1 armet			
Accumulated power	0	alarm			
		📝 Alarm amount 2 prompt alarm			
		Save Cancel			

Picture 2-4

Acrel <sup>®</sup> 科瑞典气				
Confirm and	firmation to be downloa	ded	-	
Return to edit				
Meter id	0202010105	Get the cu th	irrent amount of e meter	
RoomID	125	Original table amount transferred	0	
First time recharge	0	Power threshold (W)	54001	
Allowed maximum	0	Point price(\$)	1.25	
Alarm amount 1(\$)	100	Peak price(\$)	1.25	
Alarm amount 2(5)	0.2	Flat price(S)	1.25	
Electricity type	Commercial electricity 👻	Valley price(\$)	1.25	
Accumulated electricity p	0	Alarm amount 1 prompt	Automatically se	nd al
Accumulated power	0	alam		
		Alarm amount 2 prompt alarm		
	III			

# Picture 2-5

The user list page will pop up when the user completes account opening or clicks 'cancellation' button, the picture is as shown below. It supports query and export print operations.

Cancellation	. Open	account					
× Account record query ×							
StartTime     12     June     ,2018 v     Instrument number       UserID     UserName     Room D							
		Last 7	Next [ 1 / 0 ] [Each 500	/ Total C ]			
Creator User id	User name Phone	Contact address	Remark	Account cancellation time			
	Cancellation Account record quey × COLS  COLS  Contract of the second record quey  Contract of the second record quey  Creator User id	Cancellation Open Account record guay Account record guay Cancellation	Cancellation     Open scrount       Account record guay     Instrument number       UserName     RoomD       UserName     RoomD       Last /       Creator     User id	Cancellation     Open account       Account record quey     X       tots -     IndTime     12 June , 2018 -       UserName     RoomD       Last Next     [ : / 0 ] [Each 500]       Creator     Username     Phone       Contact address     Remark			

The account opening function supports one user with multiple meters, and the



user can add new user meter under the state of account opening.

## 2.2. Account opening record query

This function is mainly for account opening record operation, the picture is as below.

The user can choose start and stop date, user name and user ID, and click 'query'

button to query relative record. This function also supports export print operation.

Batch setup	Cancel	llation		Open	account			
Welcome × Open accou	ant × Account record qu	Jery X						
StartTime 12 June User ID Print	, 2018 👻 🗌 End	dTime 12 Jur UserName	ne ,2018 - Ins	trument number RoomID		Search Last Next [	1 / 0 ] [Each 50C / Tota	a ()
Create time	Creator	User id	User name Pho	ine	Contact address		Remark	Account cancellation time

## 2.3. User account cancellation

This function is mainly for user account cancellation, the page is shown as picture 2-2-1, the user can double click the appointed record in the list and the cancellation function page will pop up. After carefully checking and confirming the record, the user can click 'cancellation' button, enter the confirm page, and click 'confirm and download' button, then the user can cancel the account.

Batch setup Welcome × Open account	Canc × Account record	ellation query × Cancel	ation record query ×	Open	account				
User ID	2018 -	ndTime 12 UserName	June ,2018 🔻	Instrument number RoomID		Search	1 / 0 ] [E	iich 500 / Total C ]	
reate time	Creator	User id	User name	Tel	Contact address		Remark	Account cancellation time	1



## 2.4. Electricity meters batch operation

This function provides batch power on, power off, issue settings, state selection, issue and query operations. It can provides 'electricity price issue', 'issue settings',

'enforced close', 'switch off', 'prepayment recovery' and 'power threshold' to some user or several users at the same time.

Batch setup			Cancellatio	n			Open acc	ount												
Welcome × Open account	× Batci	hoper	stion ×																	
selected 2Area:2				Last N	int [	1 / 1	] [Each	10C / Tot	al 38 ]											
range	🗆 si	elect a	Bectric set	tity price A ting	mount alarm setting	Forced closing	Forced brai	s Recov	r prepaid	Power threshol setting	d Mete	r reading kpart	Opened	Alarmi	Alarm2	Arrears Uno	pened Li	ost		
selected	Seb	ect	Meter ID	RoomID	User ID	User Name	cumulative	Purchase times	Alarm amount1	Alarm amount2	Power threshold	Remaining amount(S)	:umulative(i -h)	Real time power	ls arrears	Already opened	Forced mode	Closing state	ls unconnect	Collection time
			0202010101	121		UnOpened												E		
Click to select filter	E		0202010102	122		UnOpened														
Refresh	E		0202010103	123		UnOpened														
	E		0202010104	124		UnOpened														
- 🙋 Buildings			0202010105	125		UnOpened														
1 - 2 2Area:2			0202010105	126		UnOpened														
			0202010107	127		UnOpened														
			0202010108	128		UnOpened														
			0202010109	129		UnOpened														
			020201010A	130		UnOpened														
			0202010108	131		UnOpened														
			0202010100	132		UnOpened														
			020201010D	133		UnOpened														
			020201010E	134		UnOpened														
			020201010F	135		UnOpened														
			0202010110	136		UnOpened														
			0202010111	137		UnOpened														
			0202010112	138		UnOpened														

Firstly, the user can choose one area required query, picture is as below:

10.000	
selected range	2Area:2
selected condition	
СІ	l icktoselectfilter
	Refresh
⊡ <mark>⊘</mark> Buil ⊕ <mark>⊘</mark>	dings 2Area:2



Click to select filter

and the window pops up and the user can

select the following table under filter conditions:

Remaining amount	All	Network status	All
Closing state	All	Power protection mode	All
Open account status	All	Alarm status	All 👻
Instrument number		RoomID	
	TTT.		

The user can click 'refresh' after clicking 'save' button, and can get current user meters list and state under filter conditions in the area, the following is the list mode:

The use can right-click on some record under list mode, and two right-click menu is provided as followings:

1. Refresh meter state: constant refreshment of single meter state.

2. Historical meter reading record: it provides input time period and query historical meter reading record of single meter.

F	A	<b>C</b>	re	<b>)</b> *	
安	科	瑞	电	气	

					riistory	records				
		Start date	12 June	, 2018 🔻	00:00:00		Query	Export		
		End date	12 June	, 2018 👻	14:43:50					
							Tip: Displa	y only the first	1000***	
Meter ID	Remaining amount(S)	Accumulative(kW· h)	Real time power	ls arre	ears	Already opened	Forced mode	Closing state	Is unconnect	Collection time

1. Please set some parameter before issuing electricity price, the user can choose appointed user, click 'issue settings' button, and the information table pops up, then the user can click 'save' button after setting the relative information.

🐴   The parameters to	be issued 💼	x
Alarm amount 1 ( 5	0	
Alarm amount 2 ( \$	0	
Hoardinglimit	0	
Save	Cancel	
		14

2.The user clicks 'electricity price issue', fills in electricity price and clicks 'save' button, the electricity issue operation will be completed. (see below picture)

「Acrel 安科瑞电气		
🔁   Electricity price	to be issued 💼	x
Point price(S)	1 25	
Peak price(S)	1.25	
Flat price(S)	1.25	
Valley price(\$)	1.25	
Save	Cancel	

 The user clicks 'enforce close', 'enforce power cut' and 'prepayment recovery', the instruction issue page will pop up, and the user needs to click 'confirm and download' button finishing the relative operation.



Confirm and download Shut Down Shop Number Table number Whether it is lost Communication ... E406 01010101BA False

Noun Note:

Firstly, the user should know what is prepayment mode defined in the system: prepayment mode means the electricity meters will automatically trip after arrearage; Conversely, when enforcing mode turned on, the prepayment mode will automatically close, and the electricity meters won't trip after arrearage, the electricity meters will continue to charge and the remaining amount will be negative.

The functions of 3 push buttons are as followings:

Enforced switch on: it can keep power-up mode, it will not trip after arrearages.



the meter will continue measure electricity when the amount is negative.

Enforced switch off:do switch off operation immediately,and the meter will not affected by other state,electricity will recover until the meter receive switch on or prepayment recovery command.

Prepayment recovery: recover the meter to prepayment mode ,and close the enforced mode, if the amount is positive, the meter will recover normal power state, if it is in the state of switch off it will also switch on immediately; if the amount is negative on the meter it will strip immediately.

# 3. Electricity selling management

## 3.1. Electricity selling

This function is mainly for electricity selling by operators, the operators can enter the electricity selling page by clicking the shortcut for welcome page or clicking 'add new electricity' in the electricity selling management. Picture are shown as 3-1 and 3-2.

The electricity selling page is shown as picture 3-3,the user list page will pop up when user clicks the magnifier icon on the right of select meter text,user can be chosen by double clicking the user in the list and user's detail information will be automatically filling in the user information table under the electricity selling page.After filling in the recharge amount,payment method and remark, the electricity selling operation will be finished by clicking 'save' button.



# Picture 3-1



# Picture 3-2



creator.	administrator	CreateTime: 201	8-06-12 14:47:27	
Select meter				
Recharge amount(S)	0	Payment method Casi	h payment 👻	
Remark				
	Sale of electricity	Cancel		
Roo	m ID	Meter I	D	
Roo User N	m ID	Meter II User II	D	
Roo User N Purchase t	m ID	Meter II User II Accumulative(	D D	
Rooi User N Purchase t Remaining amou	m ID	Meter I User I Accumulative Maximum amount	D D S) S)	
Roo User N Purchase t Remaining amou	m ID ame imes nt(\$)	Meter II User II Accumulative( Maximum amount( Power threshol	D	
Rooi User N Purchase t Remaining amou Closing :	m ID	Meter I User II Accumulative(\$ Maximum amount(\$ Power threshol	D D S) d e	
Roo User N Purchase t Remaining amou Closing s Alarm sta	m ID	Meter II User II Accumulative( Maximum amount( Power threshol Forced mod	D	
Rooi User N Purchase t Remaining amou Closing s Alarm sta Alarm amo	m ID	Meter II User II Accumulative( Maximum amount( Power threshol Forced mod Alarm status Alarm amount	D D 5) d 2 2	
Rooi User N Purchase t Remaining amou Closing a Alarm sta Alarm amou Is arr	m ID	Meter II User II Accumulative( Maximum amount( Power threshol Forced mod Alarm status Alarm amount	D D S) d 2 Refres h the meter	

Picture 3-3



Кез	/words:					Search	
∫serID	UserName	RoomID	MeterID	TotalMoney	BuyTimes	BuildNo	FloorID

Picture 3-4

### 3.2. Electricity selling query

This function is mainly used for electricity selling record by operators(picture shown as below). Choosing the Start and stop date,filling in the required query electricity meter ID,user ID,user name and account number,the correspondent record can be figured out by clicking 'query' button,and this function also supports export print operation.



ime         12         June         2018         Instrument number           ber ID         UserName         Room D         Select           All         Print         Last Next         [ 1 / 0 ] [Each 50C / Total C ]	0 ] [Each 500 / Total C ]
Image: Select         Select           All         Print         Last         Next         [ 1 / 0 ] [Each 50C / Tetal C ]	0 ] [Each 500 / Total C]
All Print Last Next [ 1 / 0 ] [Each SOC / Total C ]	0 ] [Each SOC / Total C ]
Less mear [ 1 / 0 ] [zern 50. / lotal c.]	u j [cach suc / local c ]
	en e
e Creator Useria Username MeterlD Room ID Purchase amount Payment method Last timePower purc Last time Cumulativ Remark	nt method Last timePower purc Last time Cumulativ Remark

# Picture 3-5

## 3. 3. Electricity retreat

The function is mainly used for electricity retreat operation by operators, the operation can be referred to electricity query shown as 3.1, after filling in the retreat information, the electricity retreat operation can be finished by clicking 'retreat' button. (picture shown as below)



Creator: adm	inistrator		CreateTime: 2018-06	5-12 14:48:27	
Select meter					
Refund amount(\$)		Payn	nent method Cash pa	iyment 👻	
Remark					
	Retreat	Cancel	1		
_					
Room ID			MeterID		
Room ID User Name			Meter ID		
Room ID User Name Purchase times			Meter ID User ID User ID Accumulative(S)		
Room ID User Name Purchase times Remaining amount(S)			Meter ID User ID Accumulative(5)		
Room ID User Name Purchase times Remaining amount(5)			Meter ID User ID User ID Accumulative(5) [ Naximum amount(5) [		
Room ID User Name Purchase times Remaining amount(S)			Meter ID User ID Accumulative(5) Naximum amount(5) Power threshold		
Room ID User Name Purchase times Remaining amount(S) Closing state		N	Meter ID User ID User ID Accumulative(5) Naximum amount(5) Power threshold Forced mode		
Room ID User Name Purchase times Remaining amount(5) Closing state Alarm status1			Meter ID User ID User ID Accumulative(5) Naximum amount(5) Power threshold Forced mode Alarm status2		
Room ID User Name Purchase times Remaining amount(S) Closing state Alarm status1 Alarm amount1		N	Meter ID User ID Accumulative(5) Naximum amount(5) Power threshold Forced mode Alarm status2 Alarm amount2		
Room ID User Name Purchase times Remaining amount(S) Closing state Alarm status1 Alarm amount1 Is arrears			Meter ID User ID Accumulative(S) Naximum amount(S) Power threshold Forced mode Alarm status2 Alarm amount2	Refres h the meter	

## 3. 4. Electricity retreat query

It is mainly used for query the electricity selling record by operators, the operation can be referred to electricity query shown as 3.1 (picture shown as below). Equally this function also supports the export print operation.



Ketreat management	Charge management						
lcome × Add Charge × Charge reco	rds × Add Retreat × Retreat records	×					
tatTime 10 kine 2010 -		Instrument number					
Line 12 June , 2016 Y				Select			
		Roomip					
heck All Print			Last Nex	[ : / 0 ] [E	ach 50C / Total C ]		
time Creator	User id User name	MeterID	Room ID Refund a	nount Payment method	Last timePower purc	Last time Cumulativ	Remai

# 4. Electricity meters report centre

The report centre provides various statistical data of various time units, and it can also inquiry and export print the report. The report centre mainly consists of constant alarm record report, daily sales report, monthly sales report and annual sales report.



### 4.1. Constant alarm record report

It is used for counting constant alarm record, picture as below, chose query buildings, floors and alarm category, all the data of some alarm category in the floor can be counted by clicking 'query' button. The data report can be printed by clicking 'export print' button.

Choose a building All	Select floor All	Select	Print
Meter ID Room ID Username Re	naining sum Alarm status	Power off	Overload

## 4.2. Daily sales report

It can provide data query and statistics of electricity selling and retreat, the data takes day as a statistical unit, chose start and stop date, electricity seller, all electricity selling and retreat record within a period of time can be counted by clicking 'query' button, and the data report can be printed by clicking 'export print' button. (picture is shown as below)

	eal time aları	n report ×	Daily sales re	port ×	Energy consump	ption	
Sai	StartTime 1 alesperson	12 June	,2018 <del>-</del>	EndTime Statistic Type	12 June , 2018 V Daily report V	Select	Print
Salesperson		Date		Sales amount	Correction amount	Refund amount	Financial income



## 4.3. Monthly sales report

It can provide data query and statistics of electricity selling and retreat, the data takes month as a statistical unit, chose start and stop year, electricity seller, start and stop month, all electricity selling and retreat record within a period of time can be counted by clicking 'query' button, and the data report can be printed by clicking 'export print' button. (picture is shown as below)

come       ×       Real time alarm report       ×       Daily sales report       ×         Select year       2038       •       Salesperson       All       •         Start Month       6       •       Select       Print         Serson       Date       Sales amount       Correction amount       Refund amount       Financial income	Di	sconnected de	wice query			Energy cor	nsumption		
Select year     2018     •     Salesperson     All     •     Select     Print       Start Month     6     •     End Month     6     •     Print       serson     Date     Sales amount     Correction amount     Refund amount     Financial income	Welcome ×	Real time ala	irm report X	aily sales report 🗙	Monthly sales rep	ort ×			
Select year     2018     •     Salesperson     All     •     Select     Print       Start Month     6     •     End Month     6     •     Print       serson     Date     Sales amount     Correction amount     Refund amount     Financial income									
Start Month 6 rint Select Print Print Select Print P		Select year	2018	*	Salesperson Al	•	1		
person Date Sales amount Correction amount Refund amount Financial income		Charles & Alexandre	6	100	Fred Marray 6		Select	Print	
person Date Sales amount Correction amount Refund amount Financial income		Start Worth			End Wonth [-				
	alesperson	1	Date	Sale	amount	Correction amount	Refund amount	Financial incom	e

#### 4.4. Annual sales report

It can provide data query and statistics of electricity selling and retreat, the data takes year as a statistical unit, chose start and stop year, electricity seller, all electricity selling and retreat record within a period of time can be counted by clicking 'query' button, and the data report can be printed by clicking 'export print' button. (picture is shown as below)



#### 4.5. Disconnected electricity meters report

It can provide data query of disconnected electricity meters, the list can be refreshed by clicking 'query' button and the data report can be printed by clicking 'export print' button.

#### 4.6. Disconnected DUP report

It can provide data query of DUP in the state of disconnection, the list can be refreshed by clicking 'query' button and the data report can be printed by clicking 'export print' button.

#### 4.7. Prepaid power consumption query report

It can provide energy consumption report query within a period of time. The list can be refreshed by clicking 'query' button and the data report can be printed by clicking 'export print' button.



Bisconnected device	toery .		Energy consu	nption			Sales report				Alara		
Welcome × Daily sales report	Energy consumptio	n report 🛛 🗙											-
■ Buildings 2Area: 020102: 020103: 020201:	StartTime 1;	2 June , 2018	<ul> <li>EndTime 12 June ,</li> <li>Roomid</li> </ul>	2018 Vote: The fetchisth	e last meterreading da Seletz	sta of the start date and Print							
	Start date	End date	MeterID Roo	om ID Username	Last timereading meter	This time reading meter	Using Electricity	Transformer rate	Last time balance	This time balance	Sales amount	Using amount	Meter Remark

## 4.8. Historical alarm record report

Historical amount alarm or arrearage record can be selected by importing time slot, user, table information and other terms. Low current and low voltage alarm record of secondary wiring can be checked by selecting 'alarm record of secondary wiring'.

come       X       Energy consumption report       X         StartTime       12       June       2018       Instrument number         Roomid       Username       RoomD       Select       Print         teterID       Shop number       Username       Message       Time of occurrence	Fibernaterica	device query		Ener	gy consumption			Sales report
StartTim       12       June       ,2018       Instrument number         Roomid       Username       RoomD       Select       Print         teterID       Shop number       Userid       Username       Message       Time of occurrence	elcome × Daily sales	report × Energy consum	ption report X Alar	m history report 🛛 🗙				
StartTim       12       June       , 2018       Instrument number         Roomid       Username       RoomID       Selea       Print								
Roomid       Username       RoomID       Select       Print         AeterID       Shop number       Userid       Username       Message       Time of occurrence	StartTime 12	June ,2018 🔻	EndTime 12	June ,2018 🔻	Instrument number			
AeterID         Shop number         UserId         Username         Message         Time of occurrence	Roomid		Username		RoomID	Select	Print	
feterID Shop number User Id Username Message Time of occurrence	L		1					
	MeterID	Shop number	Userid	Username	1	Message	1	Time of occurrence