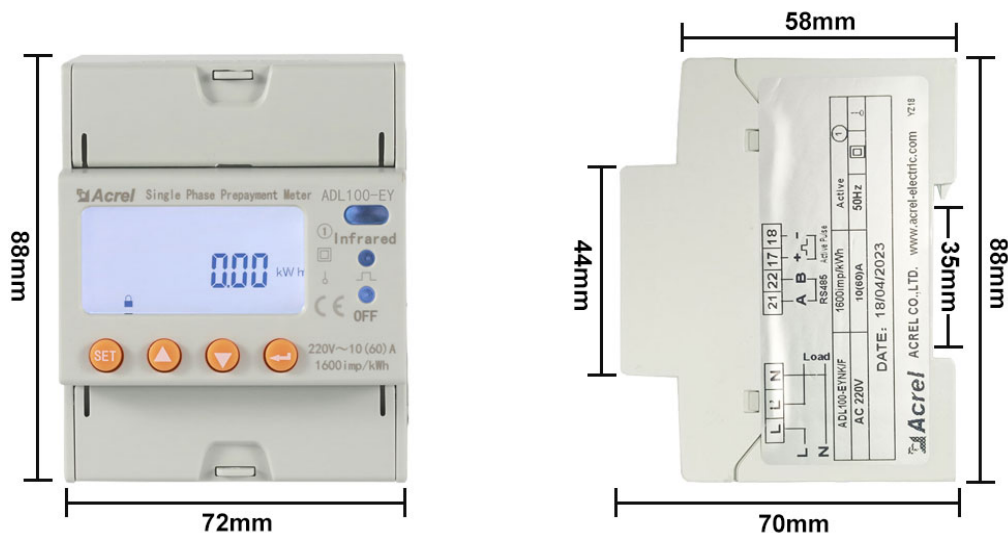


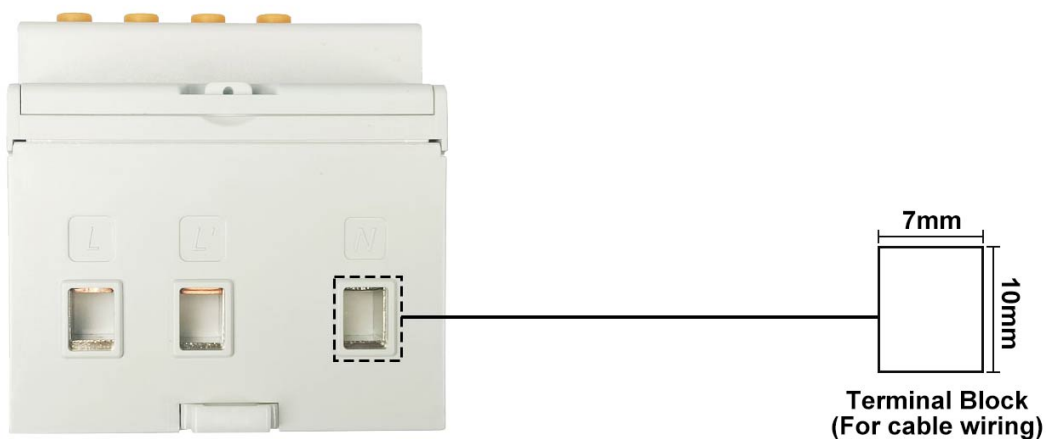
0. Installation Dimension

Dimension of necessary hardware including:

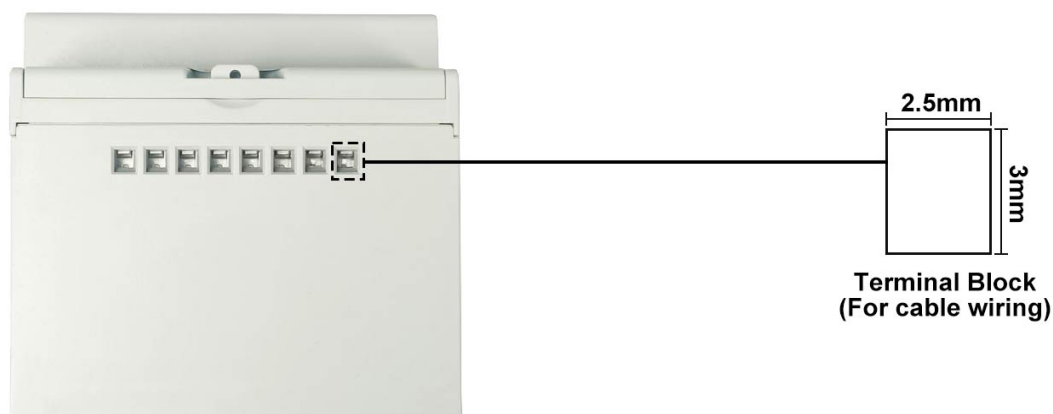
- (1) ADL100-EYNK 1-phase Prepaid&Postpaid Energy Meter (Main Body&Terminal Block/PIN)
- (2) AWT100-4GHW + AWT100-POW [Combined Overall Dimension & 4G Antenna Dimension]



(1) Dimension of Main Body of ADL100-EYNK



(1) Dimension of Terminal Block of ADL100-EYNK [for Power Wiring]

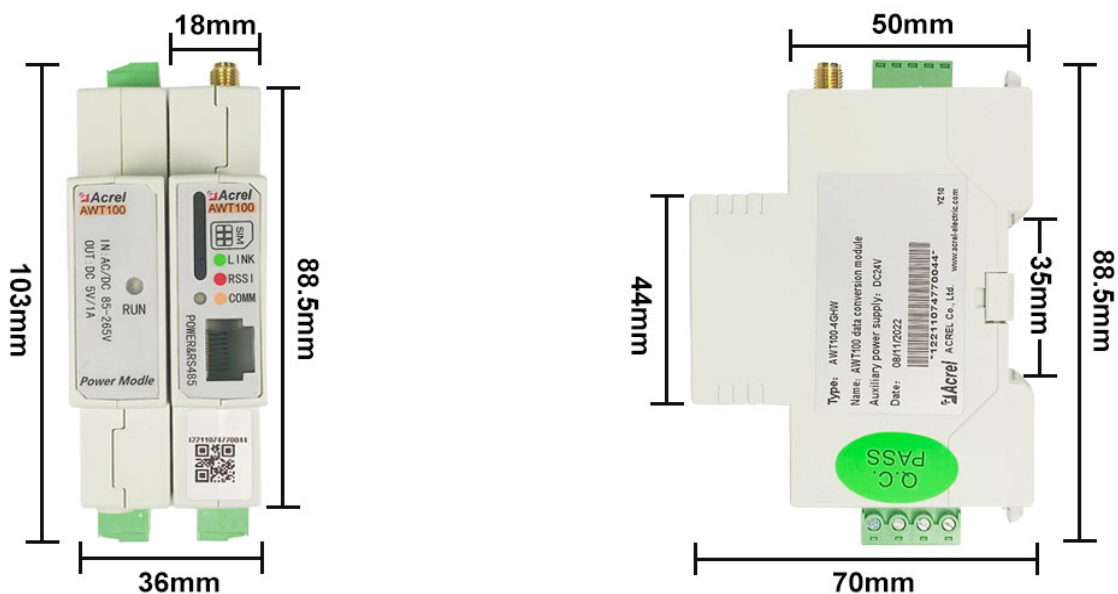


(1) Dimension of Terminal Block of ADL100-EYNK [for RS485 and Other Wiring]

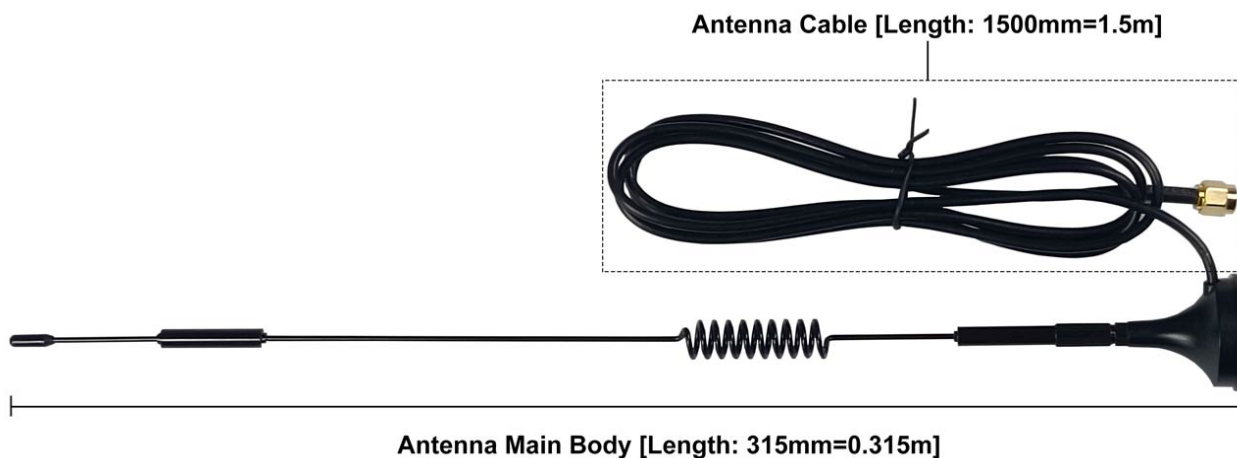
0. Installation Dimension

Dimension of necessary hardware including:

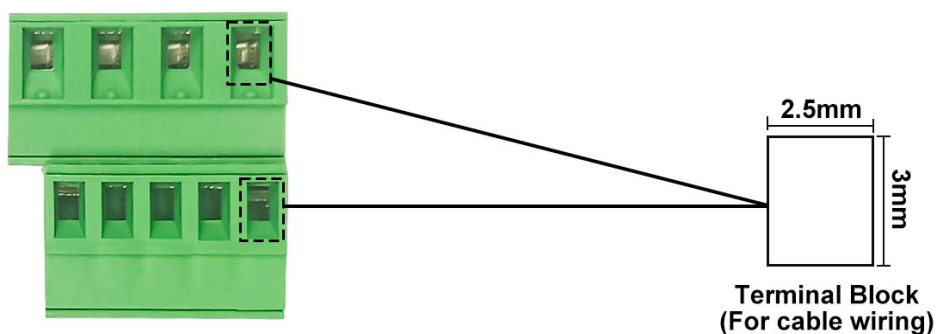
- (1) ADL100-EYNK 1-phase Prepaid&Postpaid Energy Meter (Main Body)
- (2) AWT100-4GHW + AWT100-POW [Combined Overall Dimension & 4G Antenna Dimension]



- (2) Dimension of Main Body of AWT100-4GHW + AWT100-POW Set [with Terminal Block]



- (2) Dimension of 4G Antenna of AWT100-4GHW



- (2) Dimension of Terminal Block of AWT100-4GHW + AWT100-POW Set

1. Wiring Illustration

Only 3 part of wiring was necessary for wiring of ADL100-EYNK 1-phase Prepaid&Postpaid Energy Meter and AWT100-4GHW IoT 4G Gateway [paired with AWT100-POW Power Supply Module].

(1) Power Wiring of ADL100-EYNK: Use PIN L, L', N on ADL100-EYNK for current and voltage input (Noted,the wiring must be according to the actual live line forward current/energy direction)

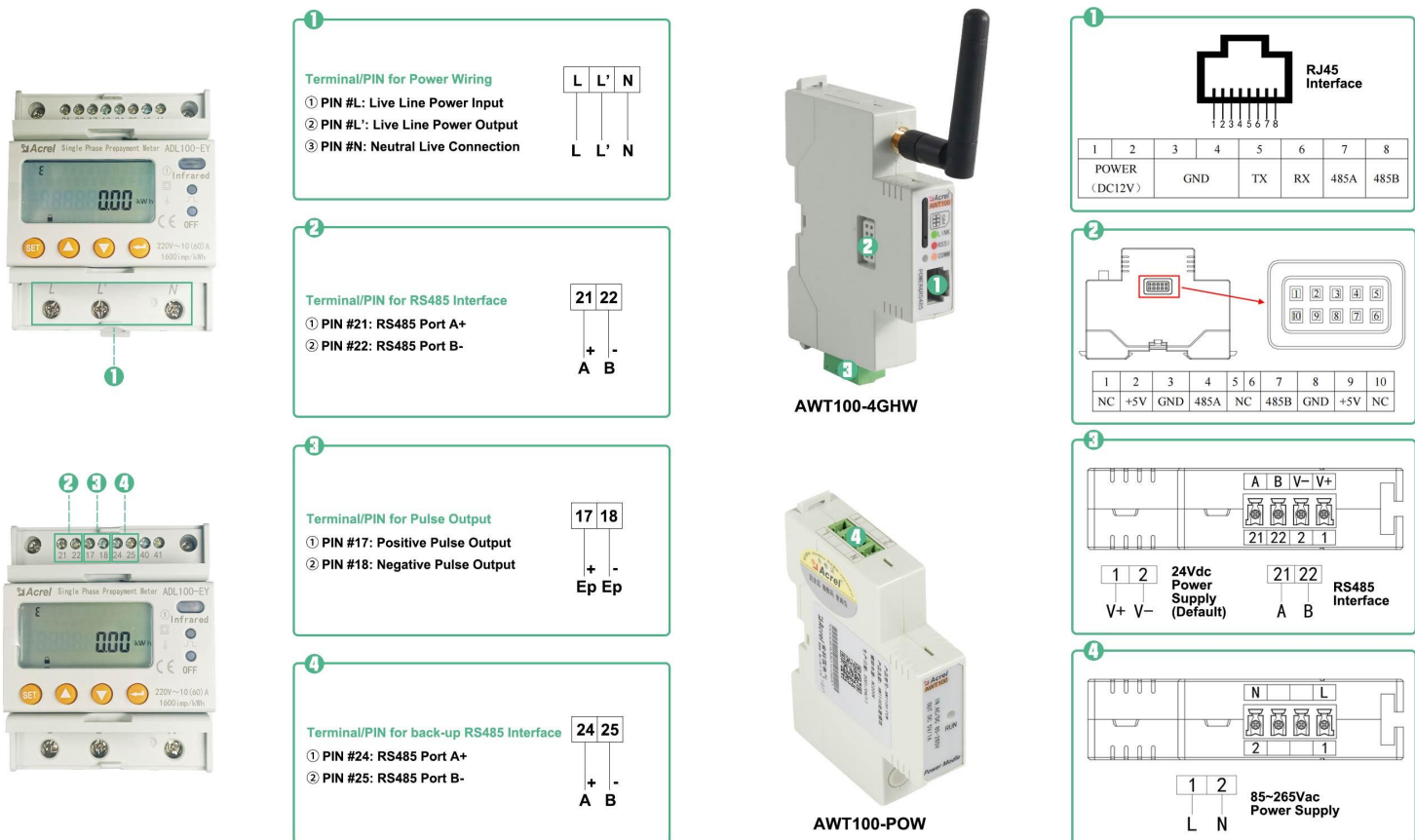
(2) Power Supply of AWT100-4GHW: Use PIN L, N on AWT100-POW for power supply (Noted: voltage level of power source must be with the range of 85~265Vac L-N)

(3) RS485 Communnication Wiring between AWT100-4GHW and ADL100-EYNK:

PIN 21 of AWT100-4GHW connected to PIN 21 of first ADL100-EYNK to PIN 21 of second ADL100-EYNK and to PIN 21 of last ADL100-EYNK. (RS485 Port A to Port A to Port A)

PIN 22 of AWT100-4GHW connected to PIN 22 of first ADL100-EYNK to PIN 22 of second ADL100-EYNK and to PIN 22 of last ADL100-EYNK. (RS485 Port B to Port B to Port B)

***Extra Noted:** Before powering ADL100-EYNK and AWT100-4GHW for the first time, make sure all the wiring was done and **4G SIM card** installed in AWT100-4GHW 4G SIM card tray.

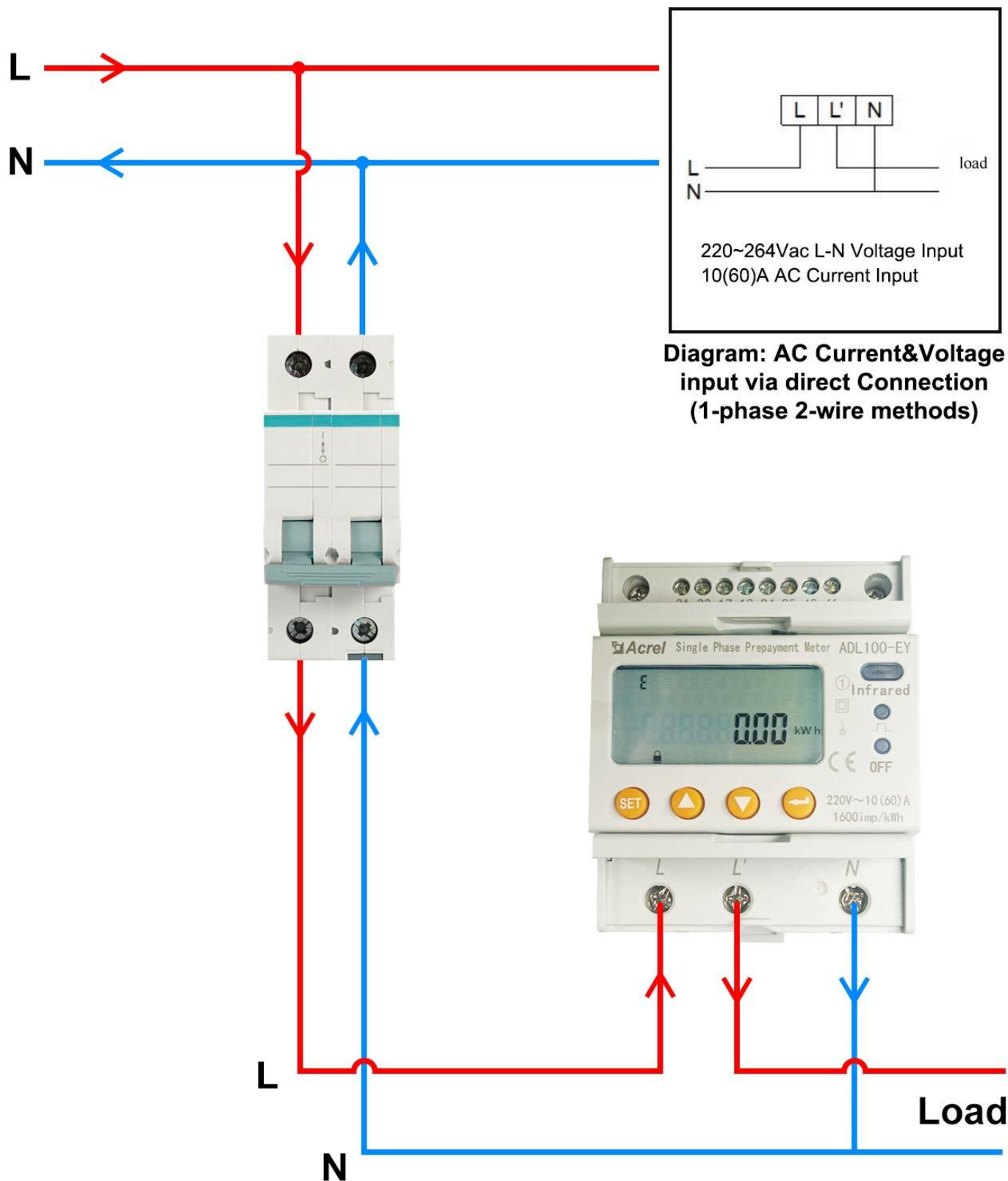


PIN Overview of ADL100-EYNK

PIN Overview of AWT100-4GHW
&AWT100-POW

1. Wiring Illustration

(1) Power Wiring of ADL100-EYNK: Use PIN L, L', N on ADL100-EYNK for current and voltage input
 (Noted, the wiring must be according to the actual live line forward current/energy direction)



(1) Power Wiring of ADL100-EYNK

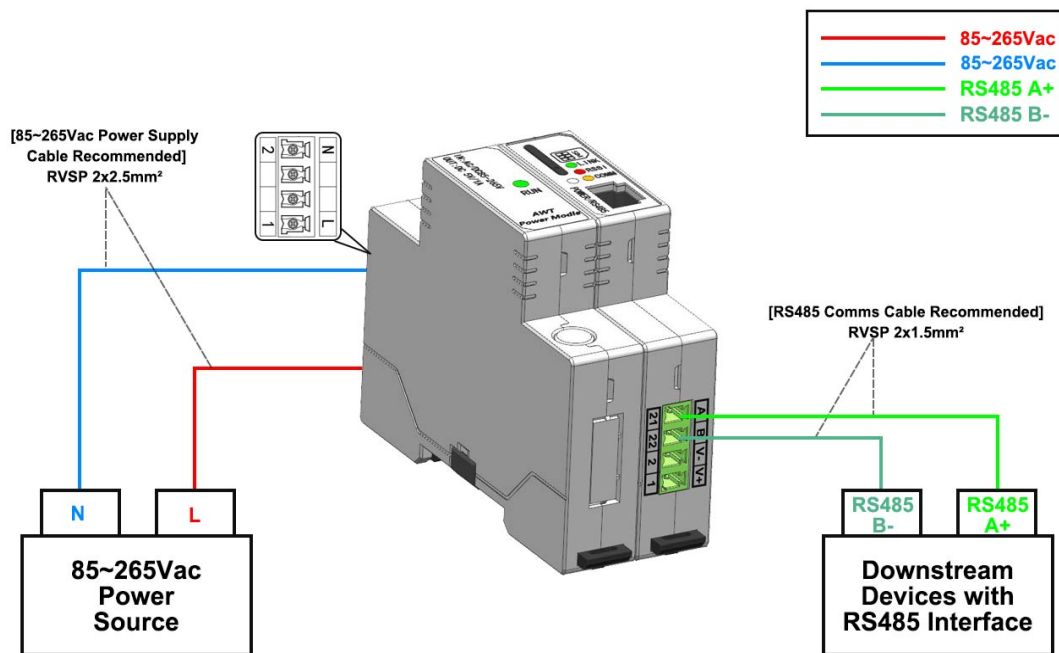
1. Wiring Illustration

(2) Power Supply of AWT100-4GHW: Use PIN L, N on AWT100-POW for power supply (Noted: voltage level of power source must be with the range of 85~265Vac L-N)

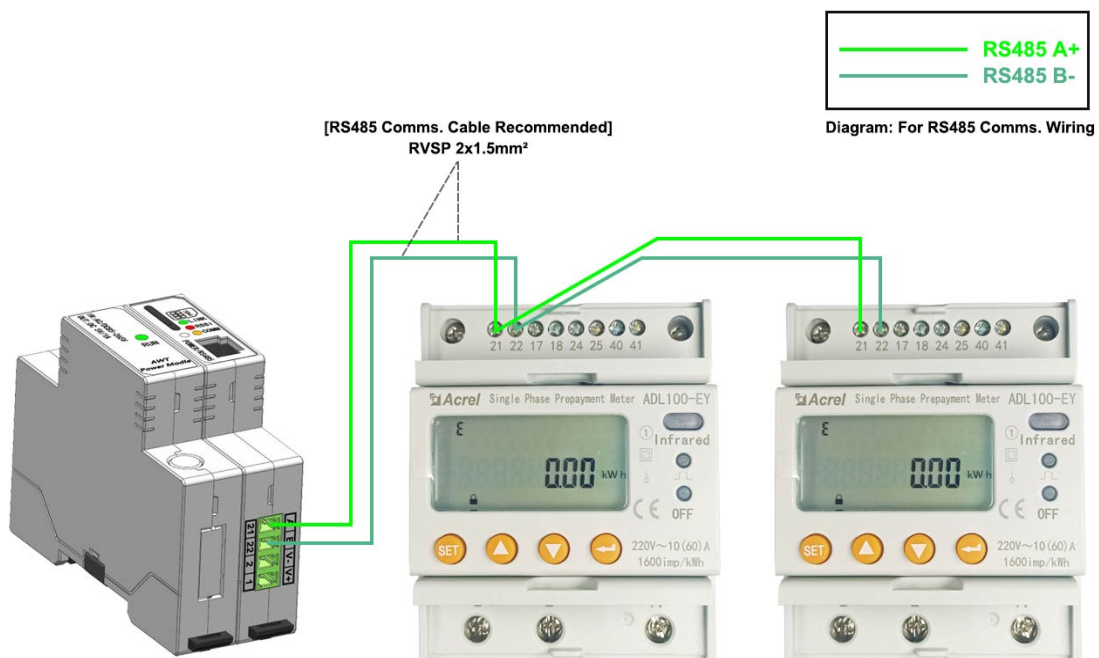
(3) RS485 Communication Wiring between AWT100-4GHW and ADL100-EYNK:

PIN 21 of AWT100-4GHW connected to PIN 21 of first ADL100-EYNK to PIN 21 of second ADL100-EYNK and to PIN 21 of last ADL100-EYNK. (RS485 Port A to Port A to Port A)

PIN 22 of AWT100-4GHW connected to PIN 22 of first ADL100-EYNK to PIN 22 of second ADL100-EYNK and to PIN 22 of last ADL100-EYNK. (RS485 Port B to Port B to Port B)



(2) Left Side - Power Supply Wiring of AWT100-4GHW (via AWT100-POW)



(3) RS485 Communication Wiring between ADL100-EYNK&AWT100-4GHW

2. System Operation

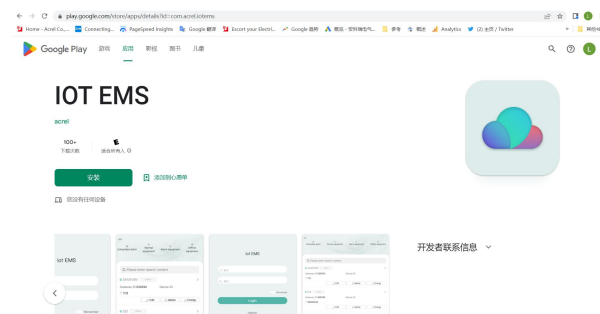
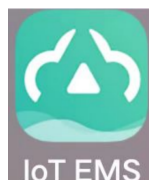
After correctly installing, wiring and powering up the Acrel devices, there are 4 steps to bind these devices with Acrel System before formally using the system:

- (1) Step 1 - Download IoT EMS APP on your Mobile Phone;
- (2) Step 2 - Register and login your own account.
- (3) Step 3 - Create a new Project
- (4) Step 4 - Add devices to your new Project (Recommend to add by using APP)

Extra Noted: Acrel IoT EMS APP (for Mobile) and IoT EMS WEB (for PC) Share the same data and account, once add the devices using APP, we can check the data on IoT EMS WEB on PC.

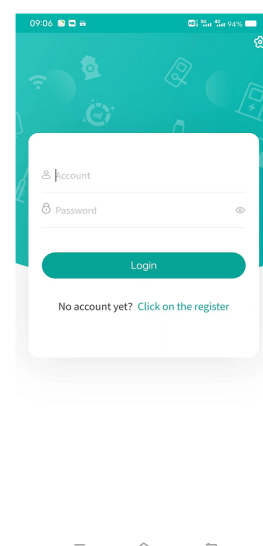
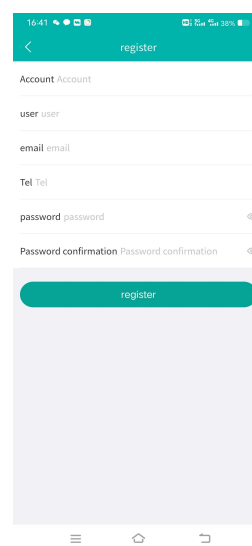
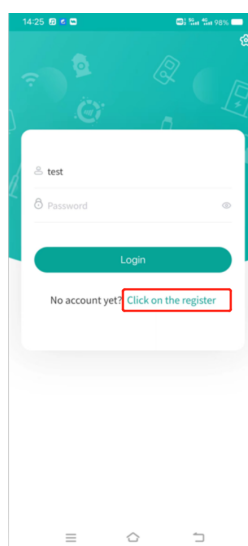
(1) Download IoT EMS APP:

- Download Link (Android): <https://play.google.com/store/apps/details?id=com.acrel.iotems>
- Download (IOS): Search IoT EMS



(2) Register your own Account:

- Click on register
- Enter related information for registering account
- Login with your new account by entering "Account" and "Password" you just set



2. System Operation

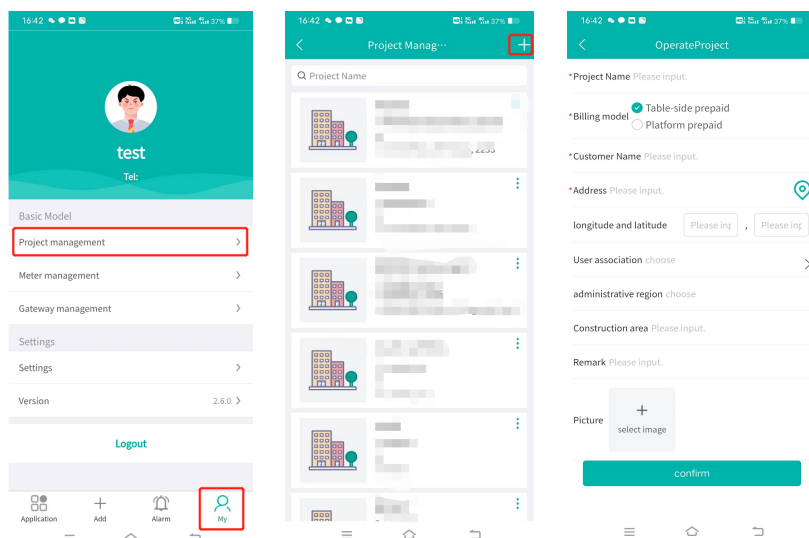
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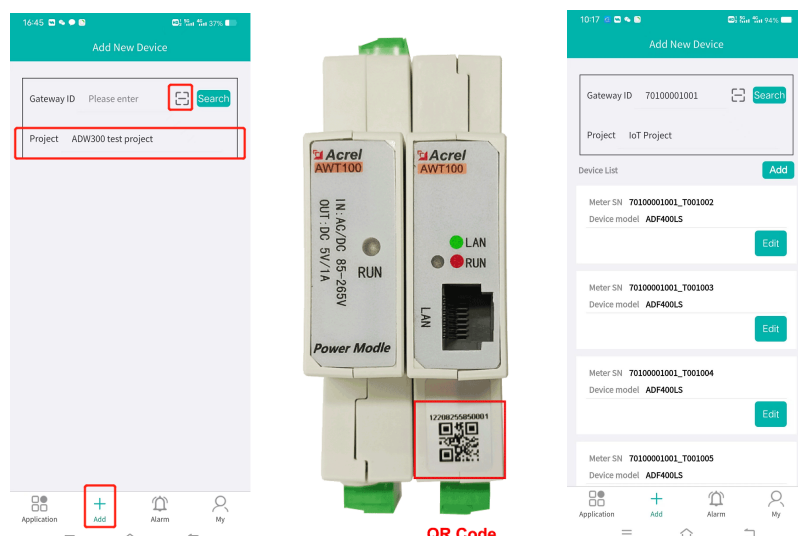
(3) Create a new Project:

- "My" "Project management"
- Click "+" icon on the right top
- Choose "Platform prepaid" and fill in other information marked by *



(2) Add Devices to Project:

- Enter "Add" interface
- Select "Project"
- Click "QR Code" scanning icon
- Scan the QR Code on AWT100-4GHW
- Downstream devices will be automatically recognized if connection success between AWT100-4GHW and ADL100-EYNK



3. Acrel IoT Cloud Prepaid System (Partail Introduction)

Acrel IoT Energy Monitoring System could be access in 2 different ways:

(1) Access through WEB on your computer.

Access port: <https://iot.acrel-eem.com/>

(2) Access through APP on your mobile phone

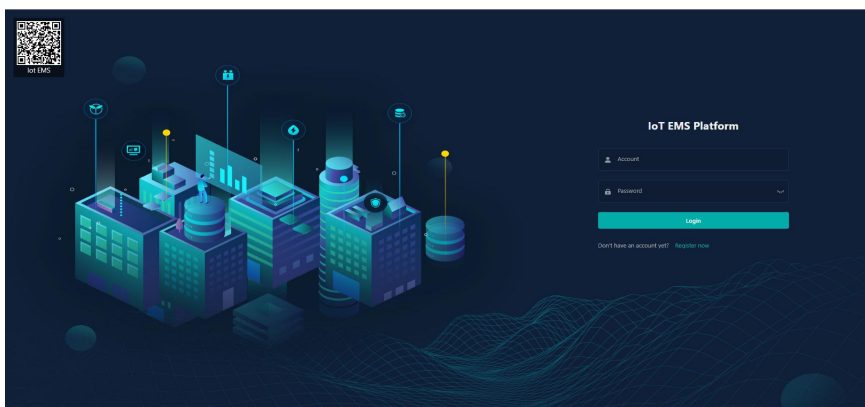
Download Link: <https://play.google.com/store/apps/details?id=com.acrel.iotems>

(1) WEB Accesss (Computer):

Access Port: <https://iot.acrel-eem.com/>

Test Account Name: acrel

Test Account Password: 123456

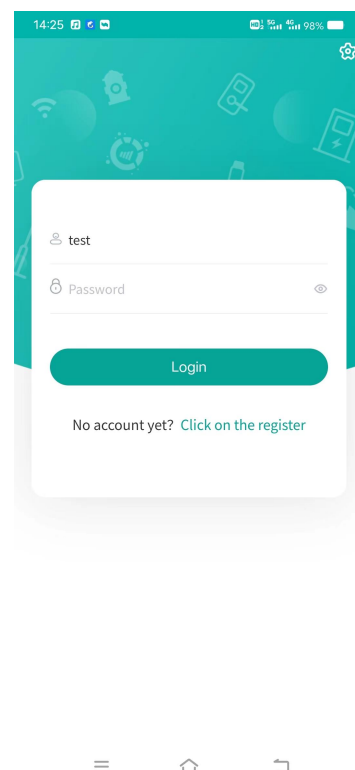
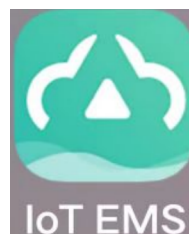


(2) APP Accesss (Mobile):

Download Link: <https://play.google.com/store/apps/details?id=com.acrel.iotems>

Test Account Name: acrel

Test Account Password: 123456

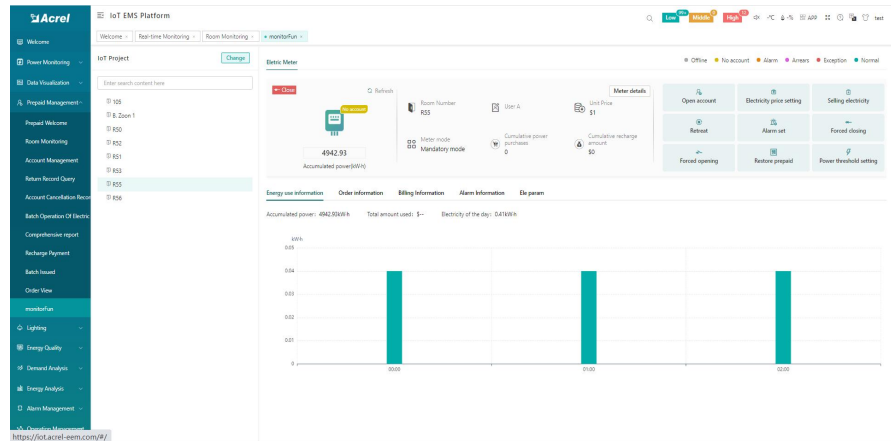


3. Acrel IoT Cloud Prepaid System (Partail Introduction)

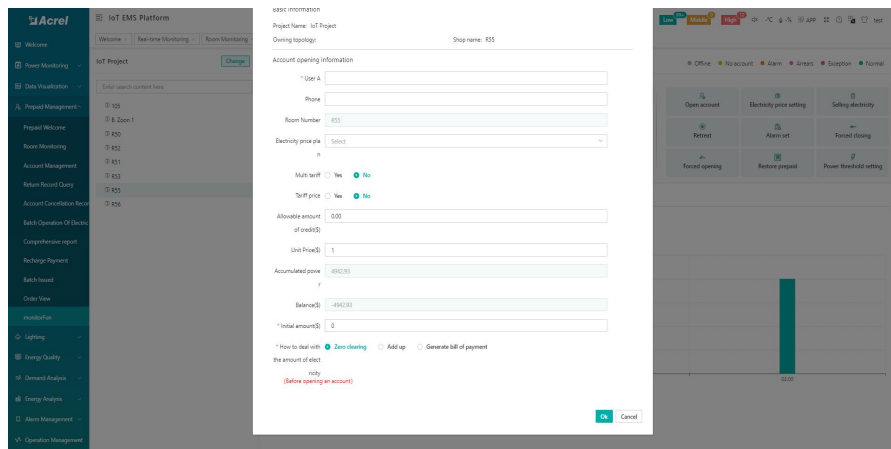
Main Function of WEB side System:

(0) Prepaid Interface (1) Devices List (2) History Curve (3) Electricity Parameters Report (4) Energy Consumption Report (Daily, Monthly, Yearly) (5) User Report

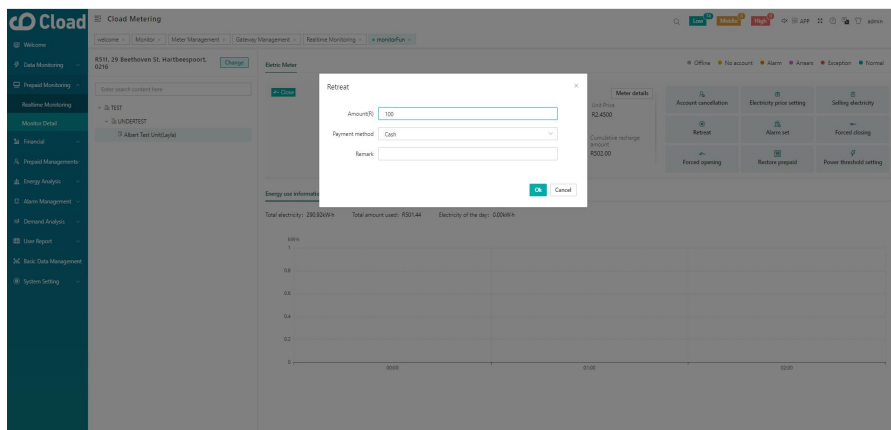
(0) Prepaid Interface-Overview: All basic function of prepaid operation could be seen here. Also, a overview of room balance credit and power consumption was available



(0) Prepaid Interface-Open Account: A prepaid energy meter will formally serve its prepaid billing and control function only after binding a "room" and "user" with it and open account for this certain "room".



(0) Prepaid Interface-Topping Up: Enter amount to issue topping up command to certain "prepaid energy meter" bound with certain "room/user".



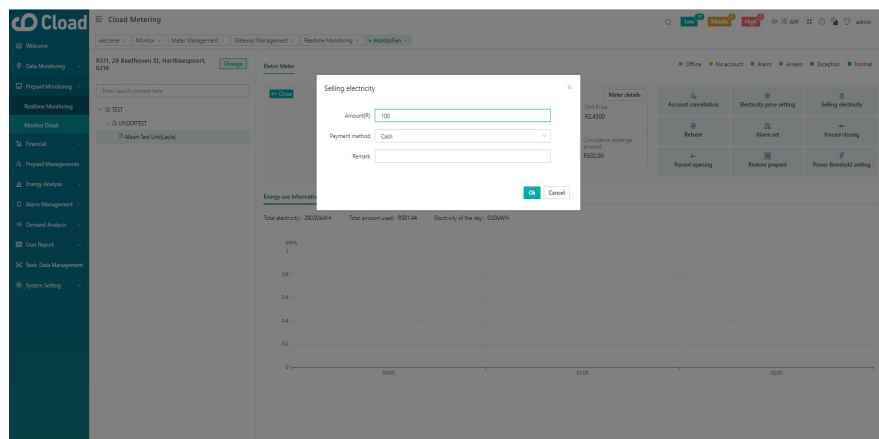
3. Acrel IoT Cloud Prepaid System (Partail Introduction)

Main Function of WEB side System:

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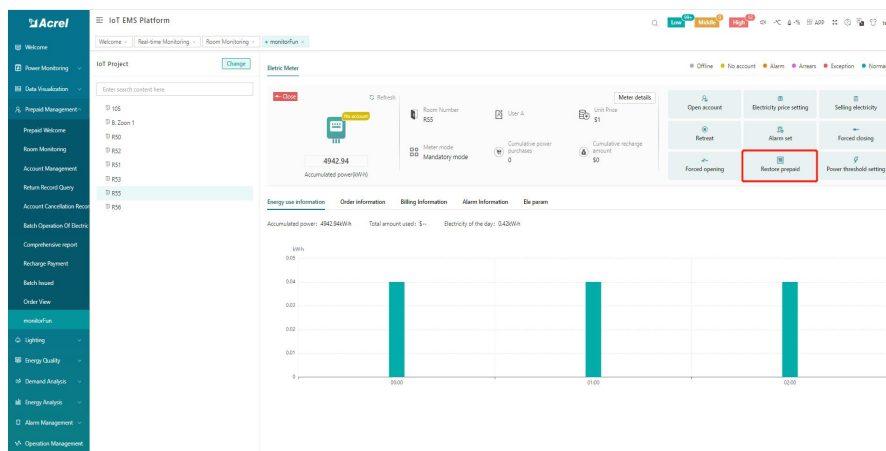
(0) Prepaid Interface-Retreat:

Retreat certain amount from credit balance. Designed for revising the possible false operation



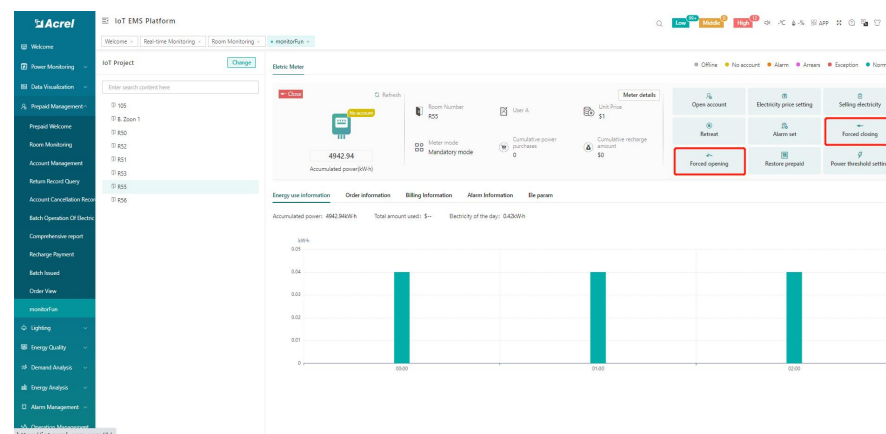
(0) Prepaid Interface - Control -

Prepaid Mode: In Prepaid Mode, when the credit balance below 0, prepaid energy meter will automatically shut down loads power. and when balance above 0, will immediate resume loads power



(0) Prepaid Interface - Control -

Postpaid Mode: In postpaid mode, load's off-on switch control will be fully manually control by platform. Balance credits whether below or above 0 won't influence the load's switch on/off status automatically

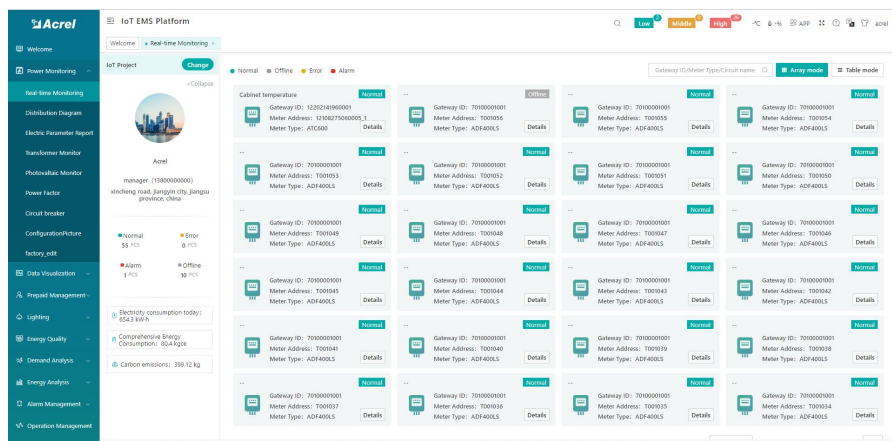


3. Acrel IoT Cloud Prepaid System (Partail Introduction)

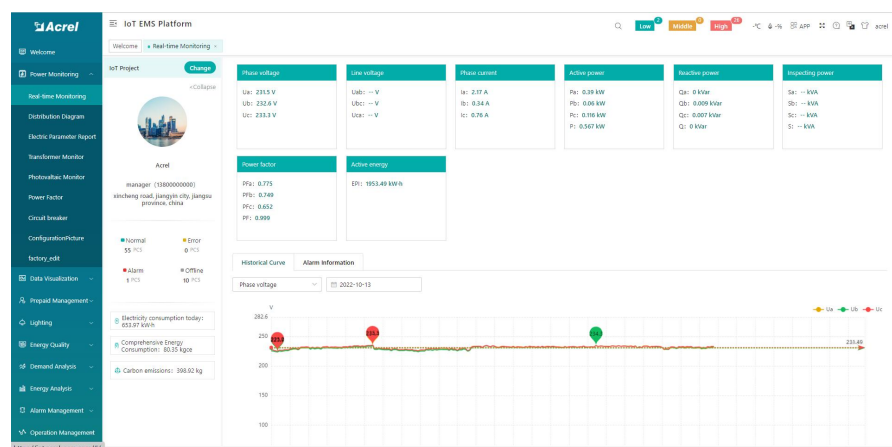
Main Function of WEB side System:

(0) Prepaid Interface (1) Devices List (2) History Curve (3) Electricity Parameters Report (4) Energy Consumption Report (Daily, Monthly, Yearly) (5) User Report

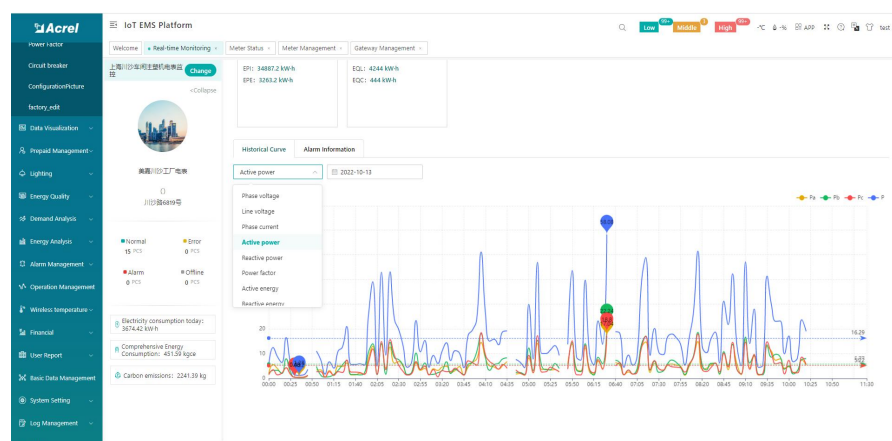
(1) Devices List: Showing the overall devices connected to Acrel System and were bond to certain project. SN code, Online-Offline status, devices model and other necessary information will be shown here.



(2) History Curve: Showing the daily history data curve of all the data that could be collected and upload by energy meter or other basic metering devices.



(2) History Curve: By selecting the items of "data" and "electricity parameter", platform can show the history curve of different data and date.

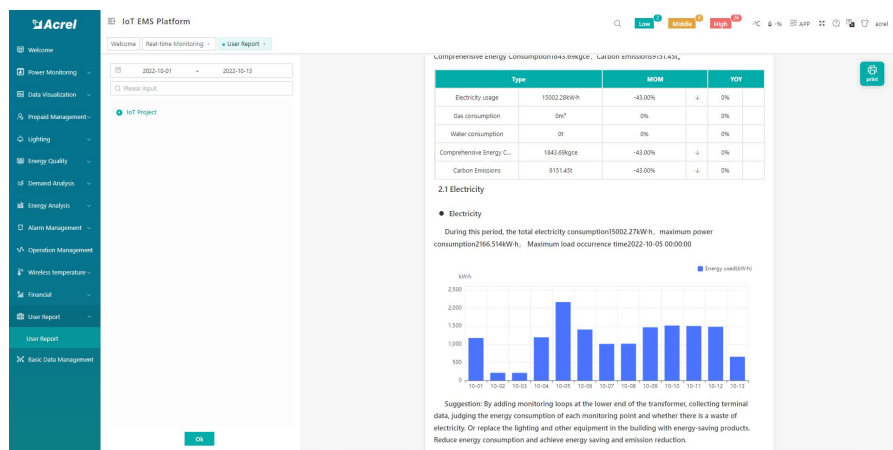


3. Acrel IoT Cloud Prepaid System (Partail Introduction)

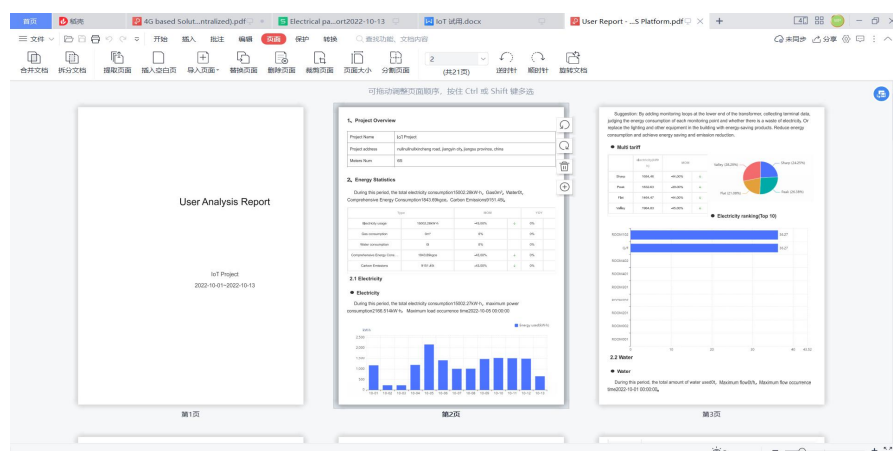
Main Function of WEB side System:

(0) Prepaid Interface (1) Devices List (2) History Curve (3) Electricity Parameters Report (4) Energy Consumption Report (Daily, Monthly, Yearly) (5) User Report

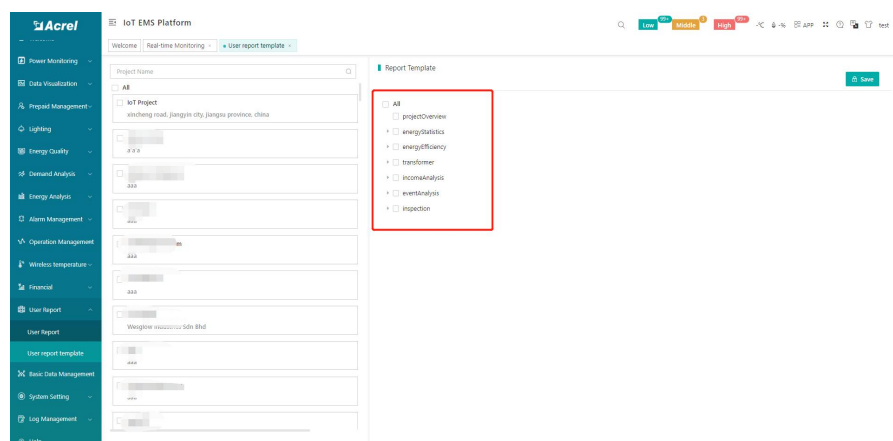
(5) User Report: A comprehensive user report including project overview, energy report, energy analysis and etc could be check on platform



(5) User Report: User report could be exported in "PDF" format into your PC for convenient check and storage.



(5) User Report: User report support template customization in buy-out service of Acrel IoT Energy Monitoring System.

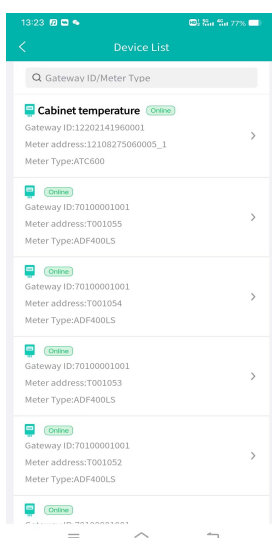


3. Acrel IoT Cloud Prepaid System (Partail Introduction)

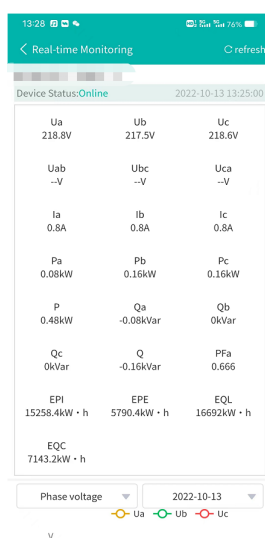
Main Function of APP side System:

(1) Devices List (2) History Curve (3) Electricity Parameters Report (4) Energy Trend (5) Energy Consumption Report (Daily, Monthly, Yearly)

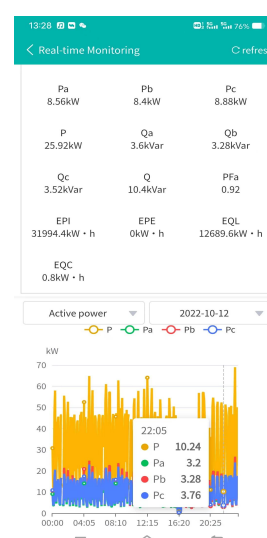
Noted: Since APP side and WEB side of Acrel IoT Energy Monitoring System share the same data, normally recommend our user to add the devices to their account using APP and check the data using WEB platform.



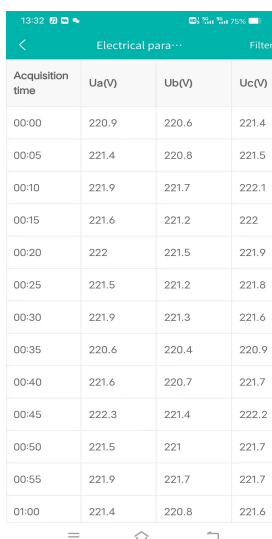
(1) Device List



(2) History Curve

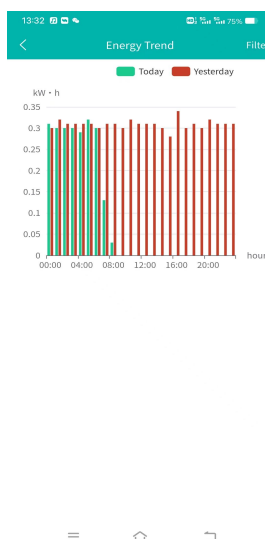


(2) History Curve

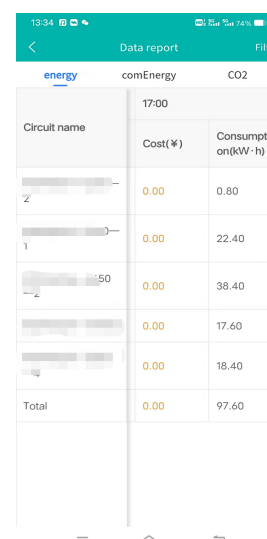


Acquisition time	Ua(V)	Ub(V)	Uc(V)
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00:05	221.4	220.8	221.5
00:10	221.9	221.7	222.1
00:15	221.6	221.2	222
00:20	222	221.5	221.9
00:25	221.5	221.2	221.8
00:30	221.9	221.3	221.6
00:35	220.6	220.4	220.9
00:40	221.6	220.7	221.7
00:45	222.3	221.4	222.2
00:50	221.5	221	221.7
00:55	221.9	221.7	221.7
01:00	221.4	220.8	221.6

(3) Parameter Report



(4) Energy Trend



energy	comEnergy	CO2
Circuit name	Cost(¥)	Consumption(kW·h)
Z	0.00	0.80
1	0.00	22.40
50	0.00	38.40
	0.00	17.60
	0.00	18.40
Total	0.00	97.60

(5) Energy Report