Acrel®

ADW310-Dxx/WF plus AKH-0.66/K K-Ø Series (Wiring&Operation Instruction)

Contact: Shelly Zhang
E-mail: shelly@acrel.cn
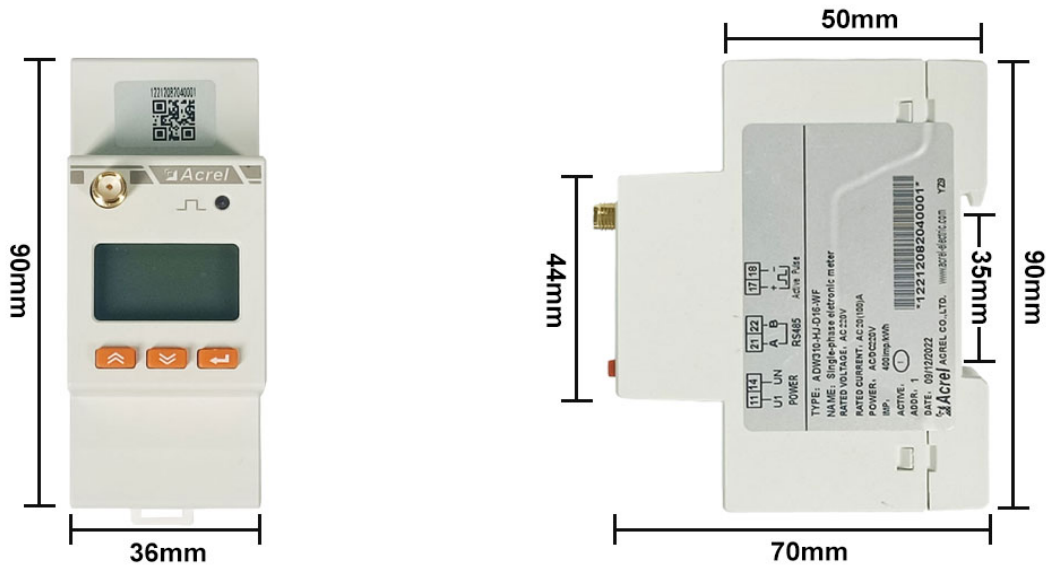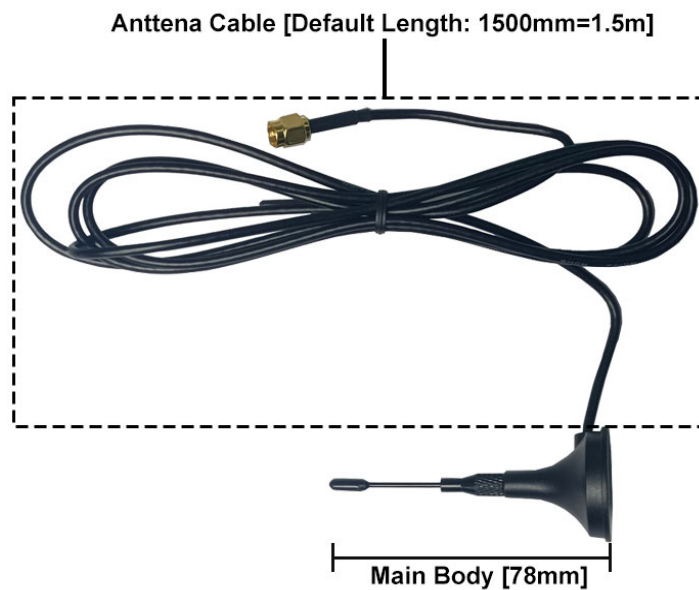Mobile: 0086 18702111813
Website:www.acrel-electric.co.za

0. Installation Dimension
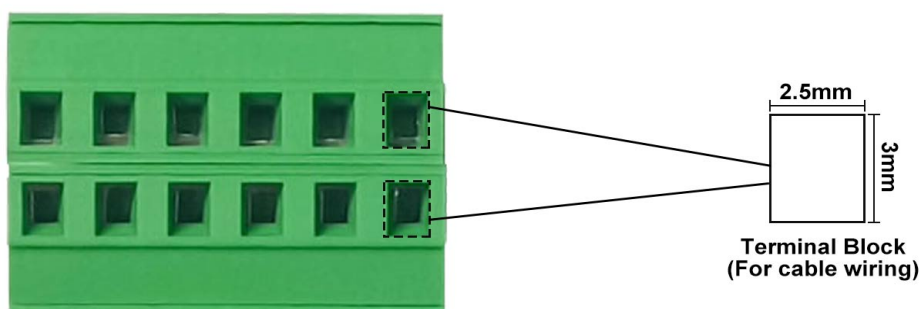
Dimension of necessary hardware including:

(1) ADW310-Dxx/WF 1-phase WiFi Wireless Energy Meter (Main Body+Terminal Block+Antenna)

(2) AKH-0.66/K K-Ø Series Current Transformer (Main Body + Output Cable)

(1) Dimension of Main Body of ADW310-Dxx/WF [Without Terminal Block]

Anttena Cable [Default Length: 1500mm=1.5m]

Main Body [78mm]

(1) Dimension of WiFi Antenna of ADW310-Dxx/WF

2.5mm

3mm

Terminal Block
(For cable wiring)

(1) Dimension of Terminal Block of ADW310 Series

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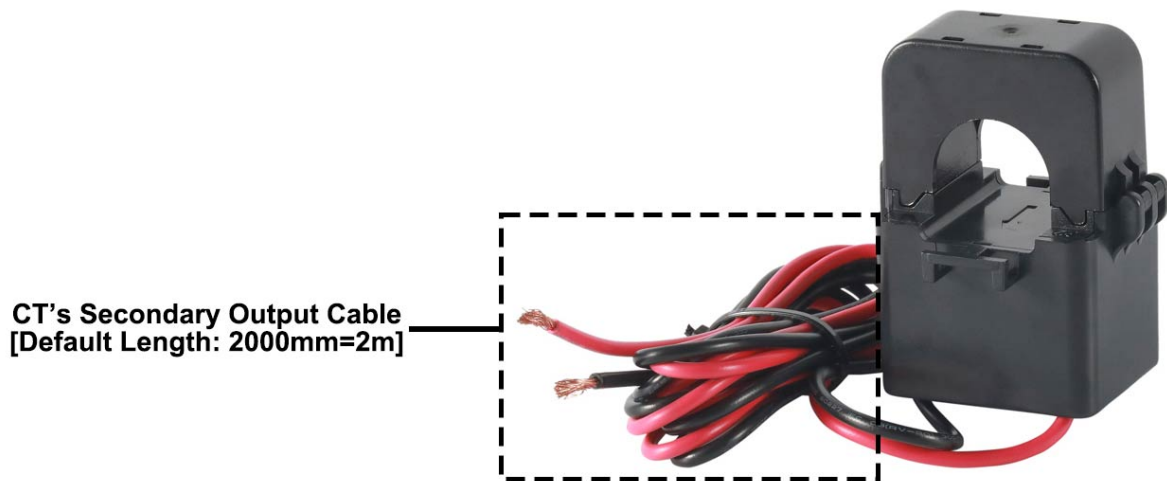Website:www.acrel-electric.co.za

0. Installation Dimension

Dimension of necessary hardware including:

(1) ADW310-Dxx/WF 1-phase WIFi Wireless Energy Meter (Main Body+Terminal Block+Antenna)

(2) AKH-0.66/K K-Ø Series Current Transformer (Main Body + Output Cable)
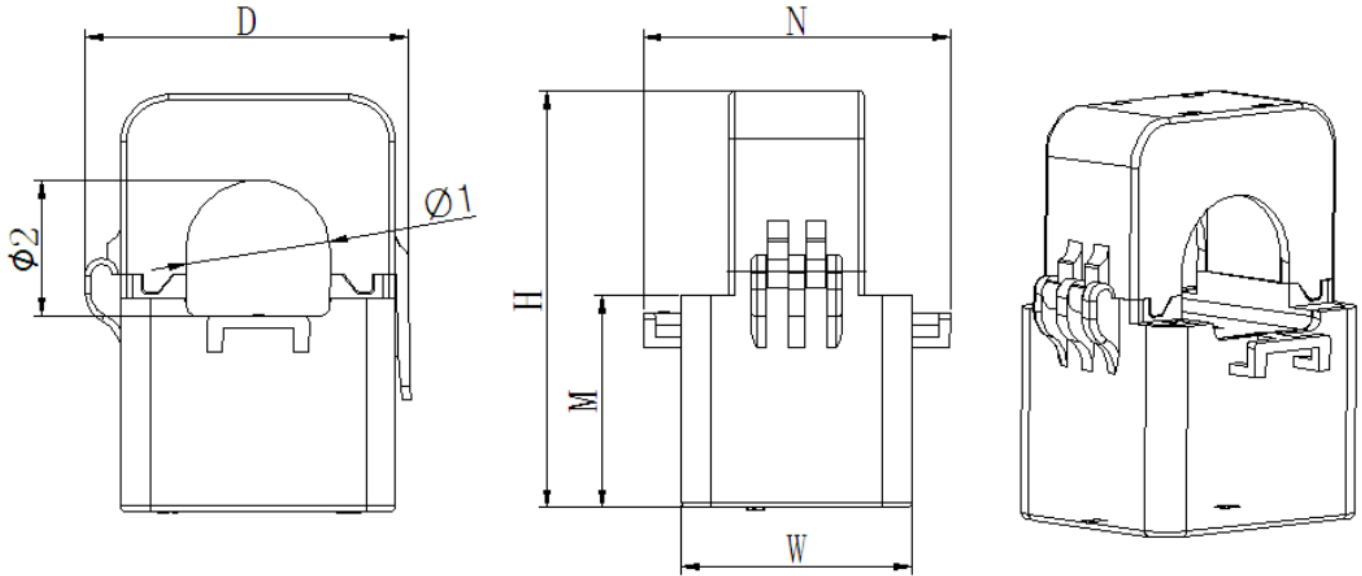
Specification	Dimensions (mm)					Perforation size (mm)		Tolerance (mm)
	W	H	D	M	N	Φ1	Φ2	
AKH-0.66/K-∅ 10N	27	44	32	25	36	10	9	±1
AKH-0.66/K-∅ 16N	31	50	36	27	42	16	17	

(2) Dimension of Main Body of AKH-0.66/K K-Ø Series

CT's Secondary Output Cable
[Default Length: 2000mm=2m]

(2) Dimension of Secondary Output Cable of AKH-0.66/K K-Ø Series

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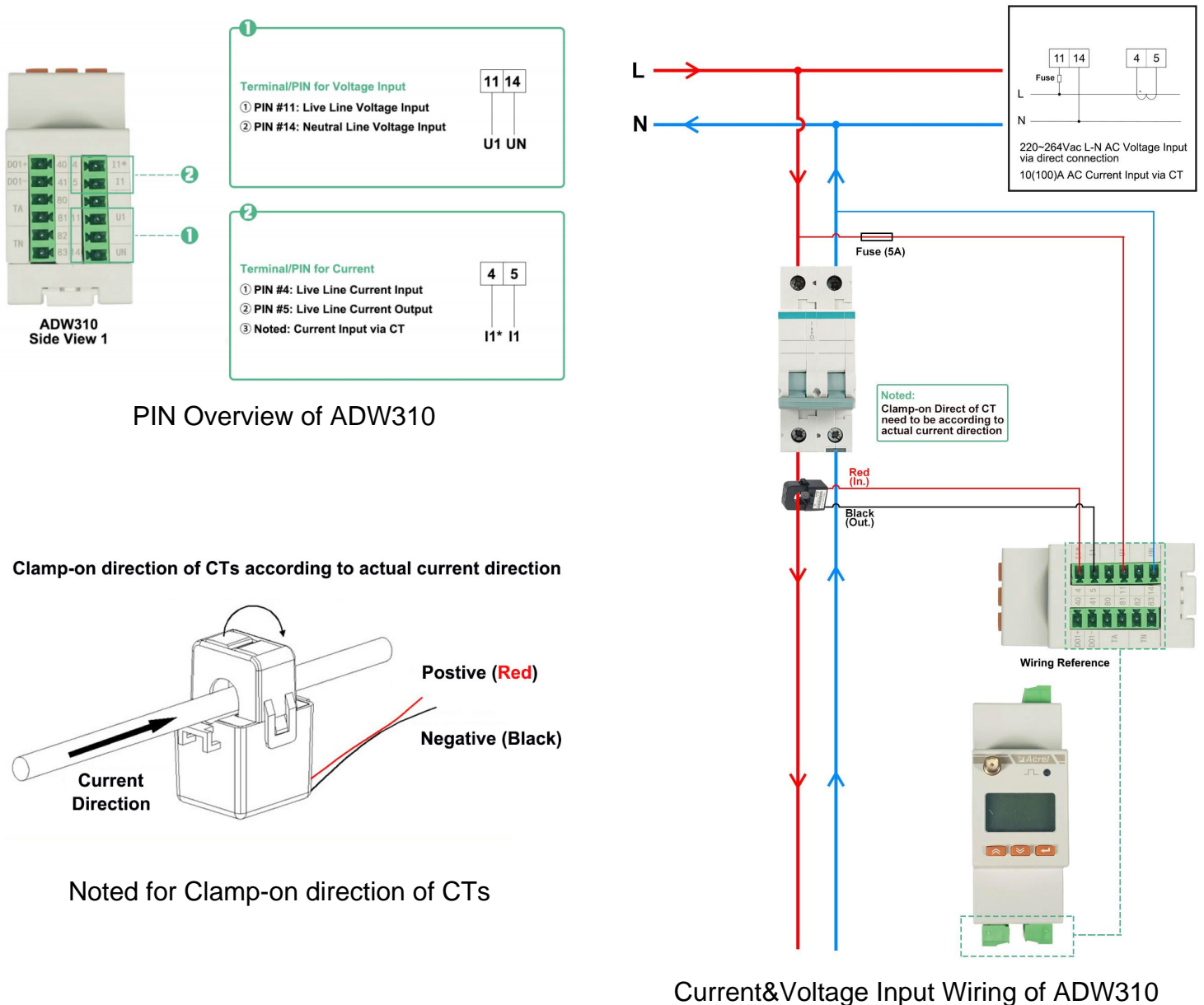
1. Wiring Illustration

Only 2 parts of wiring are necessary for ADW310-Dxx/WF

(1) Voltage Input: Use PIN 11, 14 on ADW310-Dxx/WF for 1-phase voltage signal input. [This voltage signal input will also serve as power supply of ADW310-Dxx/WF]

(3) Current input: Use PIN 4,5 on ADW310-Dxx/WF with paired CT for 1-phase current input wiring.

Noted #1: Make sure the antenna of ADW310-Dxx/WF was covered by stable WiFi signal from WiFi router for example. [Noted the WiFi connected to ADW310-Dxx/WF must have a fixed WiFi account name and password. To allign with the WiFi configuration preset in ADW310-Dxx/WF while in factory manufacturing stage. Also, customer could manually configure the WiFi account and password preset in ADW310-Dxx/WF by using "RS485 to USB converter" and "Acrel ADW310 Adjustment Software", for more detail, please check the contact in www.acrel-electric.fr]

Noted #2: The clamp-on direction of CTs must be according to the actual current direction.

PIN Overview of ADW310

Noted for Clamp-on direction of CTs

Current&Voltage Input Wiring of ADW310

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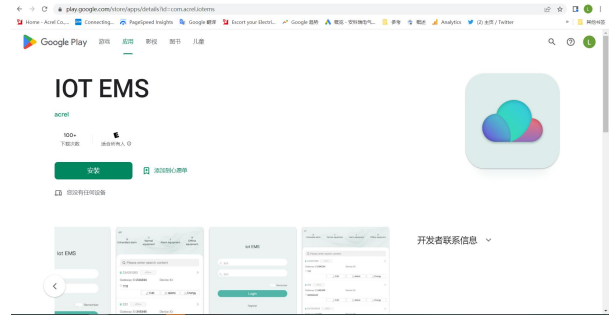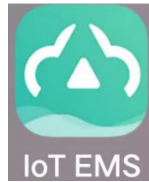Website:www.acrel-electric.co.za

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)

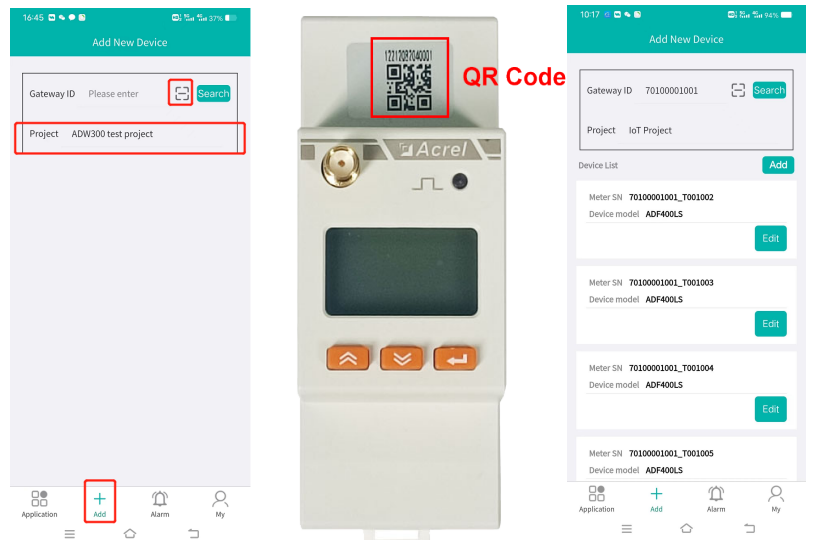Extra Noted: Acrel IoT EMS APP (for Mobile) and IoT EMS WEB (for PC) share the same data and account, once add the devices using APP, we can check the data on either computer using IoT EMS WEB or on mobile phone using IoT EMS APP.

(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
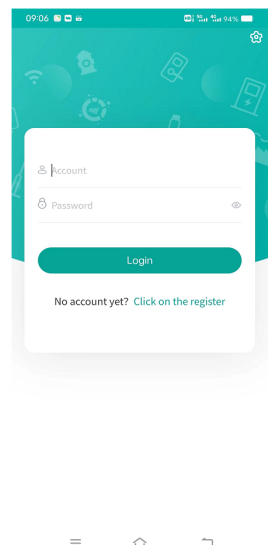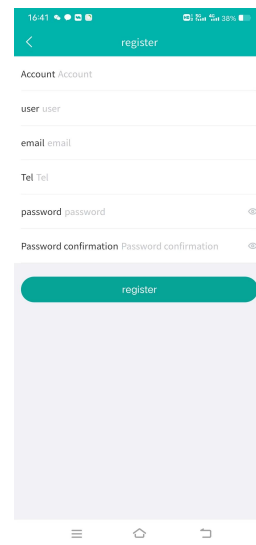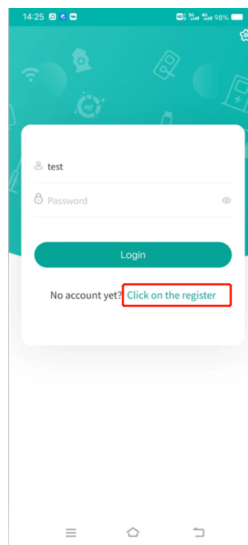
4

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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.

(3) Creat a new Project:

- "My"   "Project management"

- Click "+" icon on the right top

- Choose "Platform prepaid" and fill

in other information marked by *
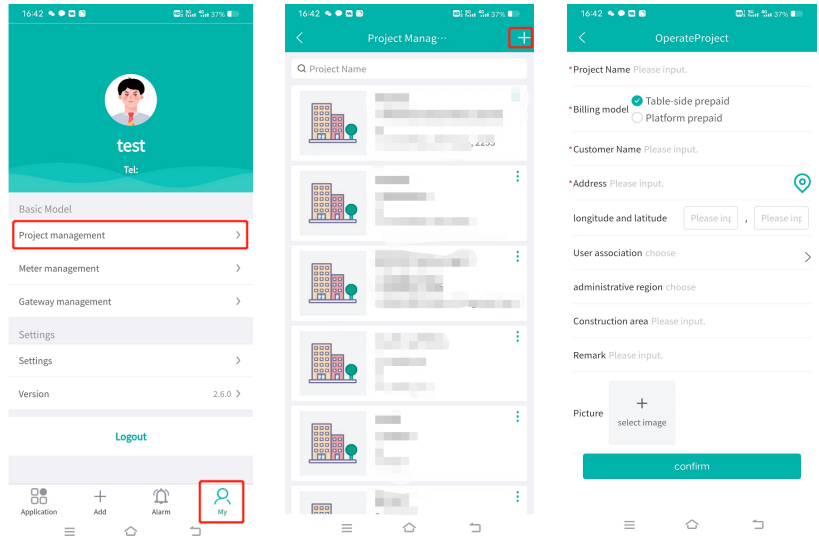
(2) Add Devices to Project:

- Enter "Add" interface

- Select "Project"

- Click "QR Code" scanning icon -

 Scan the QR Code on ADW310

- Automatically recognize the

devices type and SN code

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3. Acrel IoT Energy Monitoring 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/

Account Name: (Enter yours)

Account Password: (Enter yours)
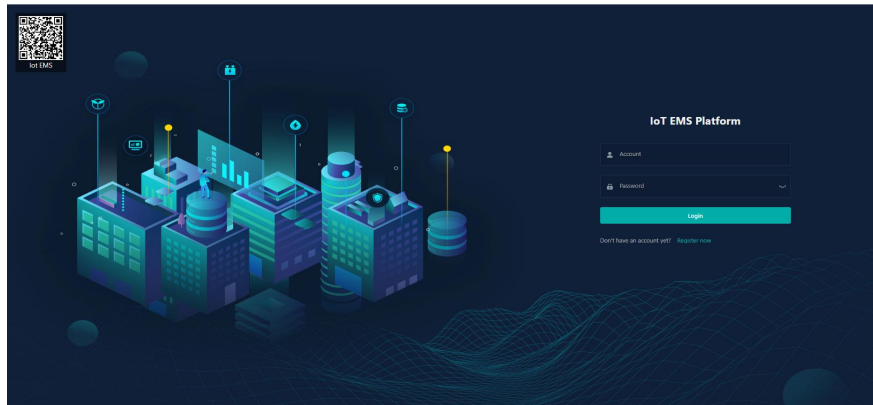
(2) APP Accesss (Mobile):

Download Link: https://play.google.
com/store/apps/details?id=com.acrel.
iotems
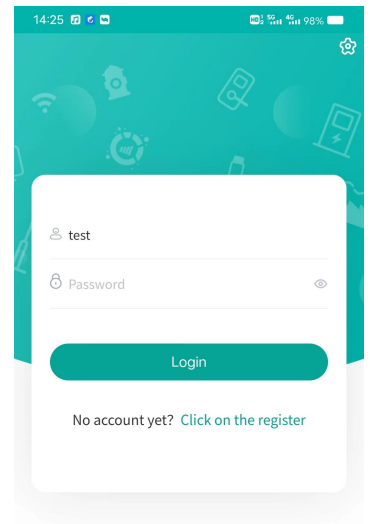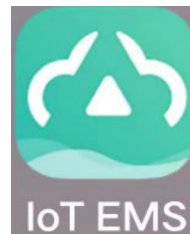
Account Name: (Enter yours)

Account Password: (Enter yours)

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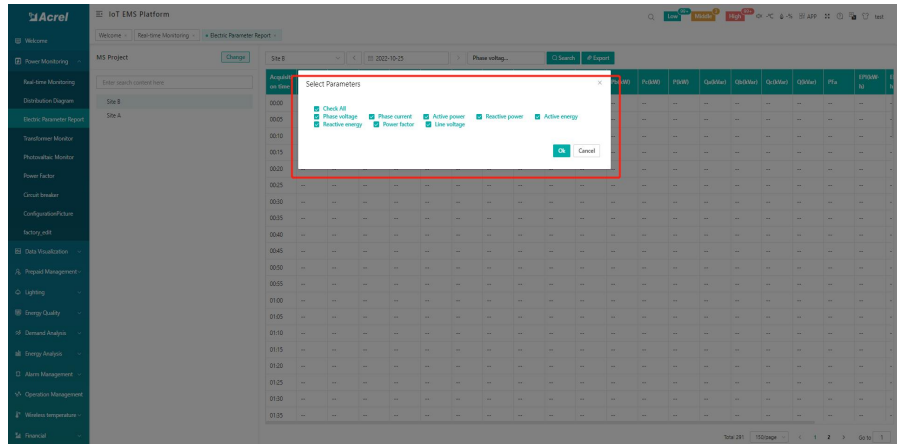Mobile: 0086 18702111813
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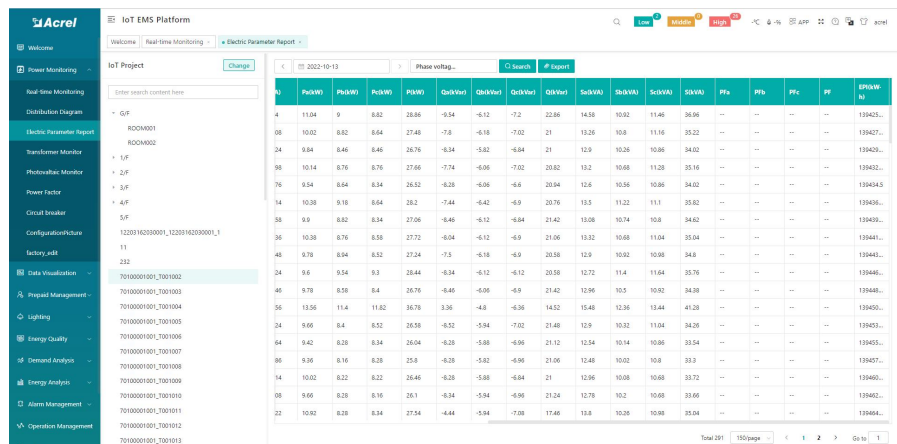## 3. Acrel IoT Energy Monitoring System (Partail Introduction)

Main Function of WEB side System:

(1) Devices List (2) History Curve (3) Electricity Parameters Report (4) Energy Consumption Report (Daily, Monthly, Yearly) (5) User Report
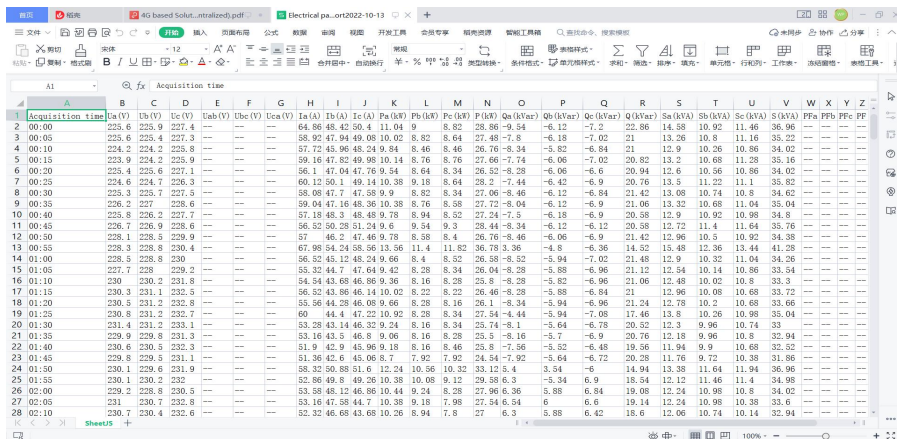
(1) Devices List: Showing the overall devices connected to Acrel System and were bond to certain project. SN code, Online-Offline status, devices model and other necessary information will be shown here.
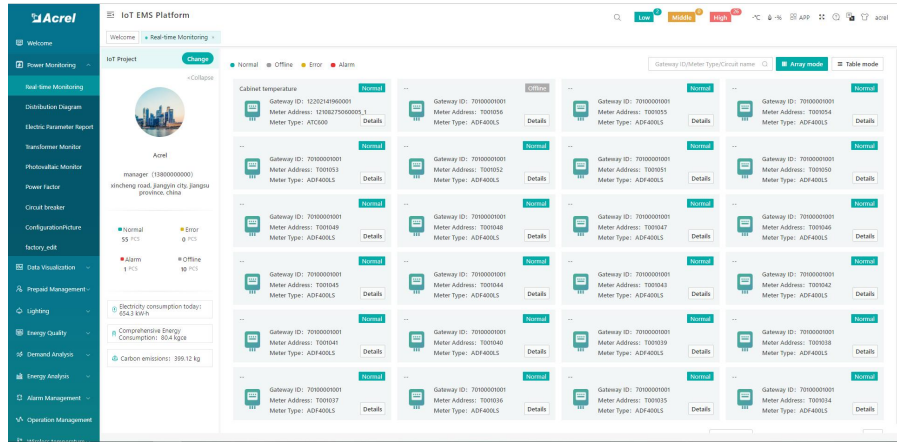
(2) History Curve: Showing the daily history data curve of all the data that could be collected and upload by energy meter or other basic metering devices.
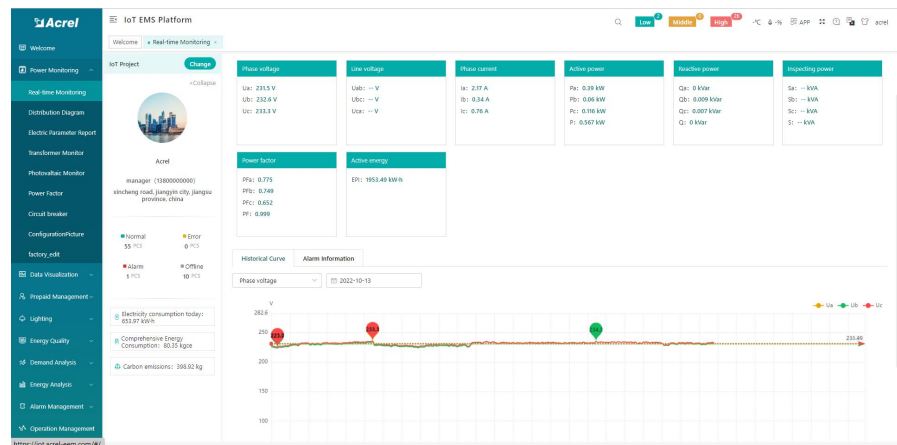
(2) History Curve: By selecting the items of "data" and "electricity parameter", platform can show the history curve of different data and date.

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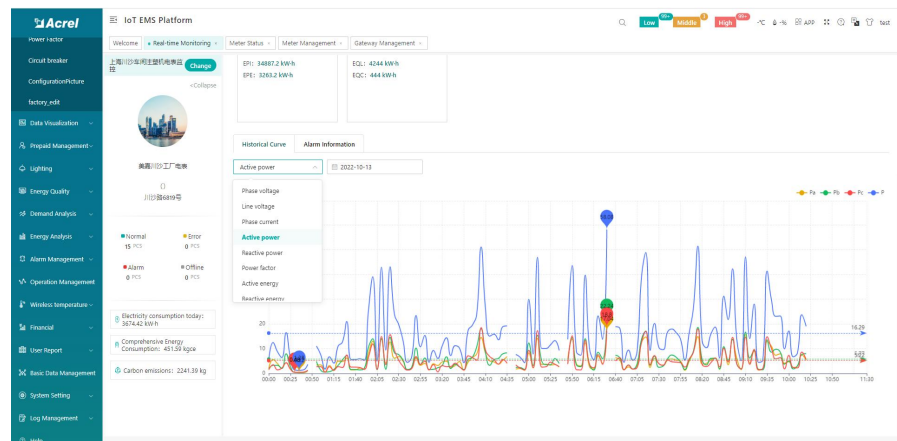
6. Acrel IoT Energy Monitoring System (Partail Introduction)

Main Function of WEB side System:

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

(3) Electricity Parameters Report: Select the "electricity parameters" that you want to show in this report .

(3) Electricity Parameters Report: All the electricity parameters that could be collected by certain energy meter will showed as a report here.

(3) Electricity Parameters Report: Report on platform could be exported in "Excel" format to your computer for a brief storage when accessing the IoT EMS WEB platform.

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Main Function of WEB side System:

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

(4) Energy Report (Daily): This
Interface show the daily energy
consumtion report (calculated by
forward active energy)

(4) Energy Report (Daily): This daily
energy report could be also export
to computer in "Excel" format

(4) Energy Report (Monthly&
Yearly): Same as daily energy
report, monthly and yearly energy
 report could be also checked on
platform and exported in "Excel"
format.

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Main Function of WEB side System:

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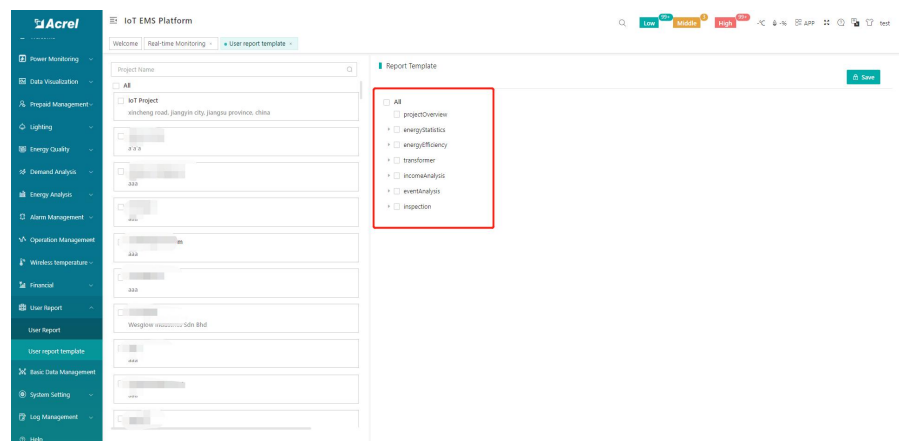
(5) User Report: A comprehensive user report including project overview, energy report, energy analysis and etc could be check on platform
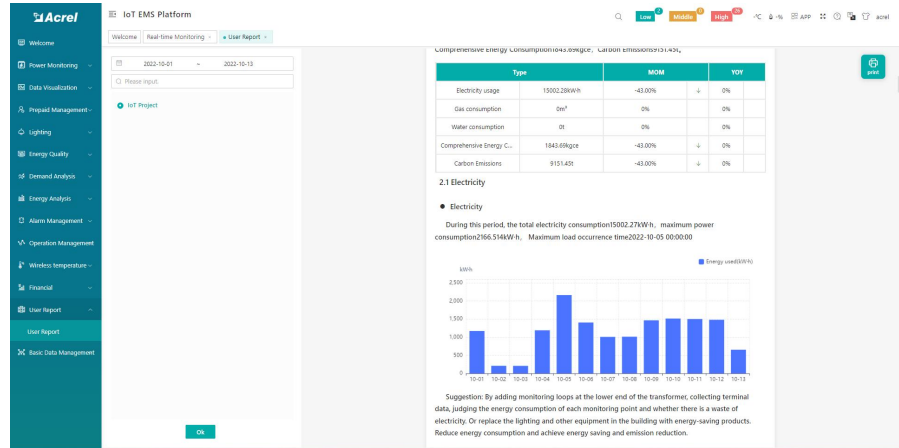
(5) User Report: User report could be exported in "PDF" format into your PC for convenient check and storage.
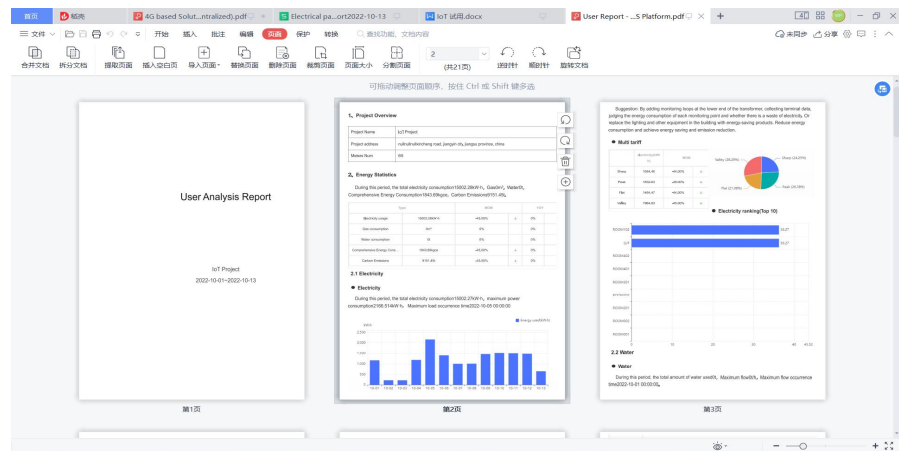
(5) User Report: User report support template customization in buy-out service of Acrel IoT Energy Monitoirng System.
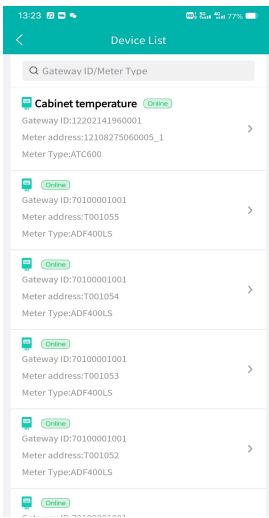
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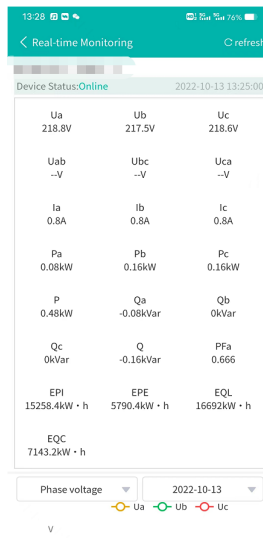# 3. Acrel IoT Energy Monitoring System (Partail Introduction)

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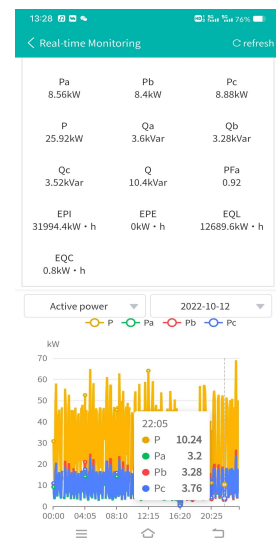
Noted: Since APP side and WEB side of Acrel IoT Energy Monitoring System share the same data, normally recommend our user to add the devices to their account using APP and check the data using WEB platform.
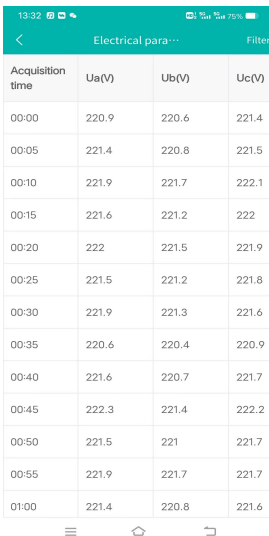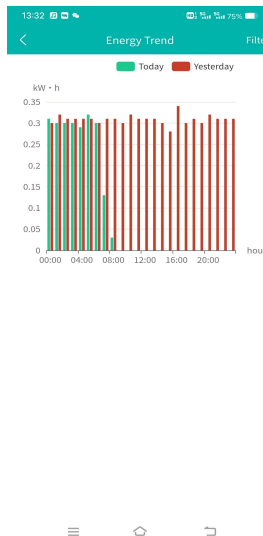

(1) Device List

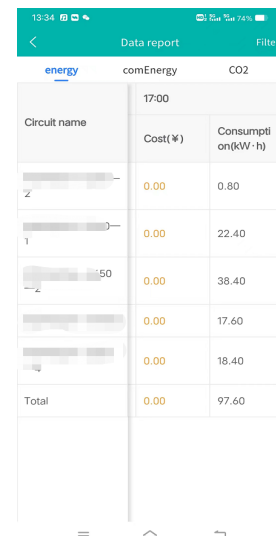(2) History Curve

(2) History Curve

(3) Parameter Report

(4) Energy Trend

(5) Energy Report

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