

Solutions

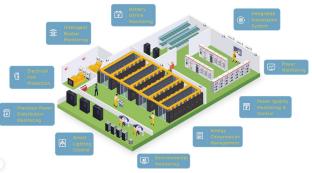


System Solution



Industry Solution







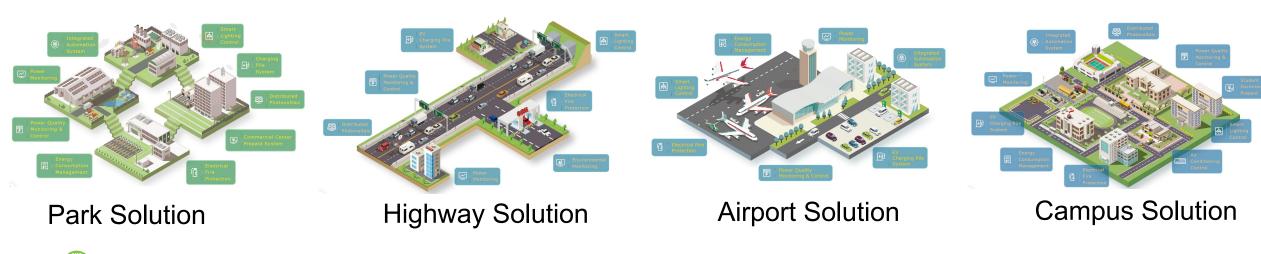


Water Treatment Plant Solution

Data Center Solution

Factory Solution

Commerce Solution



Acrel

Industry Solution



Hospital Solution

Electronic Factory Industry

Biopharmaceutical Industry Recreational and Sports Building



Acrel-EloT能源物联网云平台 Acrel-EloT Cloud Platform



Acrel-EIOT

Acrel-EloT platform based on the data center of the Internet of Things, implements unified upstream and downstream data standards, and provides a platform with energy Internet of Things data services for Internet users. Users only need to buy the Acrel IoT Power Instrument and sensor, select a gateway, and install the scanning code can use their mobile phones and computers to get the required industry data services.

Protocol	MQTT, TCP/IP
Gateway	AWT100, AWT200 etc.
Power Instrument	ADW300, ADW210, APM800, ARTM, ACR10R, DJSF1352-RN etc.
Application	Business, Schools, Factories, Commercial Buildings, Hospitals, Smart City, etc.

母线槽测温系统 **Bus Duct Temperature Measurement System** 组网方案 Networking Solution TCP/IP 母线槽测温平台 Bus Duct Temperature Measurement Platform RS485/LAN ATP010Kt触摸屏 边缘计算网关 RS485 Communication 2 ATP010Kt Touch Screen **Edge Computing Gateway** 485通讯2 485通讯1 RS485 Communication 1 AMB310采集器4 开关电源 AMB310采集器1 开关电源 Switching Power Supply Switching Power Supply AMB310 Collector 1 网线 网线 Network Wire 网线 AMB300 AMB300 AMB300 AMB300 AMB300 AMB300 测温模块安装方式 接线示意图 **Temperature Measurement Module Installation Method** Wiring Diagram ΤŢ 二总线通讯 Secondary Bus Communication



平面厂房

Factory



高层建筑

High-rise Building

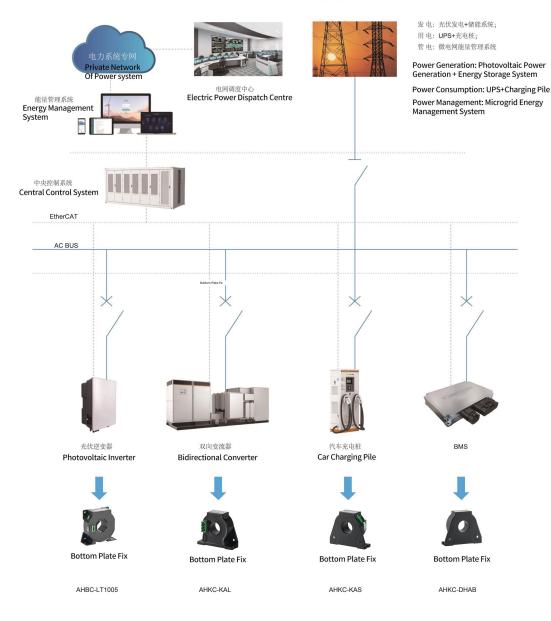
数据机房 Data Equipment Room

Bus Duct Temperature Measurement

The bus duct temperature measurement system can solve the problem of safe temperature measurement and accurate temperature measurement of the busway. The device is mainly used in the online temperature monitoring system of densely insulated busbar connectors in various fields.

Protocol	Modbus-RTU, Modbus-TCP
Gateway	AWT100, AWT200, ANet, etc.
Power Instrument	AMB300 infrared temperature measurement module, AMB310 infrared temperature measurement collector.
Application	Factory, High-rise Building, Data Room, etc.

霍尔在储能系统中的应用 Application Of Hall Sensor In Energy Storage System



Hall Sensor In Energy Storage

The Hall current sensor is mainly suitable for the isolation and conversion of complex signals such as AC, DC, and pulse.

It is suitable for current signal acquisition and feedback control of current monitoring and battery applications, inverter power supply and solar power management systems, DC panels and DC motor drives, electroplating, welding applications, inverters, UPS servo control and other systems.

Protocol	Modbus-RTU
Hardware	AHKC series hall sensor
Application	Base station, Substation, Switch Room.

变电站综合自动化系统 Substation Monitoring and Control System



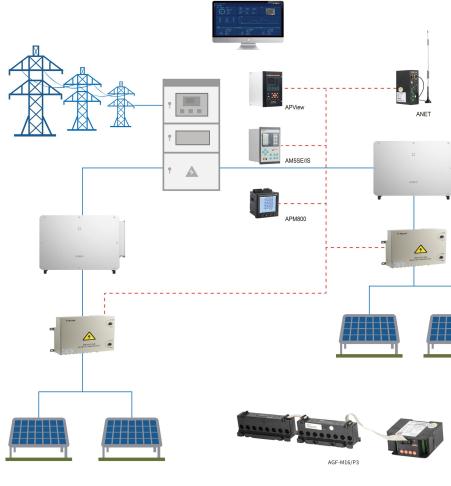
Substation Automation System

Acrel-2000 / Z substation automation system according to the requirements of power system automation and unattended, for the voltage level of 35kV and below.

Protocol	MQTT, TCP/IP
Gateway	ANET, AWT200
Power Instrument	ADW300, APM8xx, ARTM, AM, ARTU, DJSF1352-RN, etc.
Application	Office Construction, Commercial Construction, Communication Construction, Transportation, Factories and Mining Enterprises, New Energy Construction, etc.

分布式光伏运维监控系统

Distributed Photovoltaic Operation and Maintenance Monitoring System









Distributed Photovoltaic Operation and Maintenance Monitoring

AcrelCloud-1200 distributed photovoltaic operation and maintenance cloud platform helps users manage scattered photovoltaic sites by monitoring inverter equipment, meteorological equipment and camera equipment of photovoltaic sites.

Protocol	Modbus-RTU
Gateway	ANET
Power Instrument	AGF-M, AM5SE-IS, DJSF1352-RN, PZ96L, AMC, APM.
Application	Distributed Photovoltaic and Centralized Photovoltaic.

电气设备无线测温系统解决方案 Wireless Temperature Monitoring Solution



Wireless Temperature Monitoring

Acrel wireless temperature monitoring solution for electrical equipment is used in high and low voltage power systems to accurately and continuously monitor the temperature of each electrical contact to ensure safe, stable and reliable operation of the power system.

Protocol	Modbus-RTU
Temperature sensor	ATE400, ATE300M, ATE300P, ACE100.
Power Instrument	ARTM-Pn, ATC600, ARTM-8L, ASD500.
Application	Steel industry, Chemical Industry, Mining Industry, Rail Transit, Buildings, Industrial Manufacturing.

基站智慧用电管理系统 **Base Station Smart Power Management System** RS485 TCP/IP Communication 485通讯 基站智慧用电云平台 **Base Station Smart Electricity Cloud Platform** Gateway Power Generato Mains electricity 市电 发电机 ſ₩ DTSD1352-4S 备用回路 空调设备 照明设备 Spare Circuit **Lighting Device** Air Conditione F ABAT100 11 JBN 13 14 15 JBD 日 地压 0.00 Y 地球 0.00 人 *Ф*# ⊕# AMC16L-DETT 备用回路 基站设备 基站设备 基站设备 **Base Station Base Station Equipment** Spare Circuit **Base Station Equipment** Equipment



Base Station



基站

Base Station

基站 Base Station Smart Power Management System for Base Stations

The smart power consumption management system of the base station installs AC and DC intelligent monitoring equipment, wireless acquisition equipment, and system management platforms on 5G macro stations and indoor sub-sites to complete power-off operations during nighttime nonbusiness hours, reduce power consumption, reduce operating costs, and improve the real-time monitoring and protection function of the power supply line status of communication equipment.

Protocol	MQTT, TCP/IP
Gateway	AWT100, AWT200
Power Instrument	ADW300, ADW210, AMC96L-E4/KC, DTSD1352-4S, AMC16(L)-DETT, AHKC, etc.
Application	Base Station

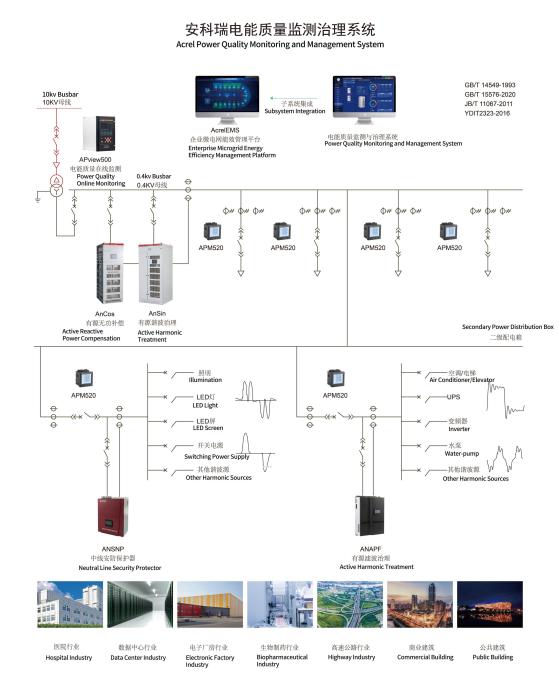
预付费云平台 Prepaid Cloud Platform



Prepaid Cloud Platform

The prepaid cloud platform is a power sales management system developed by Acrel Company and matched with electronic prepaid energy meters. It is one of the functions of IoT EMS platform. It mainly completes the parameter setting of electric energy meter, merchant electricity sale management and energy consumption management. It is easy to operate and realizes remote real-time operation and real-time monitoring of property companies.

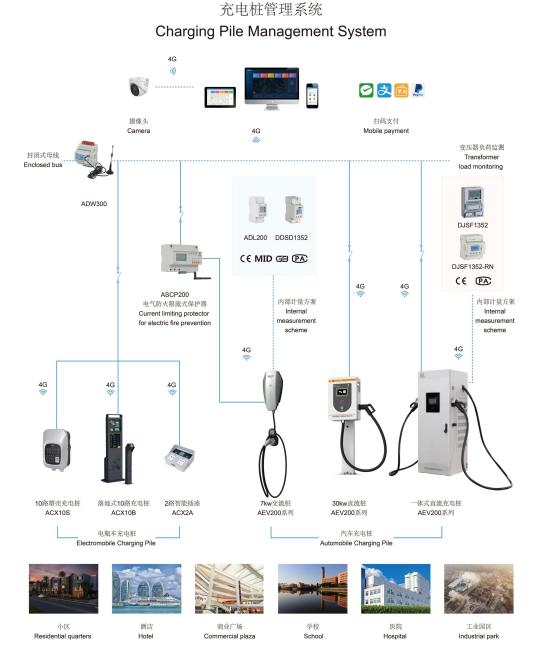
Protocol	MQTT, TCP/IP
Gateway	AWT100 , AWT200
Power Instrument	DDSY, DTSY, ADF400L, etc.
Application	Commercial Complexes, Property Groups, Industrial Parks, Industries, Offices, Universities, etc.



Acrel Power Quality Inspection and Management

Mainly to study the elimination of reactive power compensation and harmonic governance in the power supply and distribution system, suitable for the new construction, reconstruction, expansion and technical renovation projects of industrial and civil and public building electrical equipment in the reactive power compensation, harmonic suppression and comprehensive treatment.

Protocol	MQTT, TCP/IP
Gateway	ANET, AWT etc.
Harmonic monitoring equipment	APM520/APM810/APview500
Harmonic control equipment	ANSin/ANSVG
Reactive power compensation equipment	ANCos/SVC
Central line security protector	ANSNP
Application	Hospital, Data Center, Electronic Factory, Highway, Commercial Building, etc.



Charging Pile Management

It provides two charging methods of slow charging and fast charging, wallmounted and landing charging piles, and provides charging software solutions for electric vehicles. It can enjoy convenient, efficient and safe charging services anytime and anywhere. The charging methods are diversified, and convenient and efficient and safe charging services are provided for car owners and users.

Protocol	MQTT, TCP/IP
Electromobile charging pile	ACX10S/ACX10B/ACX2A
EV charging pile	7kw/30kw/60kw/120kw AEV200 series
AC Power Instrument	ADL200/ADL400/ADW300
DC Power Instrument	DJSF1352-RN/PZ72L-DE
Current limiting protector	ASCP200
Application	Community, Hotel, Commercial Plaza, Campus, Hospital, Industrial Park.

AcrelEMS-IDC数据中心能效管理系统 AcrelEMS-IDC Data Center Energy Efficiency Management System

AcrelEMS-IDC数据中心能效管理平台 AcrelEMS-IDC Data Center Energy Efficiency Management Platform TCP/IP 网关 网关 网关 Gateway Gateway Gateway Gateway 485通讯 RS485 Communication 中压配电室 低压配电室 Low-voltage Power Distribution Room Medium-Voltage Power Distribution Roon AMB300 Bus Duct AM Series Microcomputer APView500 Power Quality ASD Switch Cabinet APM series ARB5 Arc Light Temperature Protection Device **Online Monitoring Device** Intelligent Control Multi-function Meter Measurement Protection Device 电池室 数据机房 Battery Room Data Equipment Room DC -48V DC 240V DC 336V AC 220V ATP010KT (ABAT100) ΦΦ AMC100-ZD AMC100-7A ABAT100-S-12 ABAT100-S-12 ABAT100-C ABAT100-HS - ... AMC100-FAK48 AMC100-FDK30



中压配由常





任压配由零 Low-voltage Power Distribution Room Medium-Voltage Power Distribution Room

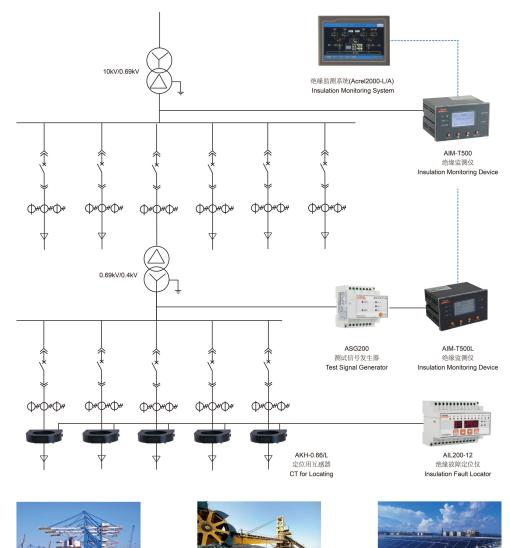
电池室 Battery Room 数据和房

AcrelEMS-IDC Data Center Energy **Efficiency Management**

AcrelEMS-IDC data center energy efficiency management system builds real-time monitoring based on high, medium and low voltage distribution systems, diesel generators, UPS and power monitoring, PUE analysis and dynamic loop monitoring based on terminal distribution system data acquisition to help data center managers understand data center energy operation, and focus on fire and electrical safety. Timely warning of anomalies to ensure stable and reliable operation of data centers.

Protocol	TCP/IP
Gateway	ANET
Power Instrument	AMC16Z, AMC100, AKH-0.66, ABAT100, ATP, ASD, APView, AMB100, AMB110, AMB300, etc.
Application	Applicable to data centers of Operators, Banks, New Media, and Internet Enterprises.

IT配电绝缘监测及故障定位系统 Insulation Monitoring and Fault Location System



采矿

Mining

可再生能湯

Renewable energy

船舶和港口

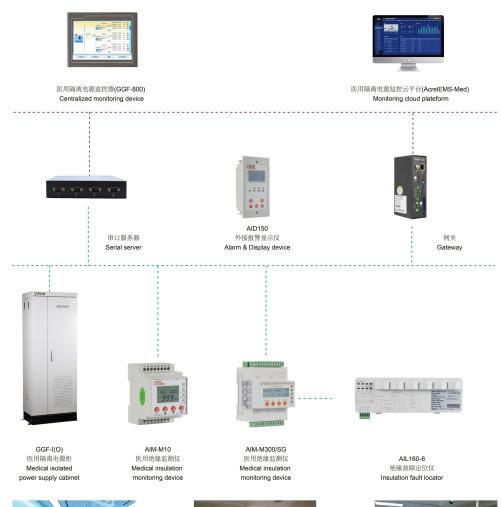
Ships and Ports

Insulation Monitoring and Fault Location

The system has multifunctions, including insulation resistance monitoring, insulation fault warning, insulation fault alarm, event recording, parameter setting, communication networking, etc. When the fault occurs, it can timely alarm and accurately locate the fault loop to remind relevant personnel to check the fault in time.

P	rotocol	Modbus-RTU
P	ower Instrument	AIM-T500L, ASG200, AIL200-12, AKH-0.66L.
A	pplication	Mine, Glass factory, Electric Furnace and Test Equipment,Ships, Metallurgical Plant, Chemical Plant etc.

医用隔离电源系统 Medical Isolated Power System



Medical Isolated Power System

Medical isolation power supply cabinet and insulation monitoring device are designed according to the different distribution characteristics of the Class II medical places to monitor the operation of medical IT system. Once an IT system fails, the electrical maintenance personnel can make a judgment within the time, and deal with it according to the field situation.

Protocol	Modbus-RTU
Power Instrument	GGF-O8G
Application	Hospital Operating Room, ICU (CCU) care unit and other important places.



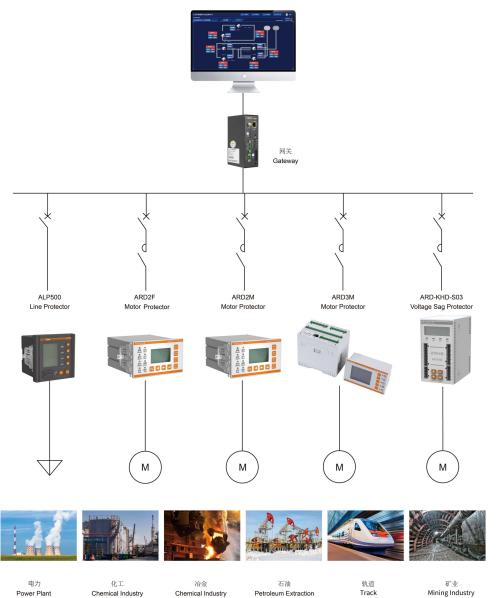
手术室 Operation Room

抢救室 Emergency Room





电机运维测控 Motor Monitoring and Controlling



Motor Monitoring and Controlling

The motor operation and maintenance measurement and control platform focuses on the industrial production site and monitors various electrical parameters data of low-voltage motor loop and feeder loop in real time, helps users complete parameter monitoring, energy consumption analysis and operation supervision of motor equipment, realizes visual management of important production equipment, and provides data basis for the construction of smart factory.

Protocol	TCP/IP
Gateway	ANET
Power Instrument	ALP, ARD2, ARD2F, ARD3, ARD3T, ARD3M ARD2M, ARD- KHD-SO3 series, etc.
Application	Power plant,Chemical Industry, Metallurgy Industry, Petroleum Industry, Raiway, Miningindustry.



Customers



Customers







Acrel Energy Management Project Of Germany Green Safe House

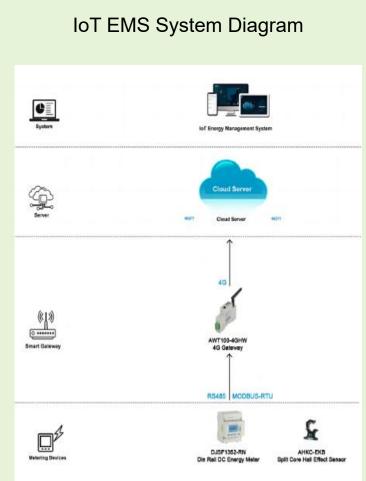


Project Overview: Client buy Acrel IoT EMS cloud system, hardware use DJSF1352-RN DC energy meter, AHKC-EKB Hall current sensor, AWT100-4GHW wireless gateway.

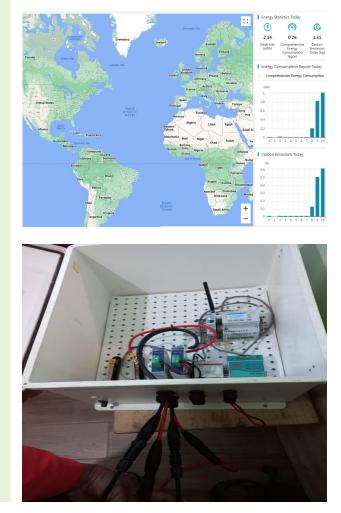
Project Amount: About \$100,000

Client : S.A.H. GmbH, EPC T.C.S. Tactical Combat Systems SA, End user

Client Website: https://sah-hamburg.de/ Related projects: Other electric power monitoring to other green house



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Acrel Acrel Cloud-1200 PV System of CLP Innovation Enterprises Limited in Hong Kong



Acrel Cloud-1200 PV System Diagram



Project Overview: Client bought Acrel Cloud-1200 PV System , hardware use Anet-1E1S1-4G and Anet-1E2S1-4G smart gateway.

Project Amount: About \$158440

Client : CLP Innovation Enterprises Limited , End user



Client Website:

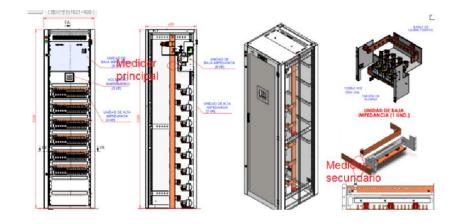
http://www.clpgroup.com

Related project: energy consumtion





Acrel Data Center Energy Monitoring Project in Peru



Project Name: Data Center Energy Monitoring Project in Peru Project

Overview: The customer purchased DC power distribution monitoring products for the data center, which were monitored locally using touch screens and connected to Huawei software via Ethernet.

Project Amount: Paid 146,070.28USD, still have about 300pcs of distribution cabinets

Client: Swichgear factory, sell and install distribution cabinet for customers

Website: emalexa.com

Related projects: INDUSTRIA EMALEXA S.A.C





Acrel AC/DC Energy Meter in EV Charger Project-Spain



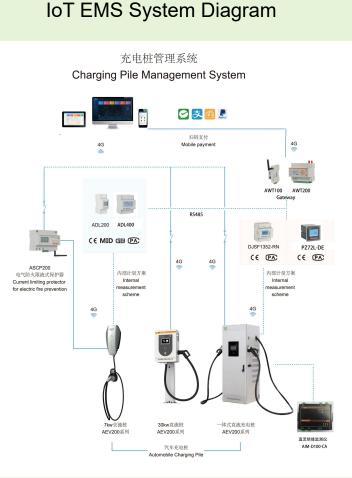
Project Overview:

Software : The myWallbox platform Hardware: DJSF1352-RN/D DC Energy Meter ADL200 Single Phase Energy Meter ADL400 Three Phase Energy Meter

Project Amount: About \$250,000

Client : Wallbox Chargers

Client Website: https://wallbox.com/ Related projects: HYPERNOVA DC EV Charger in USA







TELECOM BASE STATION

Acrel AC/DC Energy Meter in Base Station Project-Romania



Combiner l'expertise technique et l'excellence opérationnelle Us soutenors les acteurs de télécommunications à construire et à optimer efficacement leurs réseaux et à prépare le torno nouris deplement des futures technologies de communication (comusat

Project Overview:

Software : The Camusat platform Hardware: AMC16-DETT/AI DC Energy Meter ADW300W-C Three Phase Energy Meter AHKC-EKA Hall Effect sensor

Project Amount: About \$350,000

Client : Camusat

Client Website: https://camusat.com/fr/home-francais/ Related projects: 5G base station in Africa





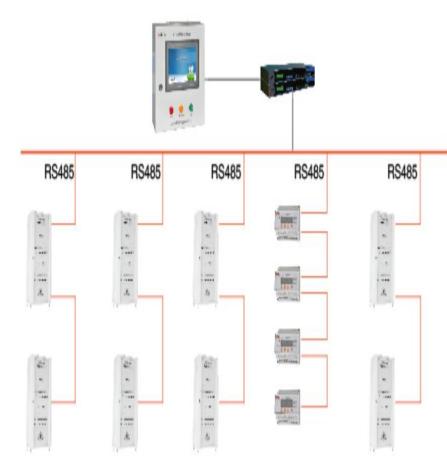




HOSPITAL

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Acrel Medical Isolation Power Supply System Application in Brazil



Medical Isolation Power Supply System www.acrel-electric.ke aaron@acrel.cn



Project Overview: Isolation Power Supply System, hardware use AIM-M10, AIM-M100, AIM-M150, AIL150-8,AID150,AID200,AIM-R100,AKH-0.66P26 Project Amount: About \$720000

Client : CSE Soluções Elétricas Ltda, EPC, Design, purchase and installation



Client Website: www.csesolucoeseletricas.com.br Related projects: industrial Insulation Monitoring Device, wireless temperature monitoring



Acrel Wireless Temperature measurement Project-Italy



AIS for MV

Distribution



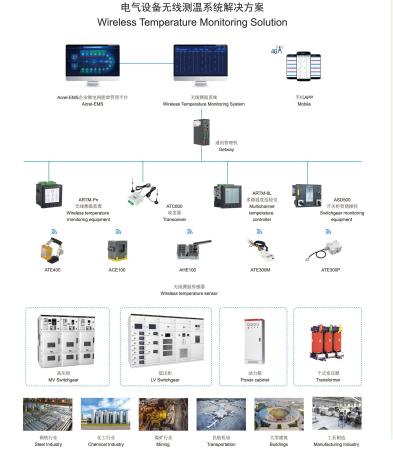
GIS for MV Distribution

Project Overview: Software : The SEL platform Hardware: ARTM-Pn Temperature Data Collector ATE series Temperature Sensor

Project Amount: About \$400,000

Client : SEL S.P.A

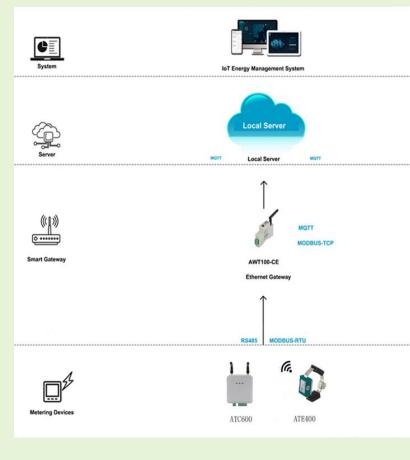
Client Website: http://www.sel-electric.com/ Related projects: Enel Green Power in Italy



Wireless Temperature Monitoring Diagram



Acrel Wireless Temperature Monitoring Project of Lotte Mart in Hanoi Vietnam



IoT EMS System Diagram



Project Overview: Client buy Acrel IoT EMS cloud system, hardware use ATE400 wireless temperature sensors , ATC600-C receiver, AWT100-CE ethernet gateway.

Project Amount: About \$100,000

Client : V.T.E.C.H Electrical Technology Co., Ltd , EPC Lotte Mart in Hanoi Vietnam, End user





Client Website: https://www.vtechelectric.vn/ Related projects: Other electric power monitoring to other Lotte Mart





INDUSTRIAL

Acrel Energy Management Project of Casa de Moneda, Chile



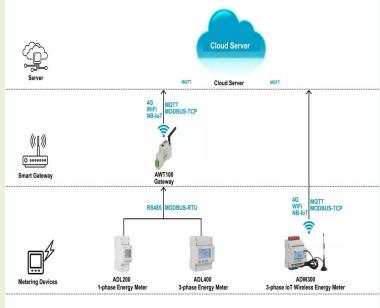
Project Overview: Client buy Acrel IoT EMS cloud system, hardware use ADW300-WF three phase wifi energy meter, AKH-0.66/K split core current transformer Project Amount: About \$50000

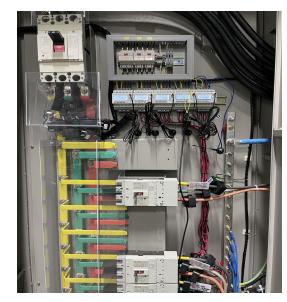
Client : Casa de Moneda, End user

Client Website: https://www.casamoneda.cl/ Related projects: Other electric power monitoring to other factories



IoT EMS System Diagram







Acrel Compressor Energy Consumption Monitoring Project in Spain



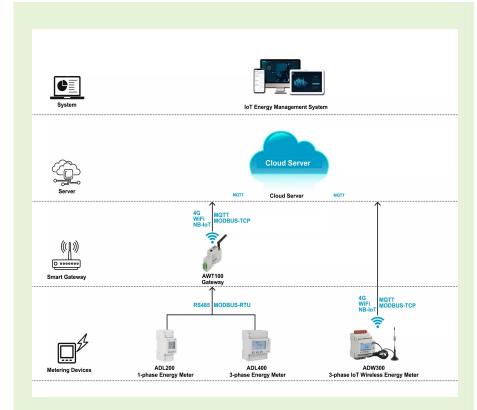
Project Overview: Client buy Acrel AEW100 LORA 868MHz wireless consumption monitoring meter, to connect with their own gateway and software monitoring system. Then the custom demand was put forward to add 5V output terminals to supply power to the external microcontroller.

Project Amount: About \$110,000 Client : PNEUMETRIX S.L.U. Client Website: https://pneumetrix.com/en/ Related projects: Energy Management System in Commercial Plaza





Acrel Energy Management Project Of LEADENCE Factory in Philippines



IoT EMS System Diagram



Project Overview:

Client buy Acrel IoT EMS cloud system, hardware use ADL400 energy meter, AKH-0.66/K split core current transformer,AWT100-CE ethernet gateway.

Project Amount: About \$100,000

Client : POWERBUILD CONST AND DEVT CORP



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ADL400

Related projects: Electric power monitoring to other factory



BUILDING

Acrel Deluxe Building Energy Management Project in UK



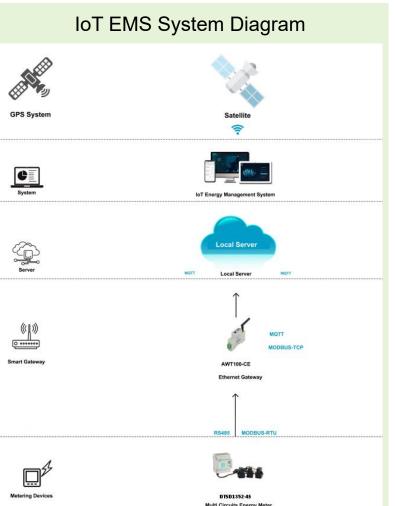
Project Overview: Client buys Acrel IoT EMS cloud system, hardware:DTSD1352-4S multi circuit energy meter, AKH-0.66/K split core current transformer,AWT100-CE ethernet gateway.

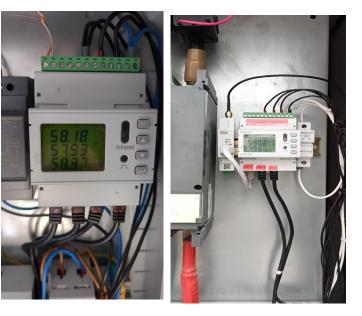
Project Amount: About \$186,000

Client & End user: Deluxe House

Client Website: https://www.bydeluxe.com/

Related projects: EMS for other buildings





SP2-CH	3 DB/WH/M/P WH Mezz MFRs Power	Norm
-	Gateway ID: 12304130660005	
	Meter Address: 12304130660002_3	
-111	Meter Type: DTSD1352-4	Deta
MAIN II	NCOME 2 - SP3 Audio WH	Norn
	NCOME 2 - SP3 Audio WH Gateway ID: 12304130660008	Norm
		Norm

Acrel Energy Management System of CISCO USA

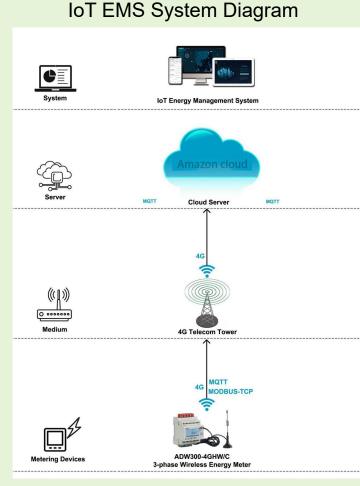


Project Overview: Software : Acrel IoT EMS System Hardware: ADW300-4G wireless energy meter AKH-0.66/K split core current transformer

Project Amount: About \$200,000

Client : SHANGHAI BINRUI INDUSTRY CO.,LTD End user: CISCO SYSTEMS INC

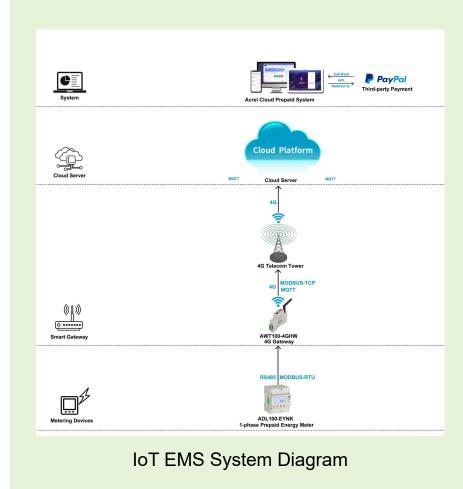
Client Website: http://binrui-sh.com/ Related projects: CISCO EMS System in Asia areas







Acrel South Africa Apartment & Industrial Zone Prepaid & Postpaid Project





Project Overview: With local contractor customer for providing the complete online prepaid&pospaid solution for local apartment and industrial zone [related product: ADL100-EYNK, AWT100-4GHW, ADW300-4GHW, etc]

Project Amount: About \$140,000

Client : AIT Group [Contractor]







PETROLEUM

Acrel Gas Station Energy Monitoring Project of Singapore

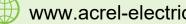


Project Overview: Clients want to manage the water and electricity in the gas station, and monitor the temperature at the same time. They can view the data remotely through the platform, and the alarm of dangerous situations such as overcurrent and overvoltage will also notify the administrator in time.For this application, we provide multi channels energy meter, water meter, temperature sensor to connect to Acrel IoT EMS platform.

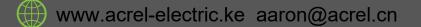
Project Amount: About \$250,000 Client: SD SOLUTIONS PTE. LTD Website: https://sdsolutions.com.sg/ Related projects: Smart Lighting System for building Project in Dubai













Acrel Energy Management Project Of DARWIN PORT in Australia

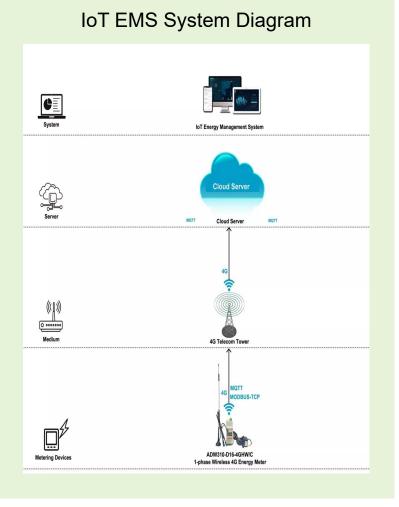


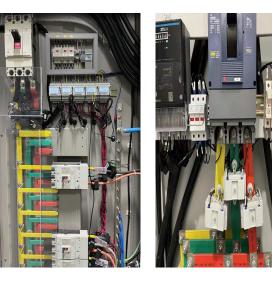
Project Overview: Client buy Acrel IoT EMS cloud system, hardware use ADW310-4GHW, ADW300-4GHW wireless energy meter, AKH-0.66/K split core current transformer.

Project Amount: About \$100,000

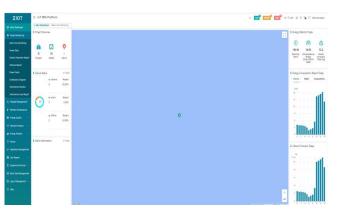
Client : Nakers Marine and Industrial Services , EPC DARWIN PORT OPERATIONS PTY LTD, End user

Client Website: https://dcs-tr.com/ Related projects: Other electric power monitoring to other MSC ship Client Website: https://darwinport.com.au/ Related projects: Other electric power monitoring of other ports



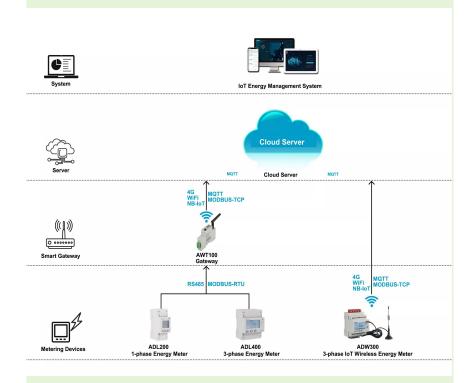


IoT Platform Site Photo

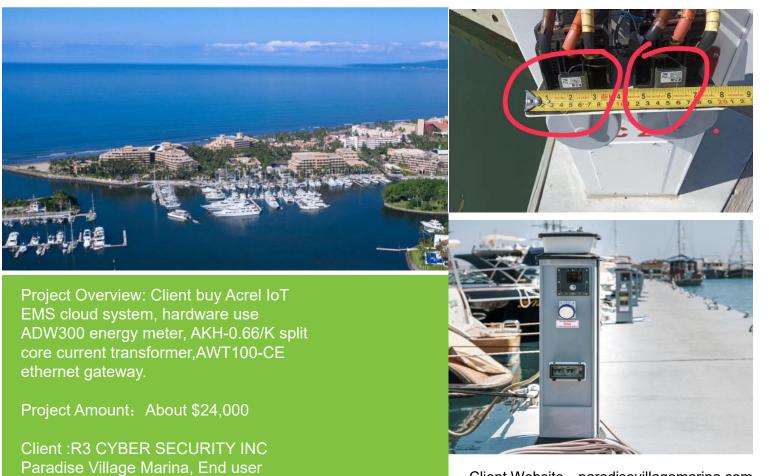


Acrel

Arcel Energy Management System of Marina Charging Pile in Spain



IoT EMS System Diagram



Client Website: paradisevillagemarina.com Related projects:similar application





SHIPPING

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Acrel Energy Management Project Of MSC Marine in Turkey

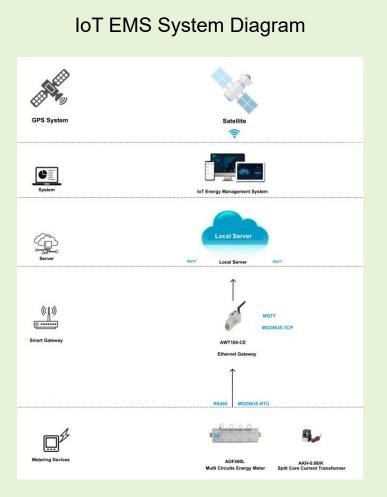


Project Overview: Client buy Acrel IoT EMS cloud system, hardware use ADF400L multi circuit energy meter, AKH-0.66/K split core current transformer,AWT100-CE ethernet gateway.

Project Amount: About \$110,000

Client : DCS shipping company , EPC Mediterranean Shipping Company S.A, End user

Client Website: https://dcs-tr.com/ Related projects: Other electric power monitoring to other MSC ship Client Website: https://dcs-tr.com/ Related projects: Other electric power monitoring to other MSC ship

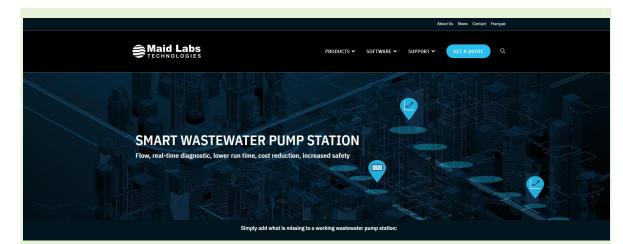






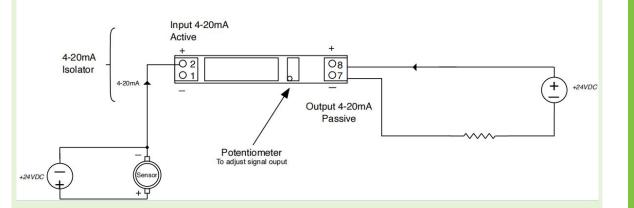
Acrel

Application of signal isolator in water treatment control system in Canada









Signal isolator wiring scheme

Project Overview:

The customer needs the signal isolator to be used with their own brand of flow meter

Project Amount: About \$100,000

Client : POWERBUILD CONST AND DEVT CORP



Website : https://www.maidlabs.com Related projects: Split core current transformer use for water treatment factory





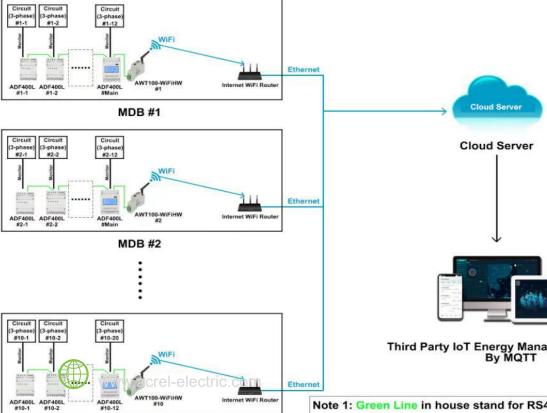
Arab Bank Jordan Branch in Jordan

Project Name: Arab Bank Jordan Branch

Project Overview:

Client buy Acrel IoT wireless energy meter to upload the values to their own Cloud Platform, hardware use ADF400L, AWT100

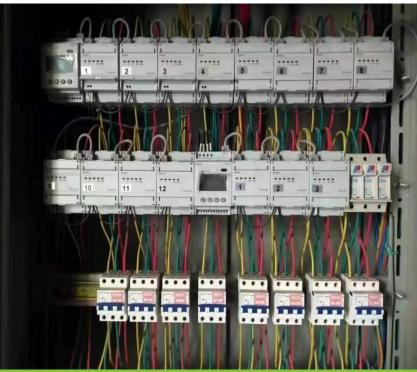
Project Amount: About \$120,000



MDB #10

Third Party IoT Energy Management System By MQTT

Note 1: Green Line in house stand for RS485 Wired Communication (MODBUS-RTU) Note 2: 1 WiFi Gateway connect multiple energy meters and send data further by WiFi



Client : Algebra Intelligence,

System Integrate Company Client Website: https://algebraintelligence.com/

Related projects: energy consumption monitoring

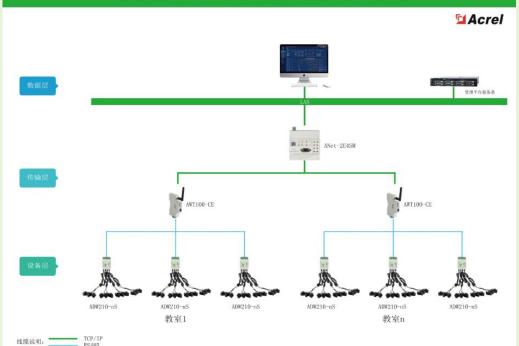


CAMPUS

Acrel

Acrel-3000 electric energy management system project for schools in Hong Kong

安科瑞ACREL-3000/WEB电能管理系统架构示意图



Project Overview: In order to promote the construction of green campuses, the Electrical and Mechanical Services Department of the Hong Kong Special Administrative Region Government launched a tender to carry out energy-saving renovations for public schools in Hong Kong.

Product: AWT100-CE、ANet-2E4SM、ADW210-D16

Project Amount: About 4.5 million RMB

Client : Jetson Technology Limited

Client Website: http://jetson.hk/

Related projects: power consumption system for shopping mall in Malaysia











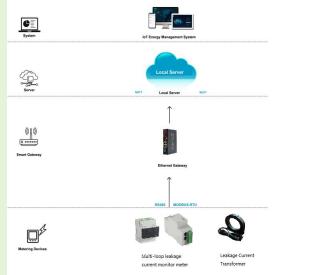
Acrel Street Light Leakage Monitor Project of Norway



Project Overview: Client buy Acrel ADW200-MTL multi-loop leakage current monitoring meter, with AKH-0.66/L leakage current transformer, to connect with client' own gateway and software monitoring system.

Project Amount: About \$154,000 **Client :** Datek Light Control AS

Client Website: https://www.datek.no/en/city/light-control **Related projects**: Earth Leakage Relay in Intelligent Building

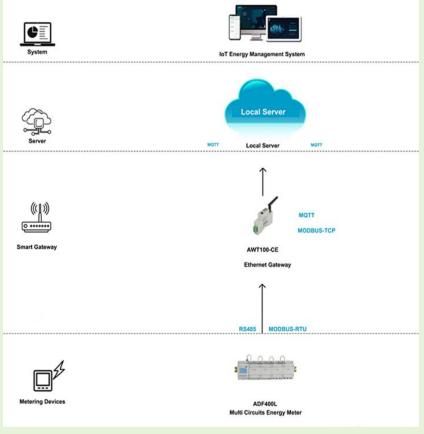




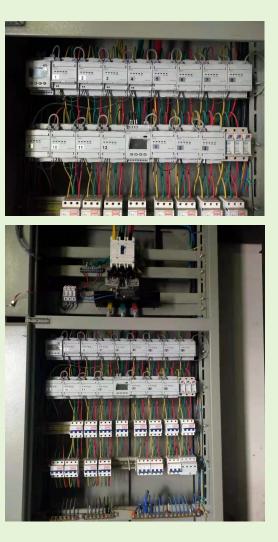




Acrel Energy Management Project Of Kallang Tennis Center, Singapore



IoT EMS System Diagram



Project Overview: Client buy Acrel IoT EMS cloud system, hardware use ADF400L multi circuit energy meter, AWT100-CE ethernet gateway.

Project Amount: About \$100,000 Client : E-TECH SMART SOLUTIONS PTE LTD , EPC

Kallang Tennis Center, Singapore, End user Client Website: https://www.e-tech.com.sg/ Related projects: Other electric power monitoring to other Kallang Tennis Center, Singapore



ACREL EXHIBITION GLOBAL 2023

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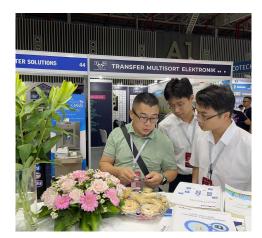
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Websites



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