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Acrel

ANet-1E2S1

ANet-1E2S1
Smart IoT Gateway

General

Embedded Linux platform, high performance, low power consumption,real-time monitoring, Convenient management.

■ Hardware Excellence

The whole machine through EMC test level 4 test.

All communication terminals 2kV power frequency withstand voltage test.

Double wide voltage (DC / AC 85V ~ 265V) reverse connection protection.

Built-in 8G SD card extensible plug-and-play electronic hard disk.

■ Flexible and Convenient Management

Flexible, efficient and reusable custom template library configuration mode.

Meter information automatically generated by key clicked.

Supports optional and fully optional single-table structure forwarding data sets.

Support for batch operations, can be filled with step size of efficient configuration.

■ Stable and Efficient Software

Up to 64 metering equipment.

Support local and remote configuration maintenance and real-time data monitoring.

Can support multiple data centers to upload data using different protocols.

Support breakpoint continuation, data XML format and AES encryption.

ANetOS System level anti-damage protection algorithm provides system operation, upgrade, update configuration and other error protection, automatic recovery capability.

Support 4G routing network to provide DHCP intelligent access judgment.

Product Summary

ANet-1E2S1 is a universal intelligent communication management machine developed by Acrel Electric Co., Ltd., which has Full-Netcom wireless networking function. It is suitable for the national public authorities, enterprises and institutions, public institutions, residential commercial buildings, hotels and restaurants, etc. It can meet the requirements of water, electricity, gas, oil, cooling capacity, heat and other forms of consumption and energy consumption measurement data collection.

The device can be used in the following application scenarios：

■ Power monitoring system

■ Fire protection system

■ Building energy system

■ IoT system

■ Power quality system

■ Electricity demand side system

■ Remote prepaid system

■ Intelligent building system

Installation and operation instruction

Hardware

Technical Data		Index
Power	Voltage	AC 85 V ～265 V
	Consumption	≤10W
Processing element		ARM32 digit Free scale ARM9 i.MX2xx 454MHz
Inner board memory		64MB DDR2 internal memory + 128MB NAND Flash + 8G SD Card Electronic hard disk
Serial interface		Two channels coupling isolation RS485
Ethernet interface		1 channel 10/100 self-adaption capacity
SD card interface		Supports SD/MMC memory cards of not less than 512 M, supports hot-plug and plug-and-play breakpoints to continue data storage
Safety		Power frequency withstand voltage: AC 2kV 1min between communication terminal and auxiliary power supply
		Insulation resistance: input, output to shape>100MΩ
Environment		Working Temperature：-20℃～+55℃
		Storage Transport Temperature：-25℃～+70℃
		Relative Humidity：≤95%（+25℃）
		Altitude：≤2500m
EMC Testing		IEC61000-4-2 ESD immunity test Class 4
		IEC61000-4-4 Resistance test of electric fast transient pulse group Class 4
		IEC61000-4-5 Surge (shock) immunity test Class 4
		IEC61000-4-6 Conductive disturbance immunity of RF field induction Class 3

Software

Configuration	C/S architecture ANetCM configuration management software, open template management, plain text or excel engineering information management
Fast update	ANetOS provides 1-3 seconds extreme speed configuration update 3-7 seconds firmware upgrade update
	If the error configuration is updated, the loss-proof algorithm automatically returns the device to the pre-update configuration state within 3-5 seconds
	If the upgrade has a problem firmware, the damage prevention algorithm automatically returns the device to the pre-upgrade state within 5-10 seconds
Network communication mode	Socket mode, support XML format compression upload, provide AES encryption and MD5 identity authentication and other security requirements
Data acquisition cycle	Second level custom configuration
Automatic upload cycle	Second, minute custom configuration, depending on the upload protocol
Protocol	In addition to the general standard protocol, it can support the customized development of non-standard protocol on acquisition side and host computer
On time with upper PC	Keeping in sync with upper PC in real time
Break point continues	Real-time detection, upload failure to automatically save the data to be transmitted, including 8G SD Card, to support external storage media plug and play and space expansion, network recovery data to be automatically uploaded
Historical Inventory （Break point continues）	Storing the history library according to the automatic upload cycle, Can customize the history database data save days, due first in first out, Storage space automatic anti-overflow near-overflow first in first out
Protocol support	GBT19582-2008（Modbus、ModbusTCP）、DL/T645-1997、DL/T645-2007、CJT188-2004、IEC60870-5（101、103、104）、MQTT、Support HTTP(s)、XML、Json forwarding format etc.

Installation and operation instruction