

ANet-1E2S1 Smart IoT Gateway

——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, DC 12V ~ 36V)
 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

∳IoT system

→Building energy system

Fire protection system

*Power quality system

*Electricity demand side system

Remote prepaid system

→ Intelligent building system

Hardware				
Technical Data		Index		
Power	Voltage	AC 85 V \sim 265 V 、 DC 12 V \sim 36 V (instruction when ordering)		
	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		
		Power frequency withstand voltage: AC 2kV 1min between communication terminal and		
	Safety	auxiliary power supply		
	-	Insulation resistance: input, output to shape>100MΩ		
		Working Temperature: -20°C∼+55°C		
		Storage Transport Temperature: -25°C∼+70°C		
En	vironment	Relative Humidity : \leq 95% (+25°C)		
		Altitude: ≤2500m		
		IEC61000-4-2 ESD immunity test Class 4		
		IEC61000-4-4 Resistance test of electric fast transient pulse group Class 4		
EMC Testing		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	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	Storing the history library according to the automatic upload cycle,
(Break point	Can customize the history database data save days, due first in first out,
continues)	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), DGJ08-2068-2012 SHANGHAI BUILDING ENERGY CONCUMPTION, DGJ32/TJ111-2010 JIANGSU BUILDING ENERGY CONSUMPTION, ELECTRICITY DEMAND SIDE (CUSTOMIZED), REMOTE PREPAID, POWER MAINTAINANCE, STRING-NET TRANSIMISSION etc.