ANet Smart IoT Gateway

Author: Shelly Zhang
E-mail: shelly@acrel.cn
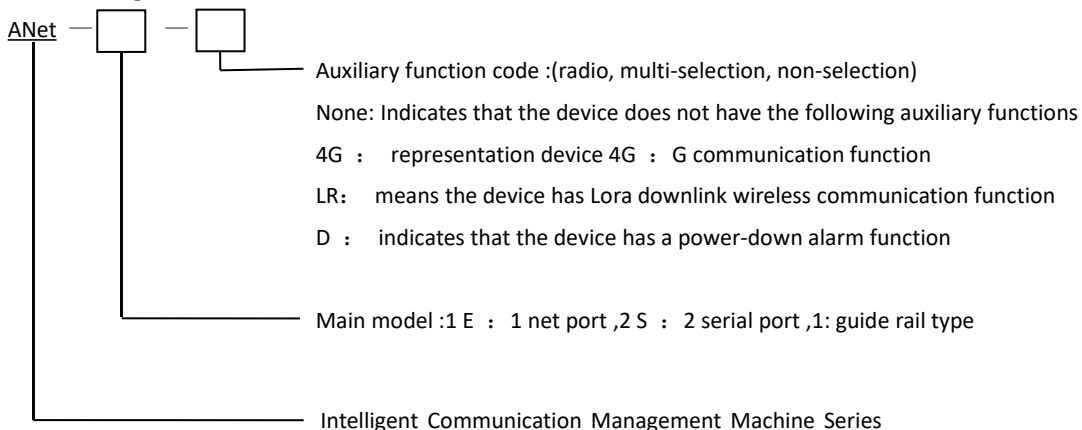Mobile:+86 18702111813
Website: www.acrel-electric.co.za

1.1 ANet-1E1S1/1E2S1Smart IoT Gateway

● overview

ANet-1E1S1/1E2S1 is a general intelligent communication management machine based on embedded Linux platform specially designed for Internet of things applications. It can meet the needs of water, electricity, gas, oil, cold quantity, heat and energy consumption metering data collection.

High integrated ARM chip is used in the product. it has the characteristics of high performance, low power consumption, real-time data acquisition, real-time data monitoring, convenient equipment management and so on. it is widely used in building energy consumption system, power monitoring, power demand side, power grid integrated energy platform, and so on.

● Model Description

ANet —☐—☐

Auxiliary function code :(radio, multi-selection, non-selection)

None: Indicates that the device does not have the following auxiliary functions

4G : representation device 4G : G communication function

LR: means the device has Lora downlink wireless communication function

D : indicates that the device has a power-down alarm function

Main model :1 E : 1 net port ,2 S : 2 serial port ,1: guide rail type

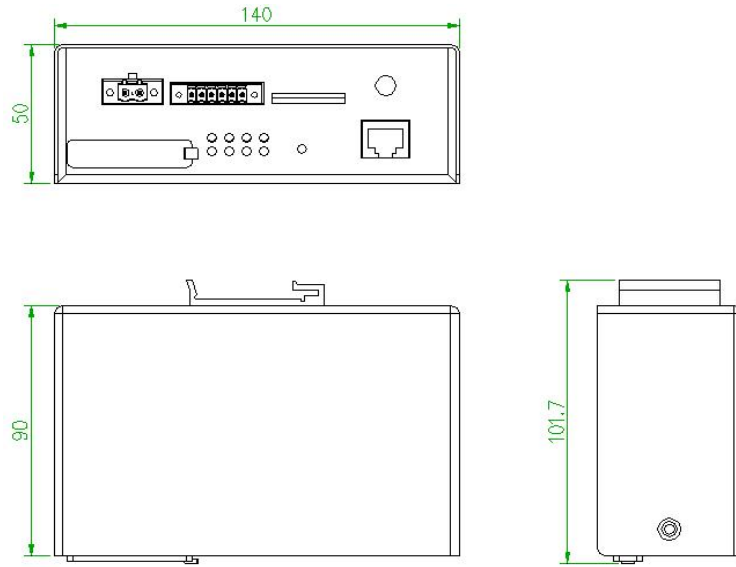Intelligent Communication Management Machine Series

Note :1.4 G function standard external SMA sucker antenna, standard line length 1.5 meters.

2.Lora function standard external sucker antenna, standard line length 2 meters.

● technical indicators

Model	ANet-1E1S1	ANet-1E1S1-LR	ANet-1E1S1-4G	ANet-1E1S1-4G/LR	ANet-1E2S1	ANet-1E2S1-LR	ANet-1E2S1-4G	ANet-1E2S1-4G/LR
uplink	1 Ethernet	1 Ethernet	1 Ethernet, 4 G 1	1 Ethernet, 4 G 1	1 Ethernet	1 Ethernet	1 Ethernet, 4 G 1	1 Ethernet, 4 G 1
Down	1 RS485 Road	1 RS485、Road 1 LORA Road	1 RS485 Road	1 RS485、Road 1 LORA Road	1 RS485 Road	1 RS485、Road 1 LORA Road	1 RS485 Road	1 RS485、Road 1 LORA Road
Lora wireless operating frequency	/	410MHz~525 MHz	/	410MHz~525 MHz	/	410MHz~525 MHz	/	410MHz~525 MHz
Power supply voltage	AC/DC 220V (85-265V)							
Frequency and Power Consumption	50Hz (45~65 Hz),10 W power consumption							
Security	Power frequency withstand voltage :1 min: 2kV (220V equipment),1.5 kV (24V equipment)							
	Insulation resistance :100 MΩ of input and output > to housing in general test atmosphere							
Environment	Operating temperature :-20℃~+55℃ Storage transport temperature :-25℃~+70							
	Relative humidity :≤95%(+25℃) Altitude :≤2500							
RS485 Serial	1-way coupling isolation				Two-way coupling isolation			
RJ45 network ports	10/100 M adaptive capacity							
2G/3G/4G	/	/	4 mode (2 G/4G) all Netcom	4 mode (2 G/4G) all Netcom	/	/	4 mode (2 G/4G) all Netcom	4 mode (2 G/4G) all Netcom
Other interfaces	TF card standard slot, support storage extension, breakpoint continuation							
Electrical performance	IEC61000-4-2 ESD immunity test Class 4							
	Class 4 immunity test of IEC61000-4-4 fast transient pulse group							
	IEC61000-4-5 surge (shock) immunity test class 4							
	IEC61000-4-6 radiation electromagnetic field interference test							
Agreement support	Equipment side: ModbusRtu、ModbusTCP、DL/T645-1997、DL/T645-2007、CJT188-2004、OPC UA, etc; Main station side: ModbusTCP(master, slave),104(master, slave), DGJ08-2068-2012 Shanghai building energy consumption, DGJ32/TJ111-2010 Jiangsu building energy consumption, Yangzhou, Changzhou, Hangzhou, Guangxi Hechi and other provinces and cities energy consumption, Ningxia power demand side, Anke Rui Yunwei cloud, prepaid cloud agreement, Huayun 104 agreement, SNMP、MQTT agreement, etc; Equipment side + main station side: support network transmission (serial server mode), edge computing (virtual data summation, data secondary calculation) and so on; Support Ankeri ACR、PZ、AMC、APM、ADW、AEW、DTSD and other series of instrument data acquisition.							

● dimensions

●System diagram