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AMC16-DETT Manual

BRIEF INTRODUCTION

Base station dedicated DC energy meter AMC16-DETT is specially designed for base stations where have sharing requirements, and switch power supply is without the function of sub-user metering. The meter could measure 6 circuits DC energy, and supply working current to the matched hall sensors. Meanwhile, it can realize zero drift calibration by upper computer software. have the functions of telemetering,teleindication,teleadjusting, metering at real time, energy quality abnormal alarm, data storage and processing, data interaction. This meter can measure DC power consumption of **three operators,** providing detail datas for base station.

MODEL

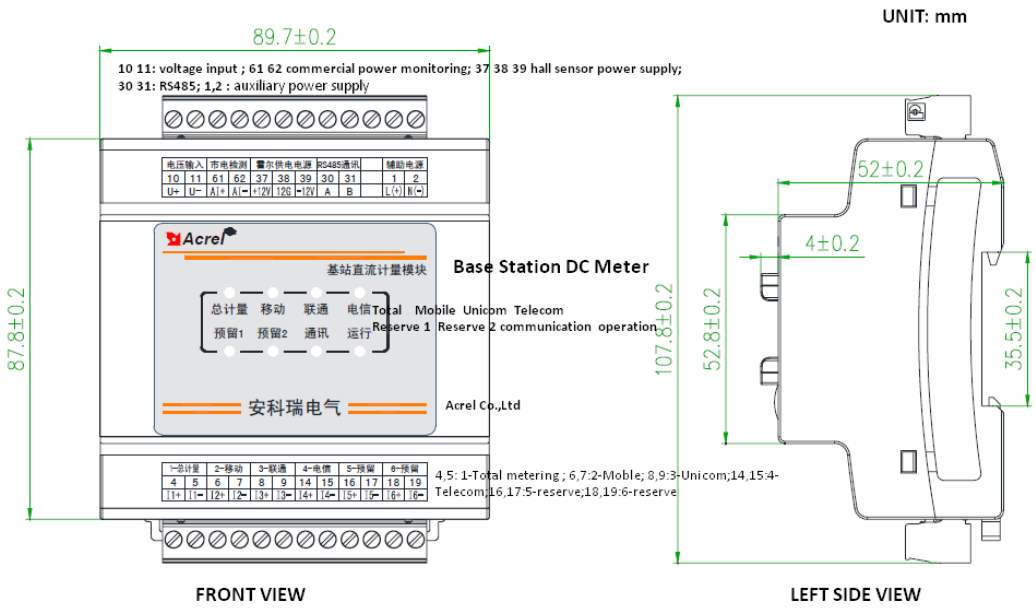
NAME	MODEL	INSTALLATION
Base station DC energy meter	AMC16-DETT	35mm din rail

SPECIFICATIONS

Technical parameter		Index
input	DC rated voltage	1 channel: -48VDC
	DC current	6 channels hall sensors: total 200A/5V, China Telecom, China Mobile, China Unicom and the 1st channel reserve 50A/5V, 2nd channel reserve 100A/5V.
	Commercial power monitoring	1 channel: 0-5VDC
	Overload capacity	Voltage:1.2times continued,2 times continued 1s; Current: 1.2 times continued,10 times continued 1s.
Accuracy (superposition hall sensors)		1%In≤I≤10%In error±2.5%; I>10%In error±2%
Measurement resolution		Voltage output accuracy 0.01V; current output accuracy 0.01A; power output accuracy 0.01kw; energy output accuracy 0.01kwh
functions	Basic function	Monitor device system time, total voltage, output total current, power, energy, each channel voltage, current, power, energy; LED indicator display;485 communication
	Metering function	Start current: under rated voltage, when the load current value of the meter doesn't exceed 1% of the max. current, the meter starts. Shunt running current: when there is no current in the current circuit of the meter, and 85%-125%of the rated voltage is applied on the voltage circuit, the calculator shall not have more than one digital change
	Alarm function	DC voltage output low alarm,DC voltage output high alarm,one power down alarm, module voltage loss alarm, metering branch error alarm, internal program error alarm, clock error alarm, memory failure alarm, AC input power failure alarm

	Timing function	support broadcast timing, could remote timing to the meter through RS485 communication.
	Communication	Single channel RS485, baudrate 9600bps, can be set to 1200BPS, 2400bps, 4800bps. Communication protocol: standard or custmized
	Hall sensor power supply	Power supply output:+12V/100Ma, -12V/50mA
	Clock accuracy	≤0.5S/d(23℃), ≤1S/d(-20℃-60℃),
Auxiliary power supply	Voltage range	-40V~-60VDC
	Power consumption	Whole device≤2W(no hall power supply output)
Storage		It has the storage function of historical power data and historical alarm information, and the memory is 2MB
Insulation resistance		≥40MΩ
environment	Temperature	Working : -20℃~+60℃; storage:-40℃~+70℃
	Humidity	≤98% no condensation, no corrosive gas place
	Altitude	≤4000m
Protection level		IP20
Material flame retardent		Terminal glow wire temperature 960℃±10℃ ,shell glow wire temperature 650℃±15℃
installation		Standard 35mm din rail
Lightning protection	Voltage input (differential mode)	Peak value 5kA
	Auxiliary power supply (differential mode)	Peak value 5kA

DIMENSION



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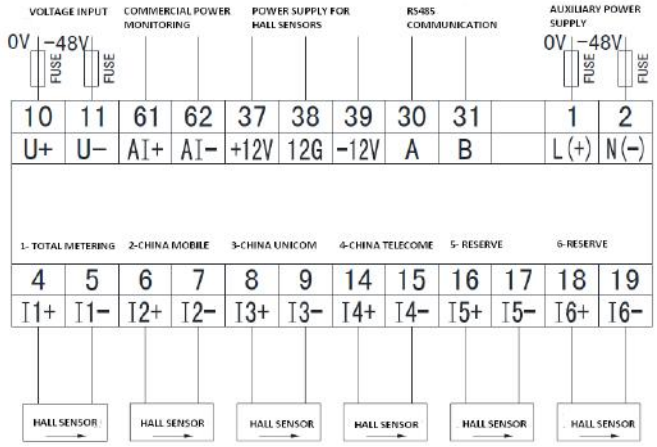
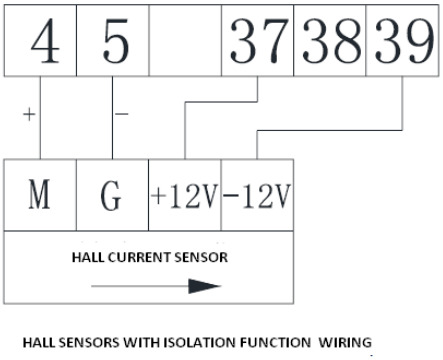
INSTALLATION AND WIRINGS



Note: arrow direction should be the same with current direction marked on the sensor .



HALL SENSORS WITH ISOLATION FUNCTION WIRING

1. input voltage should not be higher than 120% of product's rated input voltage, must install 1A fuse at the voltage input terminal.
2. Current input should use external diverter or hall sensor.
3. To ensure the accuracy,the DC meter should used together with Acrel hall sensors, the wiring length between sensors to meters should <3m.
4. Advise use three core shielded wires as communication connection wires. Each core >0.5mm^2 connect A,B, Connect shielding layer to earth, and keep communication line away from strong electric cable or other strong electric field environment during wiring
5. The hall sensor opening locking screw must be tightened to ensure the closed-loop tightness of the sensor

RECOMMEND HALL SENSOR

