

能耗篇

Energy Consumption

Electricity metering technology solution/component manufacturer
电能计量技术方案/组件提供商

ELECTRICITY METERING TECHNOLOGY SOLUTION COMPONENT PROVIDER

电能计量技术方案/组件提供商



管理云平台
Cloud Platform



服务器
Server



配电柜
Power Distribution
Cabinet

太阳能光伏板
PV Module



逆变器
Inverter



储能电池
Energy storage
battery

电网
Grid



家庭负载
Home Load

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ENTERPRISE PROFILE

企业简介

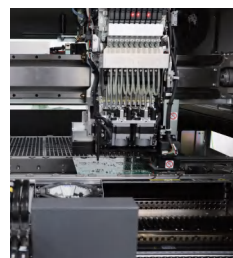
ELECTRICITY METERING TECHNOLOGY
SOLUTION COMPONENT PROVIDER
电能计量技术方案/组件提供商

Shenzhen Jiansiyan Technologies Co., Ltd. was founded in 2009, focusing on the research and development of electric energy metering technology, is a high-tech enterprise committed to providing professional one-stop services from technical solutions to related hardware manufacturing. Since its establishment, Jiansiyan has developed more than 300 kinds of products such as AC/DC energy metering module, solar energy meter, Internet of Things WiFi meter, smart PDU meter, smart gateway, electric vehicle charging motherboard, etc.

For more than 16 years, we have been adhering to the values of technological innovation, excellent quality and excellent service, providing technical solutions and products for domestic and foreign partners in various industries.

深圳市健思研科技有限公司是一家专业从事“电测”“电传”“电控”技术研发的国家高新技术企业，坐落于高科技的创新前沿地区——深圳市光明区。公司成立于2009年注册资金1010万，于2014年获得“国家高新企业认证”“软件企业认证”以及商务部颁发的“3A”级企业认证。公司成立至今已经积累了八大类三百种产品；涉及充电桩及管理系统、嵌入式电能计量模块、电测仪器、仪表，智能PDU、消防火灾报警、消防风机控制、能耗分析、分相电能计量等领域。主要合作伙伴均为行业内龙头企业，上市公司。公司50%以上产品属于技术创新类产品，处于行业领先地位；50%产品属于客户定制开发，也属于业内领先（知识产权不归健思研所有）。

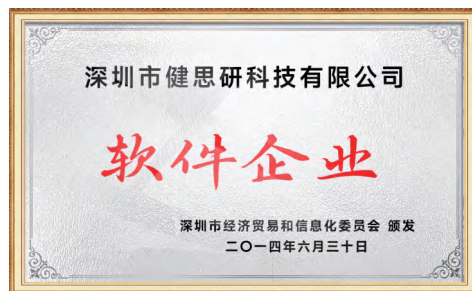
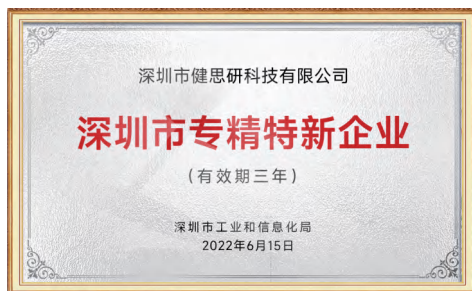
公司愿景：以科技驱动创新，以品质赢得信任，成为全球领先的电能计量解决方案提供商。



荣誉 HONOR

潜心研发并拥有相关结构、外形和发明专利
Dedicated research and development with relevant structure, shape and invention patents

企业荣誉 Enterprise Honour



发明专利 Invention Patents

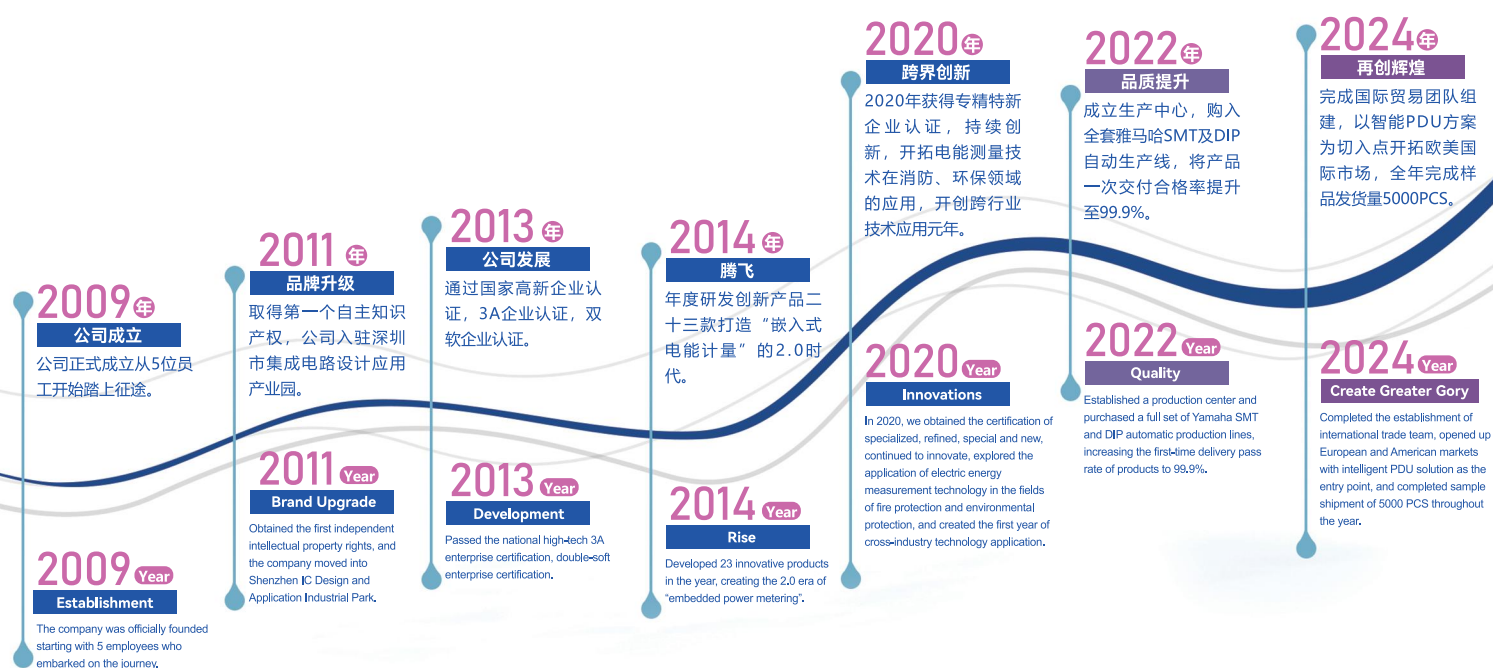


质量认证 Quality Certification



携/手/同/行/再/创/辉/煌
WITNESSING 16 YEARS OF TRIALS AND HARDSHIPS
WE ARE ALWAYS ON THE ROAD

历程 发展历程 DEVELOPMENT HISTORY



01

单相电能计量模块 SINGLE-PHASE ENERGY METERING MODULE

JSY-MK-163T 单相电能计量模块(TTL通讯)
Single-phase energy metering module (TTL)

JSY-MK-194T/194G 单相两路电能计量模块(TTL通讯)
Single-phase two-channel energy metering module (TTL)

JSY1003H/JSY1003F 单相电能计量模块(TTL通讯)
Single-phase energy metering module (TTL)

JSY1017 单相电能计量模块(TTL通讯)
Single-phase energy metering module (TTL)

JSY1050 单相电能计量模块(TTL通讯)
Single-phase energy metering module (TTL)

JSY1009 单相电能计量模块(RS485通讯)
Single-phase energy metering module (RS485)

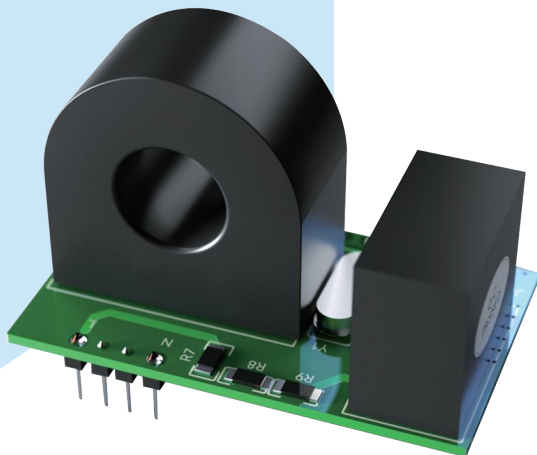
JSY-MK-193 单相两路电能计量模块(RS485通讯)
Single-phase two-channel energy metering module (RS485)

JSY-MK-149 单相导轨表(RS485通讯)
Single-phase energy meter (RS485)

JSY-MK-1039 单相电能采集器(4G/RS485通讯)
Single-phase energy meter (4G/RS485)

JSY-MK-163T

SINGLE-PHASE ENERGY METERING MODULE (TTL)
单相电能计量模块(TTL通讯)



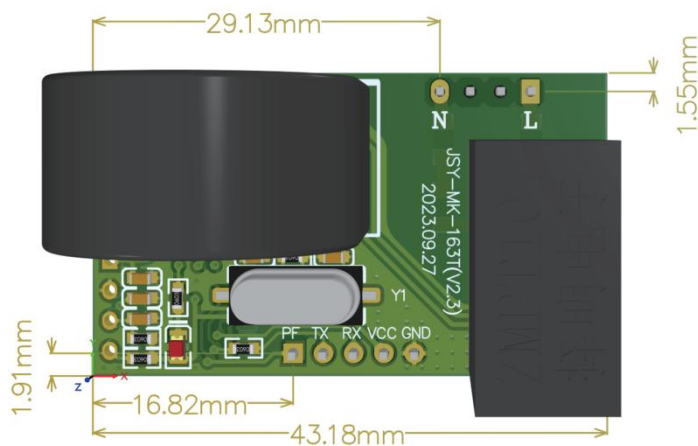
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	TTL/Modbus~RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA~50A AC 20mA~100A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	板载CT: 7.5mm ID On-board CT: 7.5mm ID 外接分芯式CT: 16mm ID External split-core CT: 16mm ID
安装方式 Installation	嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

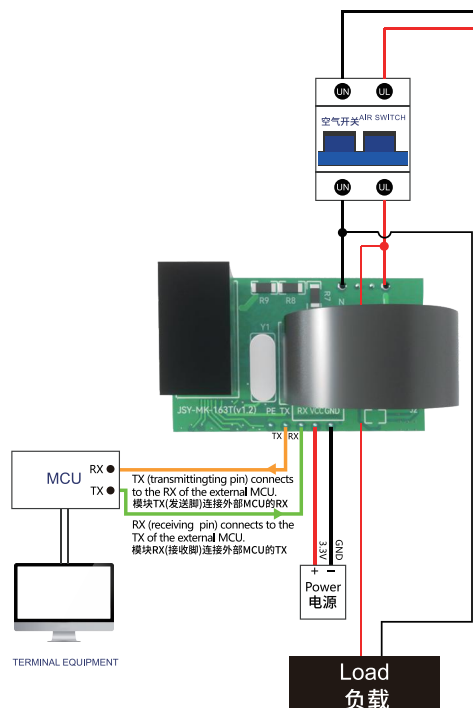
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
L	火线 Live wire	被测电压火线接线口 Measured voltage live wire connection port
N	零线 Neutral wire	被测电压零线接线口 Measured voltage neutral wire connection port
PF	输出 Output	有功电能校验脉冲输出, 默认状态低电平输出, 一般不需接此脚, 但要留出针脚位置. Active energy verification pulse output, low level output by default, generally does not need to be connected to this pin, but the pin position must be reserved.
TXD	输出 Output	模块TTL电平发送 Module TTL level sending
RXD	输入 Input	模块TTL电平接收 Module TTL level reception
V+	电源+ Power supply +	计量模块供电脚, 供电电压: 3.3V Metering module power supply pin, supply voltage: 3.3V.
V-	电源- Power supply -	电源地 Power ground

尺寸图/Dimensional drawing



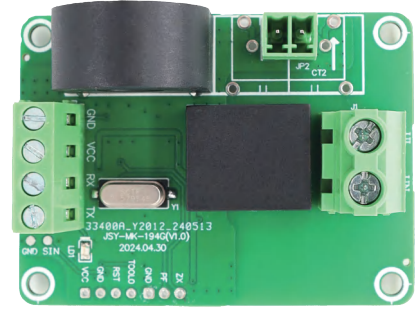
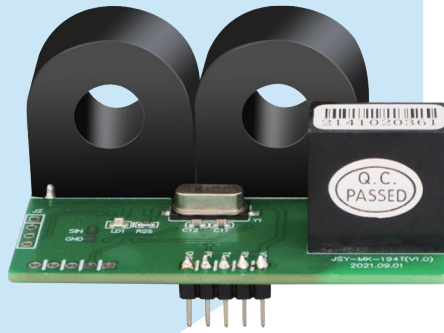
接线示意图/Wiring diagram



JSY-MK-194T

JSY-MK-194G

SINGLE-PHASE TWO-CHANNEL ENERGY METERING MODULE (TTL)
单相两路电能计量模块(TTL通讯)



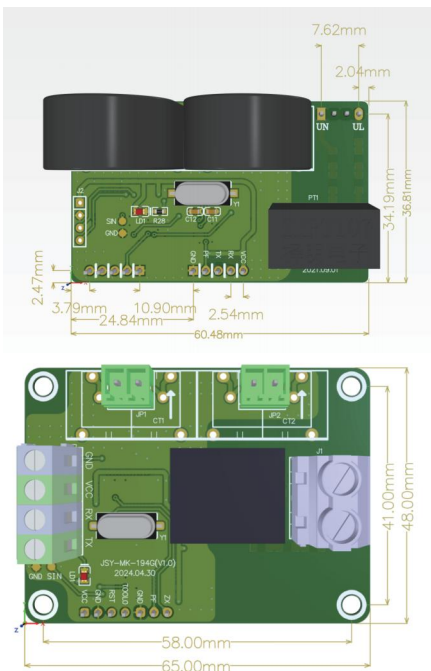
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	TTL/Modbus-RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA~50A AC 20mA~100A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	板载CT: 7.5mm ID On-board CT: 7.5mm ID 外接分芯式CT: 16mm ID External split-core CT: 16mm ID
安装方式 Installation	194T-嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm 194G - 螺丝孔, 固定Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

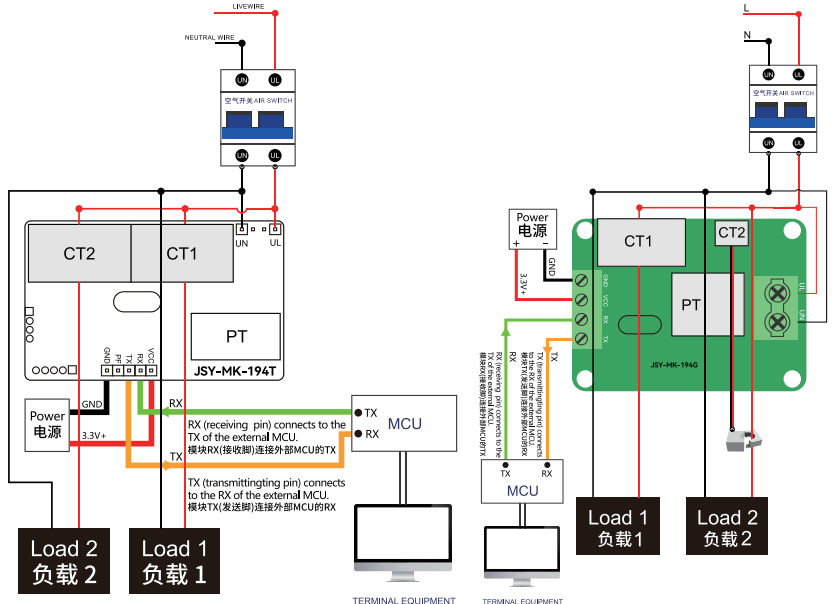
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
UL	火线 Live wire	被测电压火线接线口 Measured voltage live wire connection port
UN	零线 Neutral wire	被测电压零线接线口 Measured voltage neutral wire connection port
VCC	电源+ Power supply +	计量模块供电脚, 供电电压: 3.3V Metering module power supply pin, supply voltage: 3.3V.
RX	输入 Input	模块TTL电平接收脚Module TTL level receiving pin
TX	输出 Output	模块TTL电平发送脚Module TTL level sending pin
PF	输出 Output	有功电能校验脉冲输出, 默认状态低电平输出, 一般不需接此脚, 但要留出针脚位置. Active energy verification pulse output, low level ou by default, generally does not need to be connecte this pin, but the pin position must be reserved.
GND	电源- Power supply -	电源地 Power ground

尺寸图/Dimensional drawing

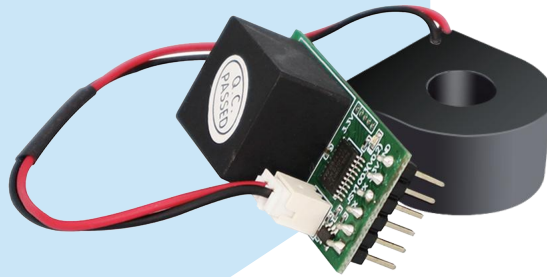


接线示意图/Wiring diagram

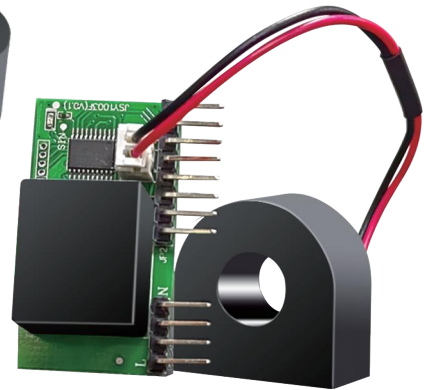


JSY1003H

SINGLE-PHASE ENERGY METERING MODULE (TTL)
单相电能计量模块(TTL通讯)



JSY1003F



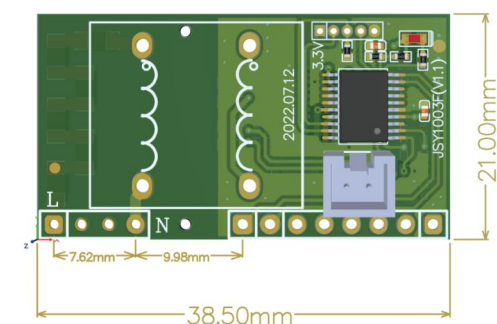
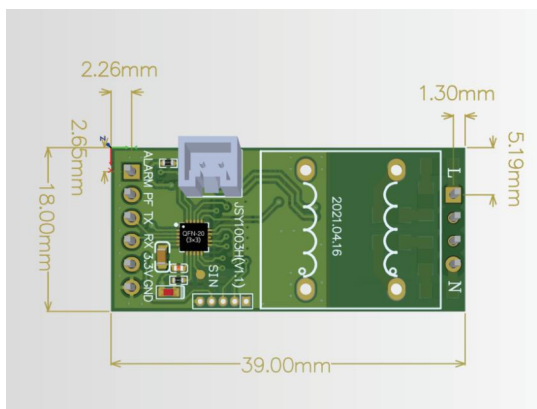
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	TTL/Modbus-RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA~50A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	板载CT: 9.5mm ID External CT: 9.5mm ID
安装方式 Installation	嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

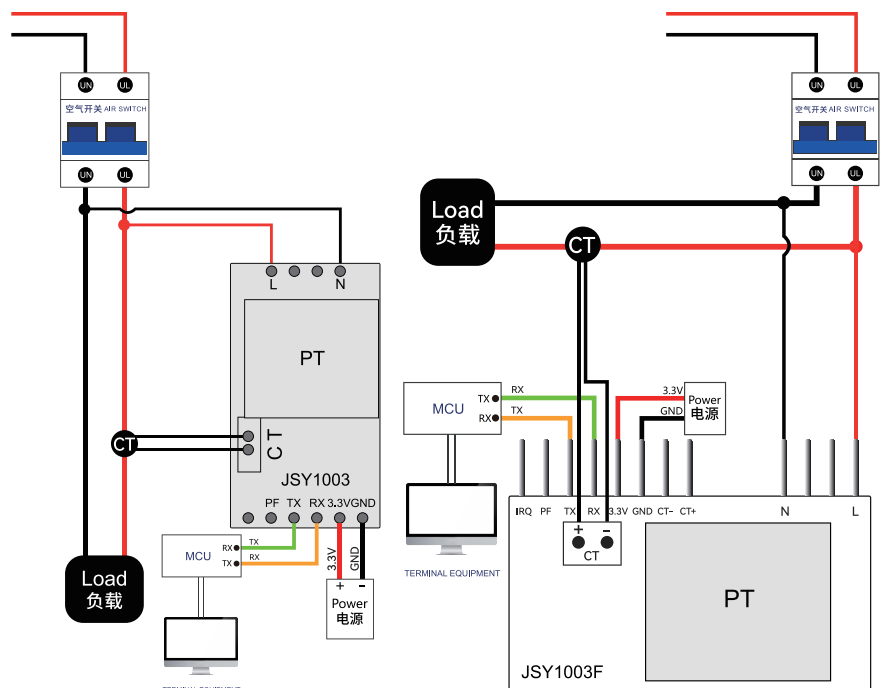
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
UL	火线 Live wire	被测电压火线接线口 Measured voltage live wire connection port
UN	零线 Neutral wire	被测电压零线接线口 Measured voltage neutral wire connection port
PF	输出 Output	有功电能校验脉冲输出, 默认状态低电平输出, 一般不需接此脚, 但要留出针脚位置. Active energy verification pulse output, low level output by default, generally does not need to be connected to this pin, but the pin position must be reserved
RXD	输入 Input	模块TTL电平接收脚Module TTL level receiving pin
TXD	输出 Output	模块TTL电平发送脚Module TTL level sending pin
3.3V	电源+ Power supply +	计量模块供电脚, 供电电压: 3.3V Metering module power supply pin, supply voltage: 3.3V
GND	电源- Power supply -	电源地 Power ground

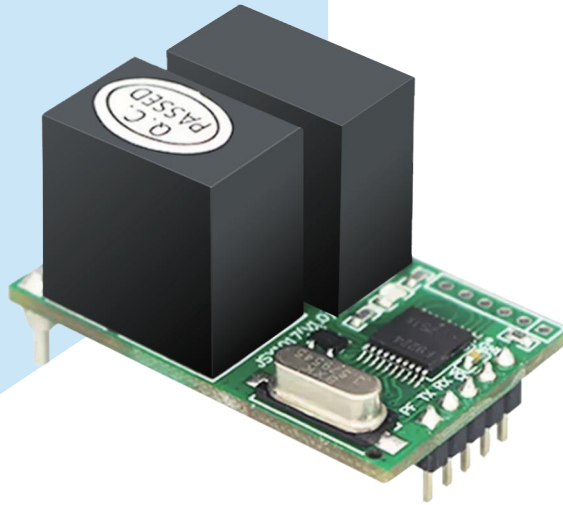
尺寸图/Dimensional drawing



接线示意图/Wiring diagram



SINGLE-PHASE ENERGY METERING MODULE (TTL)
单相电能计量模块(TTL通讯)



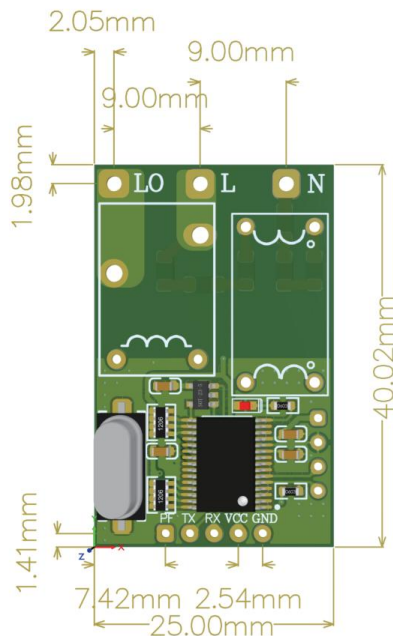
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	TTL/Modbus-RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA~16A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	板载CT On-board CT
安装方式 Installation	嵌入式可焊接 插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc.

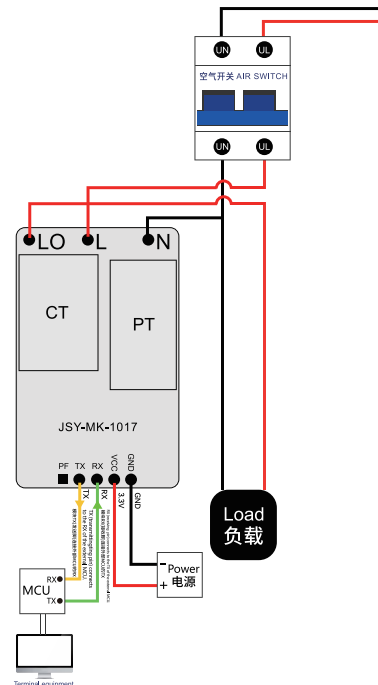
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
N	零线Neutral wire	被测电压零线接线口 The voltage to be measured of neutral wire terminal
L	火线进Live wire input	被测电压火线进接线口 The voltage to be measured of live wire inlet
L0	火线出Live wire output	被测电压火线出接线口 The voltage to be measured of live wire outlet
PF	输出Output	有功电能校验脉冲输出，默认状态低电平输出，一般不需接此脚，但要留出引脚位置。 Active energy verification pulse output, low level output by default, generally does not need to be connected to this pin, but the pin position must be reserved.
TX	输出Output	模块TTL电平发送 Module TTL level sending
RX	输入Input	模块TTL电平接收 Module TTL level reception
VCC	电源+ Power +	计量模块供电脚，供电电压：3.3V Metering module power supply pin, supply voltage: 3.3V.
GND	电源- Power -	电源地 Power ground

尺寸图/Dimensional drawing

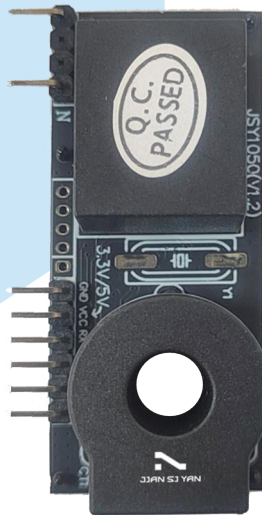


接线示意图/Wiring diagram



JSY1050

SINGLE-PHASE ENERGY METERING MODULE (TTL) 单相电能计量模块(TTL通讯)



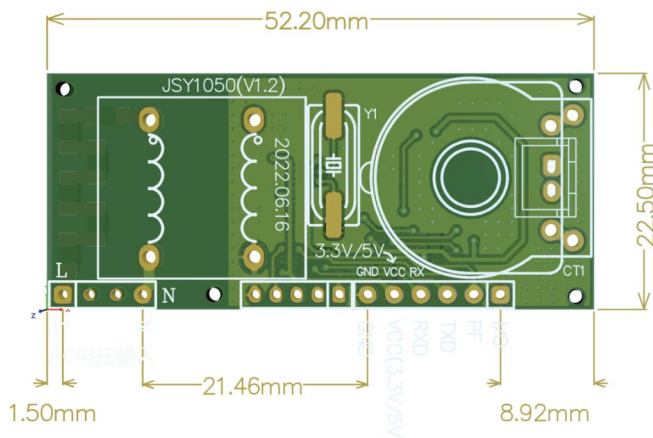
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communitation/Protocol	TTL/Modbus~RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA~30A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者 or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	板载CT: 5mm ID On-board CT: 5mm ID
安装方式 Installation	嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

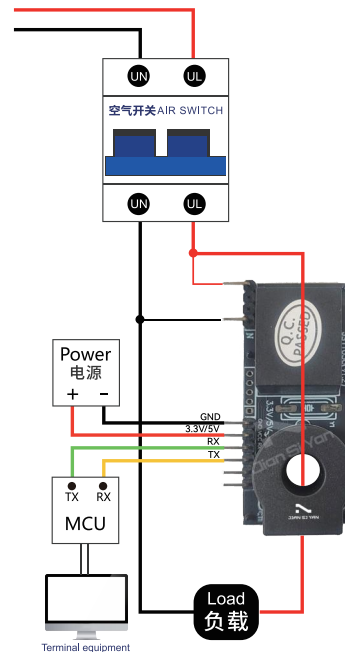
端子接口定义/Terminal interface definition

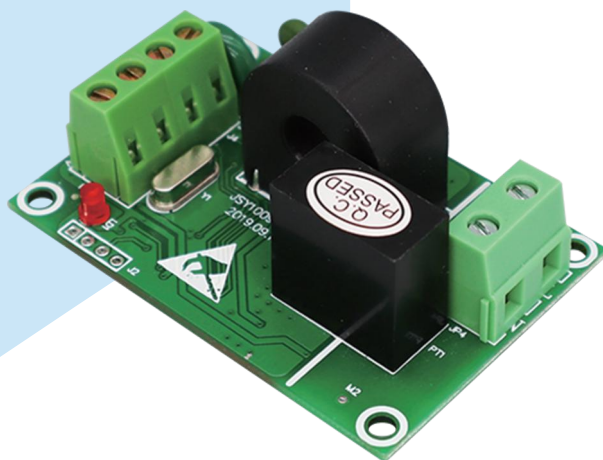
标识 Mark	特性 Feature	功能描述 Function description
L	火线Live wire	被测电压火线接线口 Measured voltage live wire connection port
N	零线Neutral wire	被测电压零线接线口 Measured voltage neutral wire connection port
PF	输出Output	有功电能校验脉冲输出, 默认状态低电平输出, 一般不需接此脚, 但要留出针脚位置. Active energy verification pulse output, low level output by default, generally does not need to be connected to this pin, but the pin position must be reserved.
TX	输出Output	模块TTL电平发送 Module TTL level sending
RX	输入Input	模块TTL电平接收 Module TTL level reception
3.3V	电源+ Power +	计量模块供电脚, 供电电压: 3.3V Metering module power supply pin, supply voltage: 3.3V.
GND	电源- Power -	电源地 Power ground
IRQ	输出Output	多功能输出接口 Multi-function output interface
CT-	输入Input	板载电流互感器负极输入 On-board current transformer negative input
CT+	输入Input	板载电流互感器正极输入 On-board current transformer positive input

尺寸图/Dimensional drawing



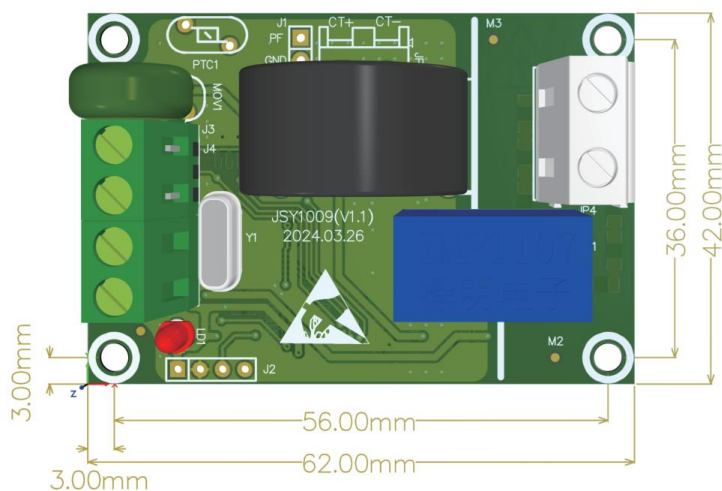
接线示意图/Wiring diagram



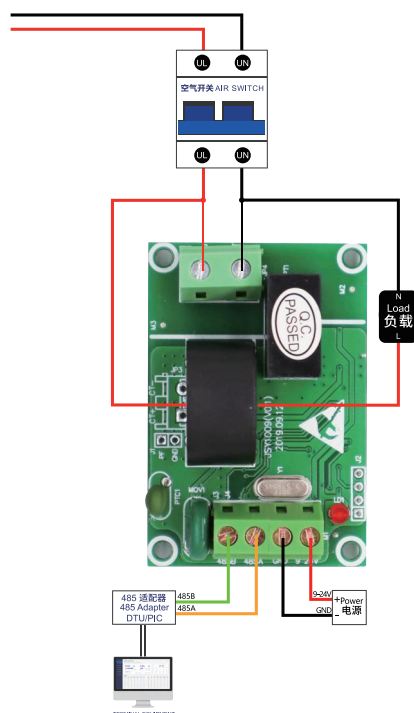


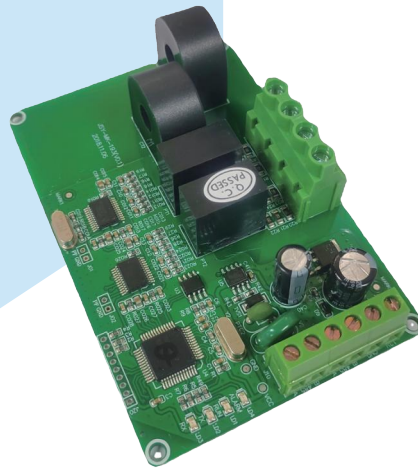
技术参数/Technical parameters		端子接口定义/Terminal interface definition		
电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering	NO.	特性 Feature	功能描述 Function description
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU	1	9~24V	产品供电电源正极 最高不超过24V Positive power supply terminal, maximum 24V
电压量程 Voltage Range	AC 1~300V	2	GND	产品供电电源负极 Negative power supply terminal
电流量程 Current Range	AC 20mA~50A AC 20mA~100A	3	485A	RS485通讯接口A RS485 communication port A
供电电源 Power Supply	DC 9-24V	4	485B	RS485通讯接口B RS485 communication port B
频率 Frequency	50Hz 或者or 60Hz	5	L	被测量AC电源火线 Live line of the AC power being measured
有功精度 Active power accuracy	±1%	6	N	被测量AC电压零线 Neutral line of the AC voltage being measured
电流互感器 Current transformer(CT)	板载CT: 7.5mm ID On-board CT: 7.5mm ID 外接分芯式CT: 16mm ID External split-core CT: 16mm ID			
安装方式 Installation	螺丝孔固定 Screw fixing			
测量参数 Collect Values	电流、电压、功率、电能等, Current, voltage, power, electric energy, etc.			

尺寸图/Dimensional drawing



接线示意图/Wiring diagram





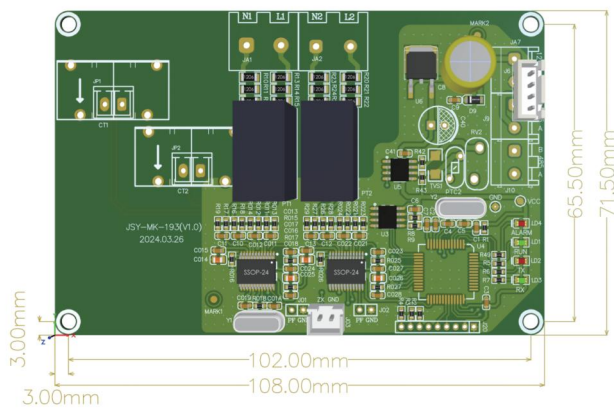
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA~50A AC 20mA~100A
供电电源 Power Supply	DC 9-24V
频率 Frequency	50Hz 或者 or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	板载CT: 7.5mm ID On-board CT: 7.5mm ID 外接分芯式CT: 16mm ID External split-core CT: 16mm ID
安装方式 Installation	螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

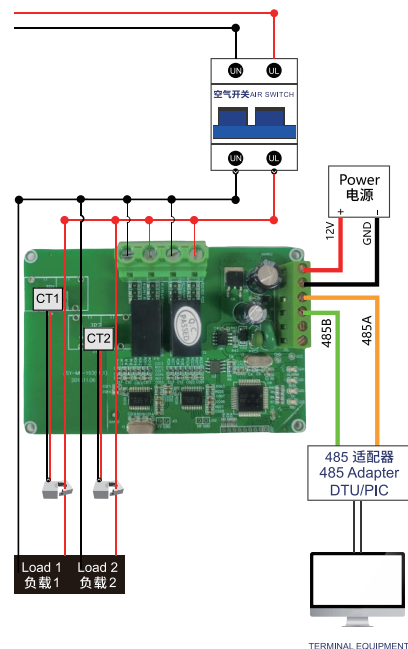
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
CT1	电流采样 Current sampling	第一通道 Channel 1
CT2	电流采样 Current sampling	第二通道 Channel 2
N1	电压采样 Current sampling	连接第一通道零线 Connect neutral wire to channel 1
L1	电压采样 Current sampling	连接第一通道火线 Connect live wire to channel 1
N2	电压采样 Current sampling	连接第二通道零线 Connect neutral wire to channel 2
L2	电压采样 Current sampling	连接第二通道火线 Connect live wire to channel 2
12V	DC+	供电电压: +9V~30V Power supply voltage: +9V-30V
GND	DC-	电源地 Power ground
A	通讯接口 Communication interface	连接RS485A接口 Connect to RS485A port
B	通讯接口 Communication interface	连接RS485A接口 Connect to RS485A port

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



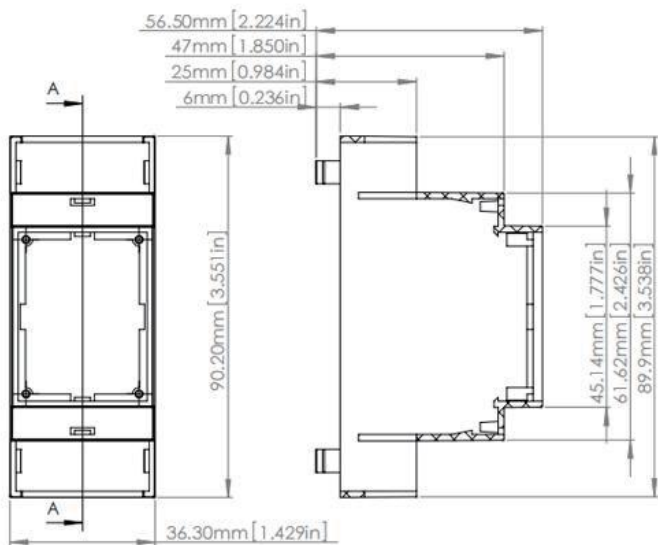
JSY-MK-149

SINGLE-PHASE ENERGY METER (RS485)
单相导轨表(RS485通讯)

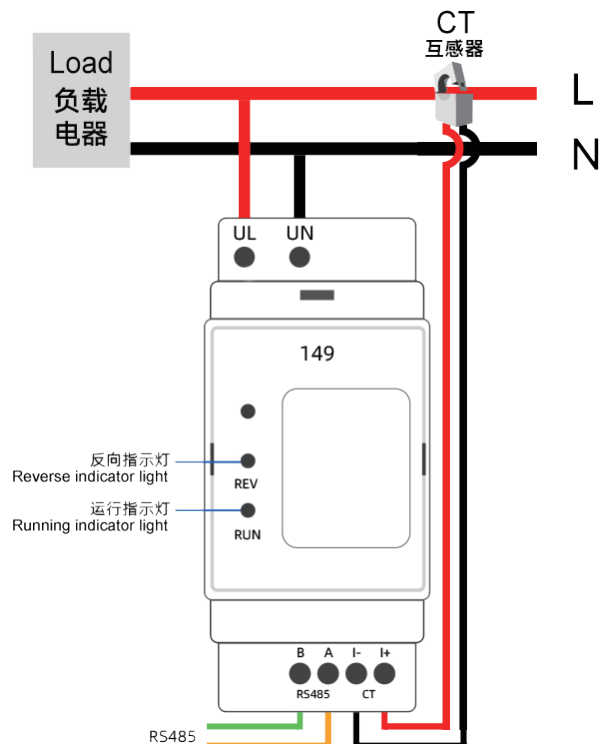


技术参数/Technical parameters		端子接口定义/Terminal interface definition	
电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)	No.	功能描述 Function description
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU	1	L (火线)、N (零线) 为被测电压接线口。 L (Live wire) and N (Neutral wire) are the voltage connection ports to be measured.
电压量程 Voltage Range	AC 85-265V	2	被测电流线(按照互感器底部电流方向)从外接互感器中穿过。 The current line to be measured (according to the current direction at the bottom of the transformer) passes through the external transformer.
电流量程 Current Range	AC 20mA~80A AC 20mA~100A	3	RS485通讯接口为2P接线插座, A(RS485通讯正极), B(RS485通讯负极)。 The RS485 communication interface is a 2P wiring socket, A (RS485 communication positive pole), B (RS485 communication negative pole).
供电电源 Power Supply	AC 85-265V		
频率 Frequency	50Hz 或者or 60Hz		
有功精度 Active power accuracy	±1%		
电流互感器 Current transformer(CT)	外接圆形闭口CT: 12mm ID External round closed CT: 12mm ID 外接分芯式CT: 16mm ID External split-core CT: 16mm ID		
安装方式 Installation	导轨式安装 DIN-rail installation		
测量参数 Collect Values	电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc.		

尺寸图/Dimensional drawing

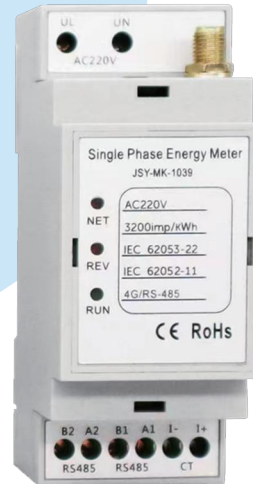


接线示意图/Wiring diagram



JSY-MK-1039

SINGLE-PHASE ENERGY METER (4G/RS485)
单相电能采集器(4G/RS485通讯)



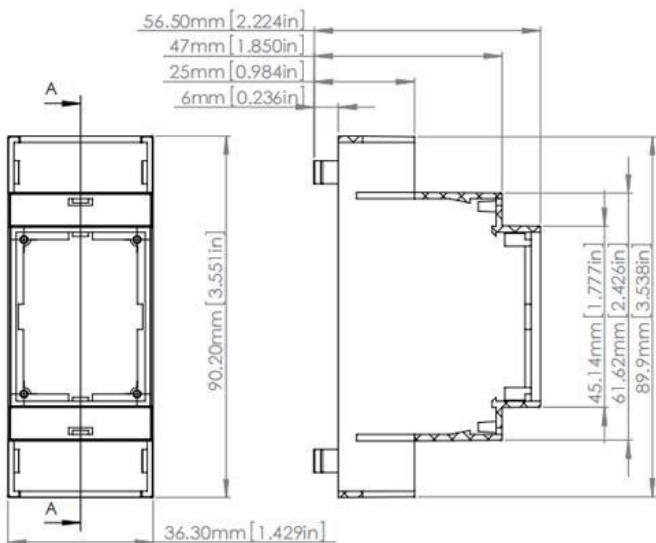
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	RS485/4G Modbus-RTU/HJ212
电压量程 Voltage Range	AC 85~265V
电流量程 Current Range	AC 20mA~80A AC 20mA~100A
供电电源 Power Supply	AC 85~265V
频率 Frequency	50Hz 或者 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	外接圆形闭口CT: 12mm ID External round closed CT: 12mm ID 外接分芯式CT: 16mm ID External split-core CT: 16mm ID
安装方式 Installation	导轨式安装 DIN-rail installation
测量参数 Collect Values	电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc.

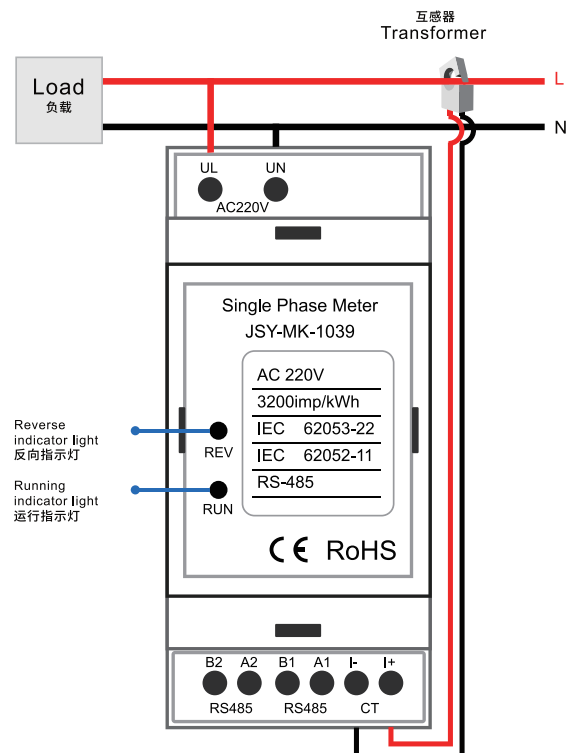
端子接口定义/Terminal interface definition

No.	功能描述 Function description
1	L (火线)、N (零线) 为被测电压接线口。 L (Live wire) and N (Neutral wire) are the voltage connection ports to be measured.
2	被测电流线(按照互感器底部电流方向)从外接互感器中穿过。 The current line to be measured (according to the current direction at the bottom of the transformer) passes through the external transformer.
3	RS485通讯接口为2P接线插座, A(RS485通讯正极), B(RS485通讯负极)。 The RS485 communication interface is a 2P wiring socket, A (RS485 communication positive pole), B (RS485 communication negative pole).

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



02

三相电能计量模块 THREE-PHASE ENERGY METERING MODULE

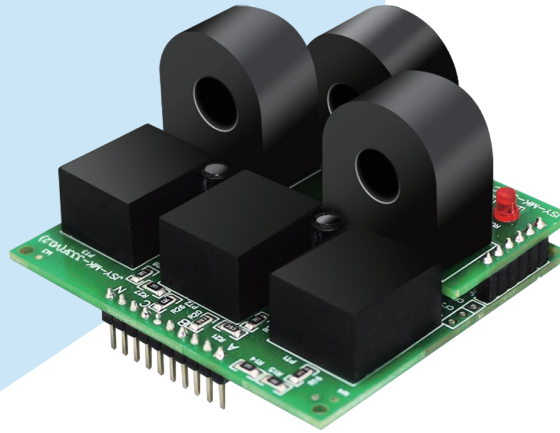
JSY-MK-333 三相电能计量模块(TTL/RS485通讯)
Three-phase energy metering module (TTL/RS485)

JSY-MK-333G 三相电能计量模块(RS485通讯)
Three-phase energy metering module (RS485)

JSY-MK-353 三相电能计量模块(TTL通讯)
Three-phase energy metering module (TTL)

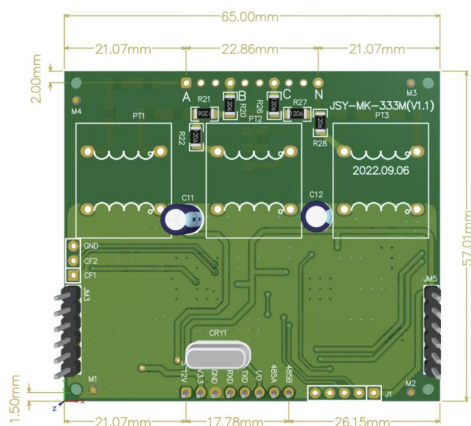
JSY-MK-354 三相电能计量模块(RS485通讯)
Three-phase energy meter (RS485)

JSY-MK-339 三相电压电流采集器(4G/RS485通讯)
Three-phase energy meter (4G/RS485)

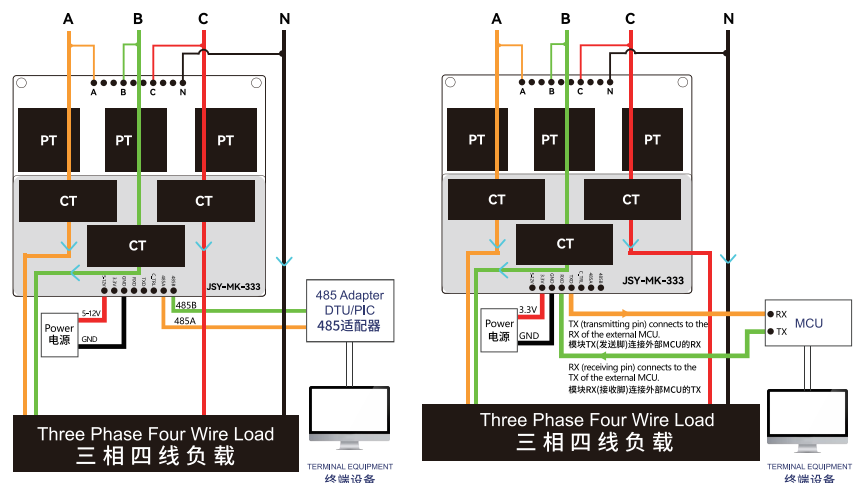


技术参数/Technical parameters		端子接口定义/Terminal interface definition	
电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)	标识 Mark	功能描述 Function description
通讯方式/协议 Communication/Protocol	TTL & RS485 / Modbus-RTU	A	被测A相电压输入端 The measured voltage input of phase A
电压量程 Voltage Range	AC 1-300V	B	被测B相电压输入端 The measured voltage input of phase B
供电电源 Power Supply	DC 3.3V(TTL) DC 5-12V(RS485)	C	被测C相电压输入端 The measured voltage input of phase C
频率 Frequency	50Hz 或者 or 60Hz	N	被测零线输入端 The measured voltage input of the neutral line
有功精度 Active power accuracy	±1%	5-12V	宽电压供电输入正极 (5-12VDC) Positive input of power supply (5-12VDC)
电流量程 Current Range	AC 1mA-5A	3.3V	3.3VDC供电输入正极(5-12V/3.3V两脚只能二选一) Positive input of 3.3VDC power supply (5-12V/3.3V only choose one)
	AC 20mA-50A	GND	电源输入负极 Negative input of power supply
	AC 20mA-63A	RXD	TTL接收脚 (3.3V电平) TTL Receiving pin (3.3V Level)
	AC 20mA-80A	TXD	TTL发送脚 (3.3V电平) TTL transmitting pin (3.3V level)
	AC 20mA-80A	I/O	功能预留 Function Reserved
	AC 20mA-80A	485A	RS485通讯A口 RS485 communication port A
	AC 20mA-100A	485B	RS485通讯B口 RS485 communication port B
	AC 50mA-250A		
电流互感器 Current transformer(CT)	AC 100mA-500A		
	AC 100mA-500A		
安装方式 Installation	嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm		
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.		

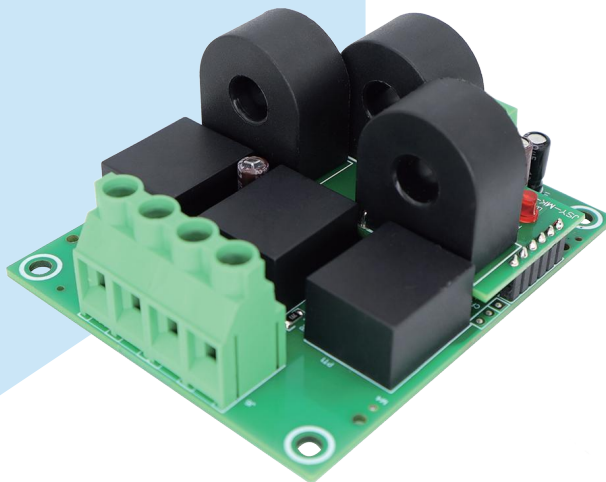
尺寸图/Dimensional drawing



接线示意图/Wiring diagram



THREE-PHASE ENERGY METERING MODULE (RS485)
三相电能计量模块(RS485通讯)



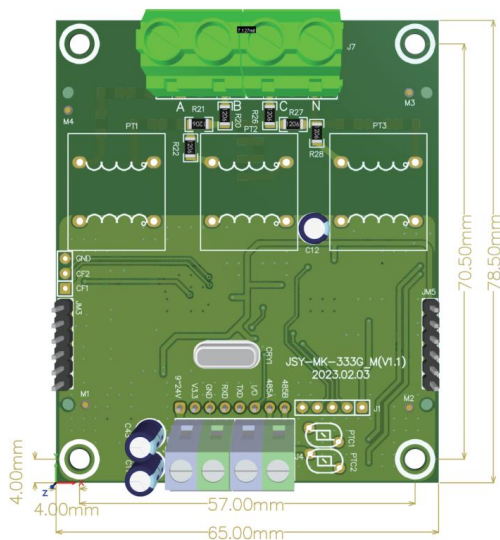
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)	
通讯方式/协议 Communication/Protocol	RS485 / Modbus-RTU	
电压量程 Voltage Range	AC 1-300V	
供电电源 Power Supply	DC 9-24V	
频率 Frequency	50Hz 或者 60Hz	
有功精度 Active power accuracy	±1%	
电流量程 Current Range 电流互感器 Current transformer(CT)	AC 1mA~5A	板载CT: 7.5mm ID On-board CT: 7.5mm ID
	AC 20mA~50A	板载CT: 7.5mm ID On-board CT: 7.5mm ID
	AC 20mA~63A	外接分芯式CT: 10mm ID External split-core CT: 10mm ID
	AC 20mA~80A	板载CT: 9.5mm ID On-board CT: 9.5mm ID
	AC 20mA~80A	外接圆形闭口CT: 12mm ID External round closed CT: 12mm ID
	AC 20mA~100A	外接分芯式CT: 16mm ID External split-core CT: 16mm ID
	AC 50mA~250A	外接分芯式CT: 24mm ID External split-core CT: 24mm ID
安装方式 Installation	螺丝孔固定 Screw fixing	
	测量参数 Collect Values 电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc.	

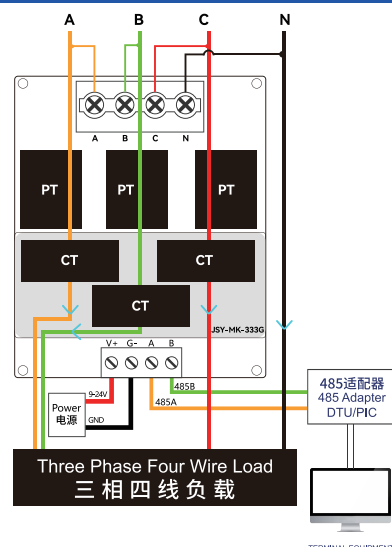
端子接口定义/Terminal interface definition

标识 Mark	功能描述 Function description
A	被测A相电压输入端 The measured voltage input of phase A
B	被测B相电压输入端 The measured voltage input of phase B
C	被测C相电压输入端 The measured voltage input of phase C
N	被测零线输入端 The measured voltage input of the neutral line
V+	宽电压供电输入正极 (9-24VDC) Positive input of power supply (9-24V DC)
G-	电源输入负极 Negative input of power supply
A	RS485通讯A口 RS485 communication port A
B	RS485通讯B口 RS485 communication port B

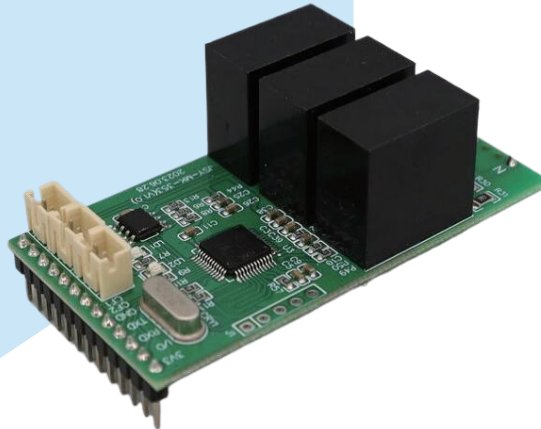
尺寸图/Dimensional drawing



接线示意图/Wiring diagram



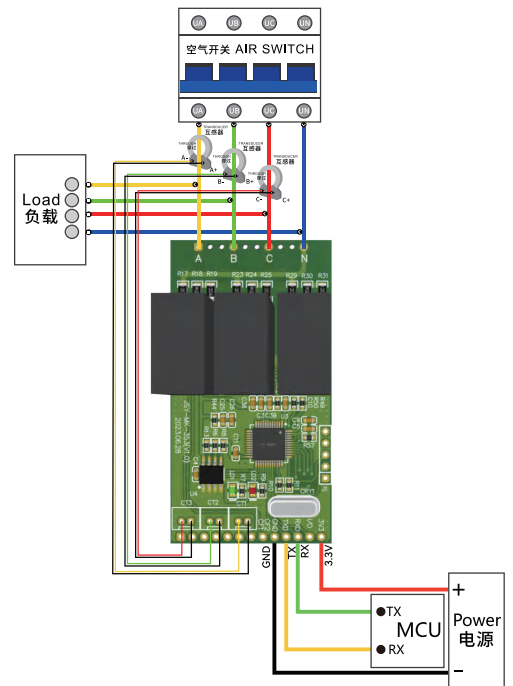
THREE-PHASE ENERGY METERING MODULE (TTL)
三相电能计量模块(TTL通讯)



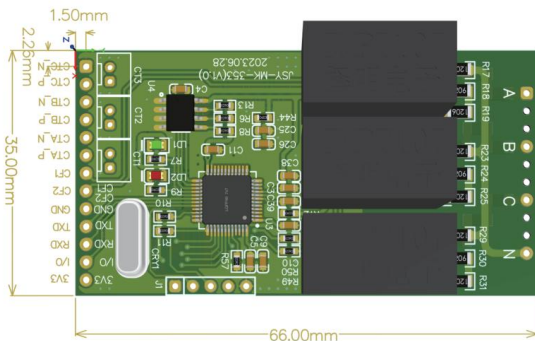
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communtation/Protocol	TTL/Modbus~RTU
电压量程 Voltage Range	AC 1-300V
电流量程 Current Range	AC 20mA~50A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
电流互感器 Current transformer(CT)	外接圆形闭口CT: 14.5mm ID External round closed CT: 14.5mm ID
安装方式 Installation	嵌入式可焊接,插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

接线示意图/Wiring diagram



尺寸图/Dimensional drawing



端子接口定义/Terminal interface definition

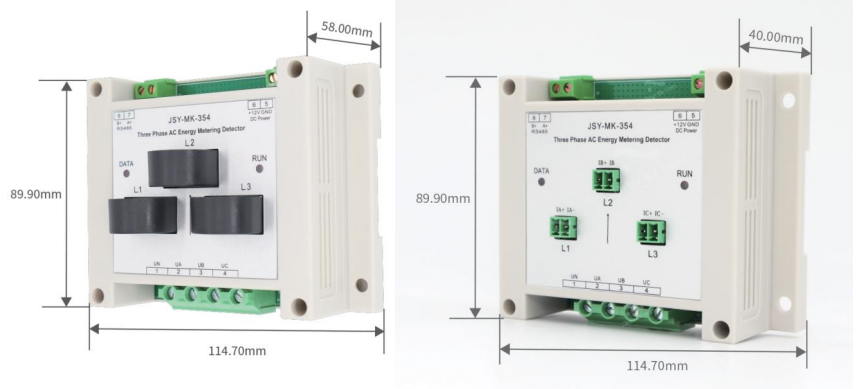
标识 Mark	功能描述 Function description	标识 Mark	功能描述 Function description
A	被测A相电压输入端 Measured phase A voltage input terminal	RXD	TTL接收脚 (3.3V电平) TTL receiving pin (3.3V level)
B	被测B相电压输入端 Measured B-phase voltage input terminal	TXD	TTL发送脚 (3.3V电平) TTL send pin (3.3V level)
C	被测C相电压输入端 Measured C-phase voltage input terminal	I/O	功能预留 Function Reserved
N	被测零线输入端 Measured neutral line input terminal	CF1	有功脉冲输出检验口 Active pulse output test port
3.3V	3.3VDC供电输入正极 3.3VDC power input positive	CF2	无功脉冲输出检验口 Reactive pulse output test port
GND	电源输入负极 Negative power input		



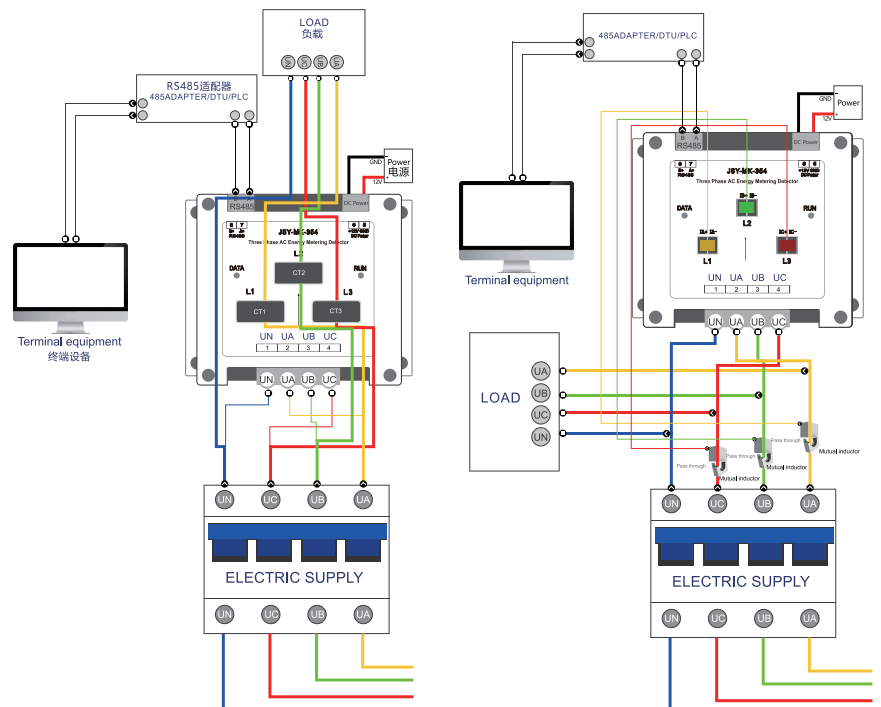
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)	
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU	
电压量程 Voltage Range	AC 1~300V	
供电电源 Power Supply	DC 9~24V	
频率 Frequency	50Hz 或者 60Hz	
有功精度 Active power accuracy	±1%	
电流量程 Current Range	AC 20mA~50A	板载CT: 7.5mm ID On-board CT: 7.5mm ID
	AC 20mA~63A	外接分芯式CT: 10mm ID External split-core CT: 10mm ID
	AC 20mA~80A	外接圆形闭口CT: 12mm ID External round closed CT: 12mm ID
	AC 20mA~100A	外接分芯式CT: 16mm ID External split-core CT: 16mm ID
	AC 50mA~250A	外接分芯式CT: 24mm ID External split-core CT: 24mm ID
	AC 100mA~500A	外接分芯式CT: 35mm ID External split-core CT: 35mm ID
安装方式 Installation	导轨式安装 DIN-rail installation	
	螺丝孔固定 Screw fixing	
测量参数 Collect Values	电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc.	

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



端子接口定义/Terminal interface definition

标识 Mark	功能描述 Function description
UA	被测A相电压输入端 Measured phase A voltage input terminal
UB	被测B相电压输入端 Measured phase B voltage input terminal
UC	被测C相电压输入端 Measured phase C voltage input terminal
UN	被测零线输入端 Measured neutral line input terminal
+12V	宽电压供电输入正极 (9~24VDC) Wide voltage power input positive (9~24 VDC)
GND	电源输入负极 Negative power input
A	RS485通讯A口 RS485 communication port A
B	RS485通讯B口 RS485 communication port B



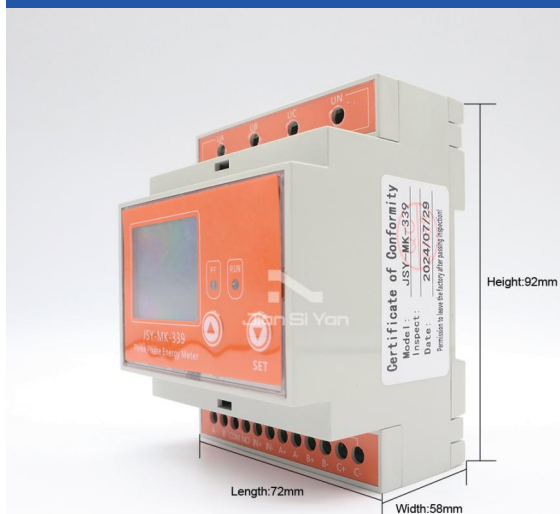
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	RS485/4G Modbus-RTU
电压量程 Voltage Range	AC 85-265V
供电电源 Power Supply	AC 85-265V
频率 Frequency	50Hz 或者 60Hz
有功精度 Active power accuracy	±1%
电流量程 Current Range	AC 20mA~80A 外接圆形闭口CT: 12mm ID External round closed CT: 12mm ID
	AC 20mA~150A 外接分芯式CT: 16mm ID External split-core CT: 16mm ID
	AC 50mA~250A 外接分芯式CT: 24mm ID External split-core CT: 24mm ID
电流互感器 Current transformer(CT)	AC 100mA~500A 外接分芯式CT: 35mm ID External split-core CT: 35mm ID
安装方式 Installation	导轨式安装 DIN-rail installation
测量参数 Collect Values	电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc.

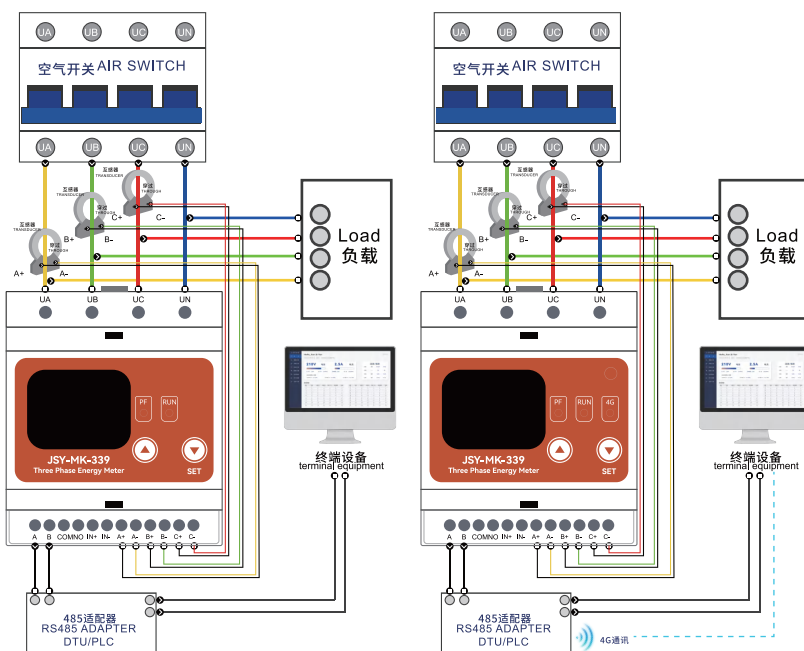
端子接口定义/Terminal interface definition

标识 Mark	功能描述 Function description	标识 Mark	功能描述 Function description
UA	A相电压输入 A phase voltage input	C+	C相电流互感器+ C phase current transformer+
UB	B相电压输入 B phase voltage input	C-	C相电流互感器- C phase current transformer-
UC	C相电压输入 C phase voltage input	A	RS485正极 RS485 positive pole
UN	零线输入 Neutral input	B	RS485负极 RS485 negative pole
A+	A相电流互感器+ A phase current transformer+	COM	开关量功能预留 Switch function reserved
A-	A相电流互感器- A phase current transformer -	NO	开关量功能预留 Switch function reserved
B+	B相电流互感器+ B phase current transformer+	IN+	剩余电流互感器+ Residual current transformer+
B-	B相电流互感器- B phase current transformer-	IN-	剩余电流互感器- Residual current transformer-

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



03

直流电能计量模块 DC ENERGY METERING MODULE

JSY1013 交流/直流电能计量模块(TTL通讯)
AC/DC energy metering module (TTL)

JSY1031 交流/直流自适应电能计量模块(TTL通讯)
AC/DC Self-adaptive energy metering Module (TTL)

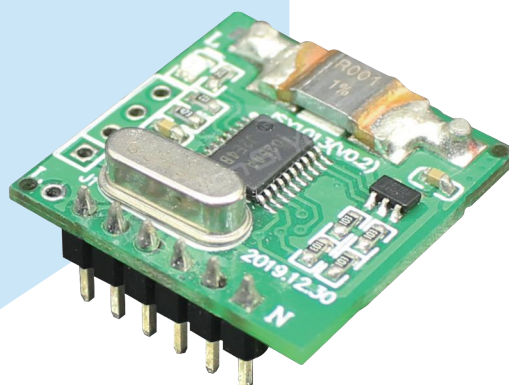
JSY-MK-211 交流/直流自适应电能计量模块(RS485通讯)
AC/DC Self-adaptive energy metering Module (RS485)

JSY-MK-227 直流电能计量模块(RS485通讯)
DC energy metering module (RS485)

JSY-MK-229 单路交/直流采集器(RS485通讯)
Single-channel AC/DC metering module (RS485)

JSY-MK-231 单路直流采集器(霍尔互感器-RS485通讯)
Single-channel DC metering module (Hall sensor-RS485)

JSY1013

AC/DC ENERGY METERING MODULE (TTL)
交流/直流电能计量模块(TTL通讯)

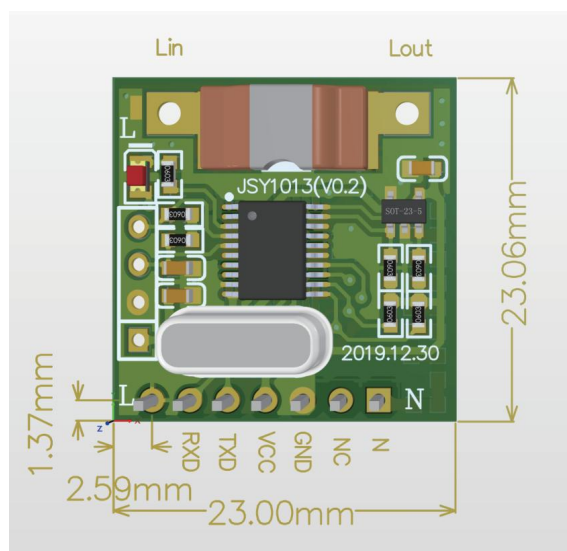
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	TTL/Modbus~RTU
电压量程 Voltage Range	AC/DC 5V~400V
电流量程 Current Range	AC 5mA~10A
供电电源 Power Supply	DC 3.3V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

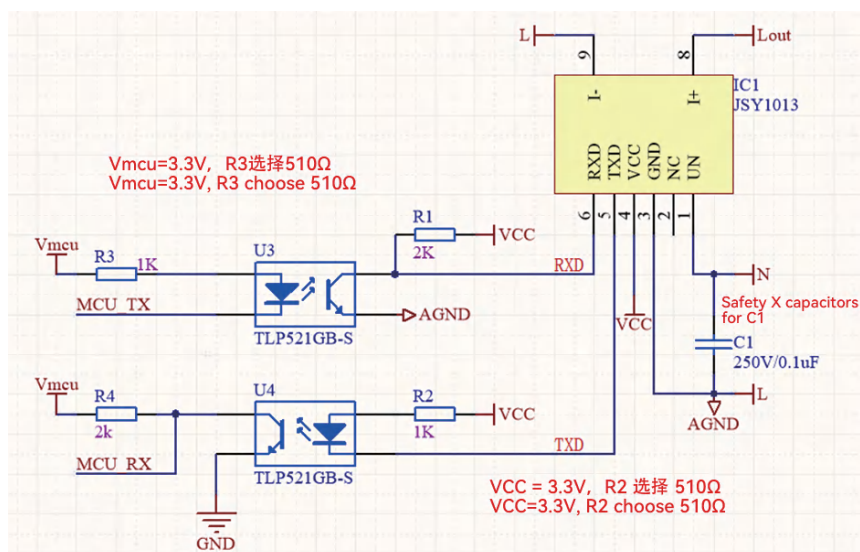
端子接口定义/Terminal interface definition

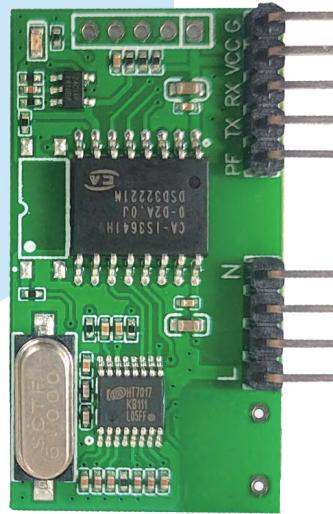
标识 Mark	功能描述 Function description	
Lin	被测交流火线进 The AC live wire under test enters	被测直流正极进 The DC positive pole under test enters
Lout	被测交流火线出 The AC live wire under test comes out	被测直流正极出 The measured DC positive pole output
N	被测交流零线 AC neutral wire under test	被测直流负极 Tested DC negative pole
NC	空 Null	
GND	模块工作电源直流地（内部与Lin连接） Module working power supply DC ground (internally connected to Lin)	
VCC	模块工作电源DC 3.3V（需要单独隔离电源供电） Module working power supply DC 3.3V (requires separate isolated power supply)	
TXD	模块数据发送脚（需接光耦隔离） Module data sending pin (requires optocoupler isolation)	
RXD	模块数据接收脚（需接光耦隔离） Module data receiving pin (requires optocoupler isolation)	

尺寸图/Dimensional drawing



接线示意图/Wiring diagram





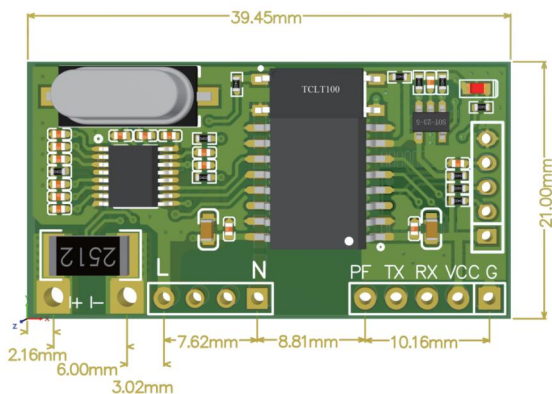
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communitation/Protocol	TTL/Modbus~RTU
电压量程 Voltage Range	1~300V
电流量程 Current Range	10mA~16A
供电电源 Power Supply	DC 5V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

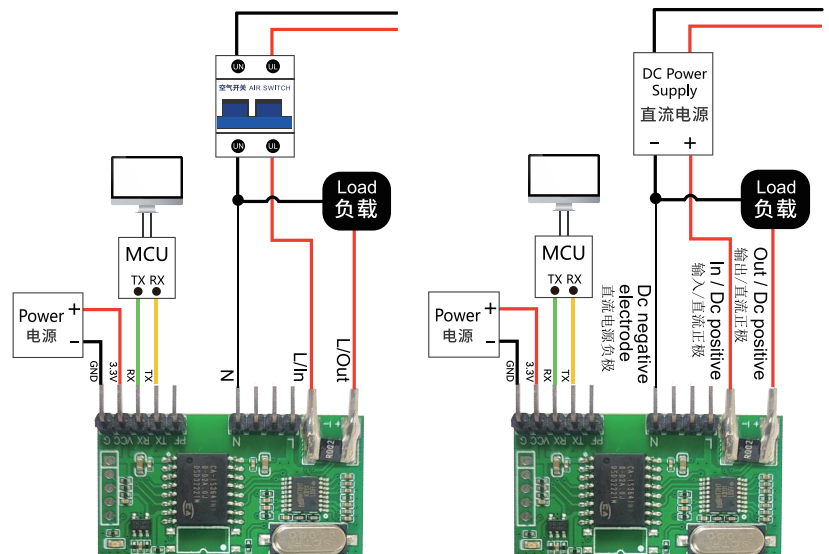
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
L	火线 Live line	被测电压火线接线口 Measured voltage live wire connection port
N	零线 Neutral line	被测电压零线接线口 Measured voltage neutral line connection port
PF	输出 Output	有功电能校验脉冲输出, 默认状态低电平输出, 一般不需接此脚, 但要留出针脚位置. Active energy verification pulse output, low level output by default, generally does not need to be connected to this pin, but the pin position must be reserved.
TXD	输出 Output	模块TTL电平发送脚 Module TTL level sending pin
RXD	输入 Input	模块TTL电平接收脚 Module TTL level receiving pin
VCC	电源+ Power+	计量模块供电脚, 正常应用范围: 5V Metering module power supply pin, normal application range: 5V
GND	电源- Power-	电源地 Power ground

尺寸图/Dimensional drawing

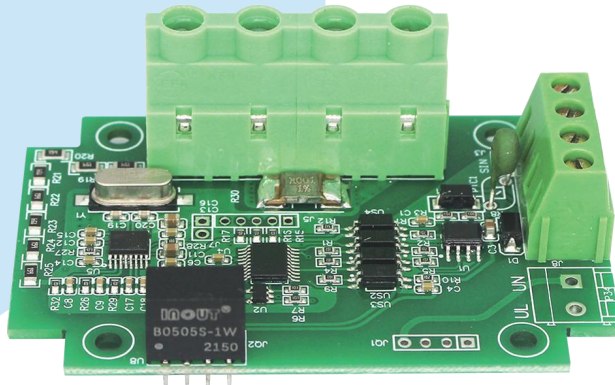


接线示意图/Wiring diagram



JSY1031 (AC)

JSY1031 (DC)



技术参数/Technical parameters

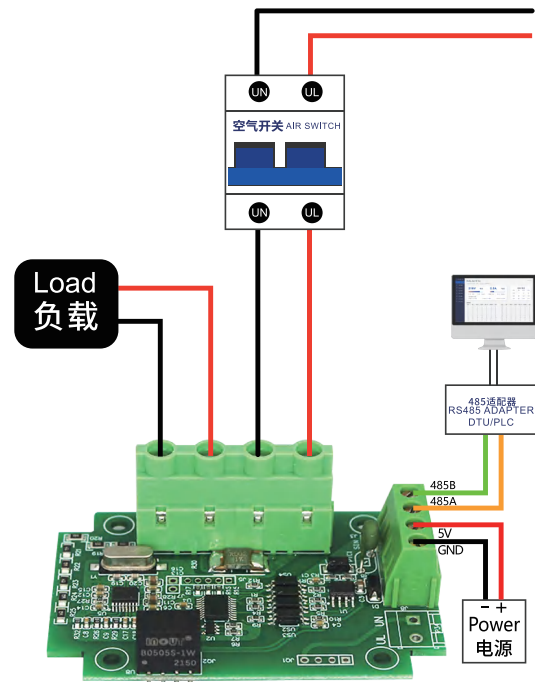
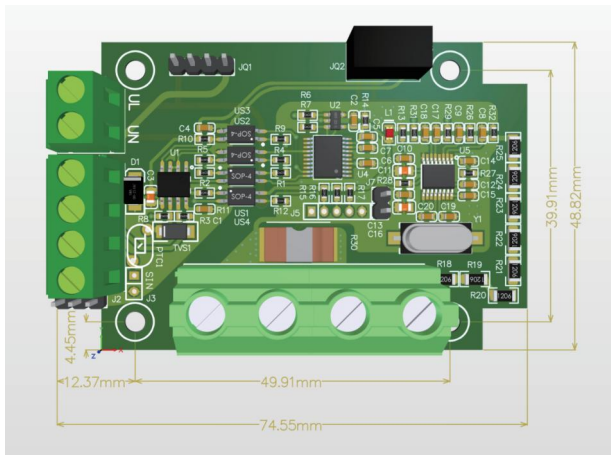
电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU
电压量程 Voltage Range	1~300V
电流量程 Current Range	10mA~16A
供电电源 Power Supply	AC 80V ~ 260V DC 5V
频率 Frequency	50Hz 或者 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

端子接口定义/Terminal interface definition

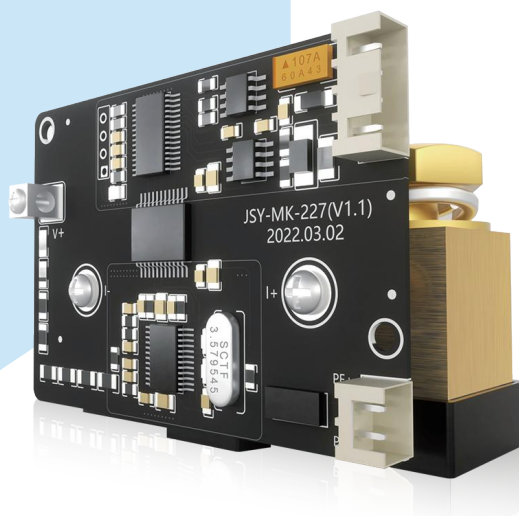
标识 Mark	特性 Feature	功能描述 Function description
UL	火线/直流正极输入 Live wire/DC positive input	被测火线/直流正极输入接口 Measured live wire/DC positive input port
UN	零线/直流负极输入 Neutral wire/DC negative input	被测零线/直流负极输入接口 Measured neutral wire/DC negative input port
LO/+	火线/直流正极输出 Live wire/DC positive output	被测火线/直流正极输出接口(接负载) Measured live wire/DC positive output port (connect to load)
N/-	零线/直流负极输出 Neutral wire/DC negative output	被测零线/直流正极输出接口(接负载) Measured live wire/DC positive output port (connect to load)
GND	供电电源负极 Power supply negative	产品直流供电负极接口 Product DC power negative port
5V	供电电源正极 Power supply positive	产品直流供电5V正极接口 Product DC power 5V positive port
485A	通讯接口 Communication port	RS485通讯接口A RS485 communication port A
485B	通讯接口 Communication port	RS485通讯接口B RS485 communication port B

尺寸图/Dimensional drawing

接线示意图/Wiring diagram



DC ENERGY METERING MODULE (RS485) 直流电能计量模块(RS485通讯)



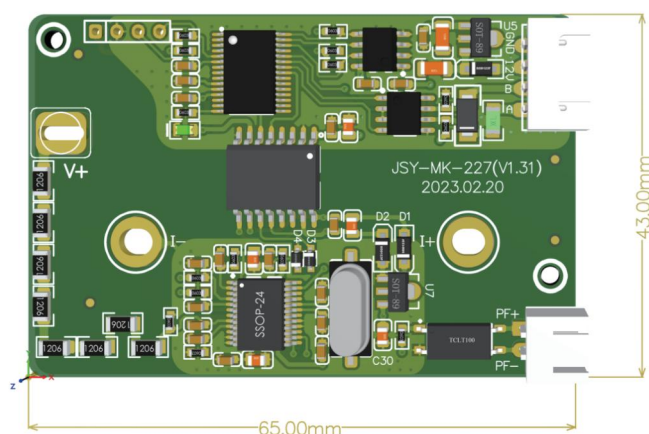
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	RS485/Modbus~RTU
电压量程 Voltage Range	5~400V, 5~1000V
分流器量程 Shunt Range	50A, 100A
供电电源 Power Supply	DC 12V
频率 Frequency	50Hz 或者 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

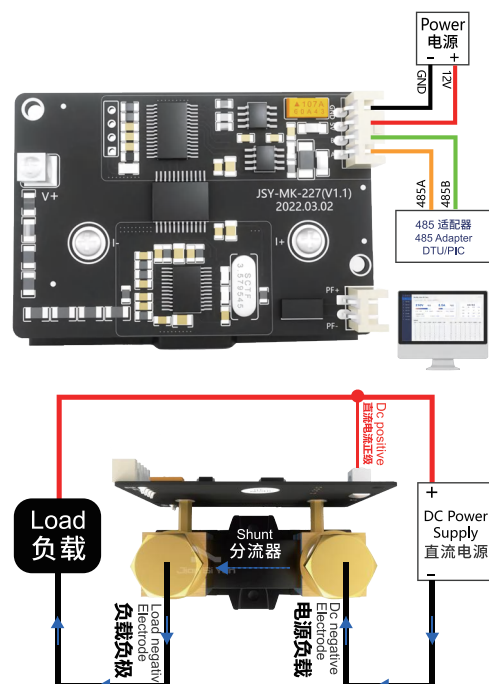
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
V+	直流正 DC positive	被测直流电压正极接口 (交流接火线)
I+	分流器正端 Shunt positive end	分流器正端输入, 接负载负极 (交流接零线负载端) The shunt positive end input, connected to the load negative (AC connected to the zero line load end)
I-	分流器负端 Shunt negative end	分流器负端输入, 接电源负极端 (交流接零线电源端) The negative end of the shunt is input and connected to the negative end of the power supply (AC is connected to the power supply end of the neutral line)
GND	供电电源负极 Negative pole of power supply	电能计量模块12VDC供电电源负极 Energy metering module 12VDC power supply negative
12V	供电电源正极 Positive pole of power supply	电能计量模块12VDC供电电源正极 Power metering module 12VDC(by default) power supply positive
A	485A口 485A port	RS485通讯A口 RS485 communication port A
B	485B口 485B port	RS485通讯B口 RS485 communication port B

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



SINGLE-CHANNEL AC/DC METERING MODULE (RS485)
单路交/直流采集器(RS485通讯)



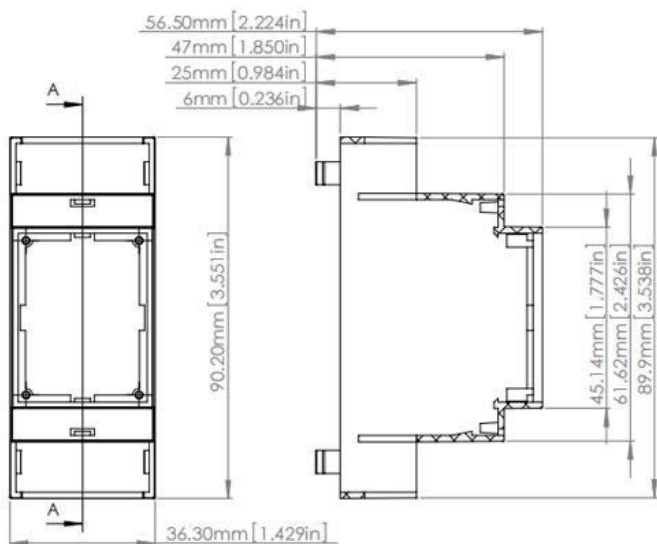
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communtation/Protocol	RS485/Modbus~RTU
电压量程 Voltage Range	5~400V, 5~1000V
分流器量程 Shunt Range	50A, 100A, 200A, 300A, 400A, 500A, 600A, 800A
供电电源 Power Supply	DC 12~36V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	导轨式安装 DIN-rail installation
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

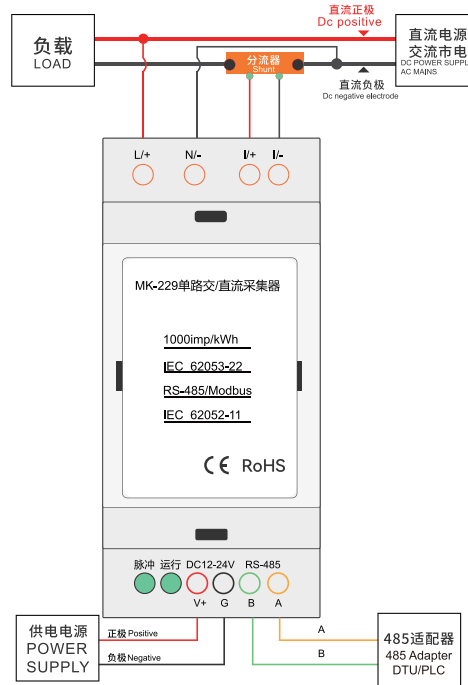
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
L/+	交流火线 (直流正极) AC live wire (DC positive)	被测交流电压火线接口 (被测直流电压正极接口) The live wire interface of the AC voltage under test (the positive terminal of the DC voltage under test)
N/-	交流零线 (直流负极) AC neutral line (DC negative pole)	被测交流电压零线接口 (被测直流电压负极接口) Measured AC voltage neutral interface (measured DC voltage negative interface)
I+	分流器正端 Positive end of shunt	锰铜分流器正端输入 (分流器串入被测回路零线或负极) Positive terminal input of manganese-copper shunt (the shunt is connected in series to the neutral line or negative pole of the circuit under test).
I-	分流器负端 Negative terminal of shunt	锰铜分流器负端输入 (接被测电源的零线或负极) Manganese-copper shunt negative input (connected to the neutral line or negative pole of the power supply under test).
G	电源负极 Negative pole of power supply	采集器供电电源负极 Collector power supply negative pole
V+	电源正极 Positive pole of power supply	采集器12~36VDC供电电源正极 Collector 12~36VDC power supply positive pole
A	484A	RS485通讯A口 RS485 communication port A
B	485B	RS485通讯B口 RS485 communication port B

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



JSY-MK-231



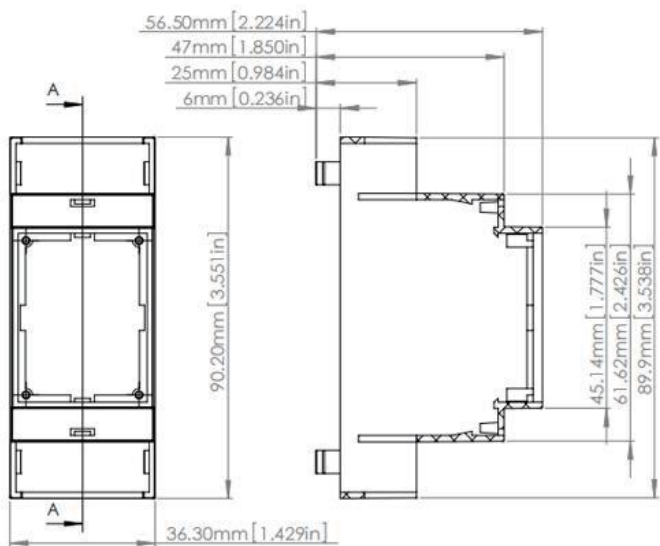
技术参数/Technical parameters

电能计量方向 Energy metering direction	双向计量(正向+反向) Bidirectional measurement(Positive+Negative)
通讯方式/协议 Communication/Protocol	RS485/Modbus~RTU
电压量程 Voltage Range	DC 1~400V
电流量程 Current Range	0.5-100A
供电电源 Power Supply	DC 12-36V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	导轨式安装 DIN-rail installation
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

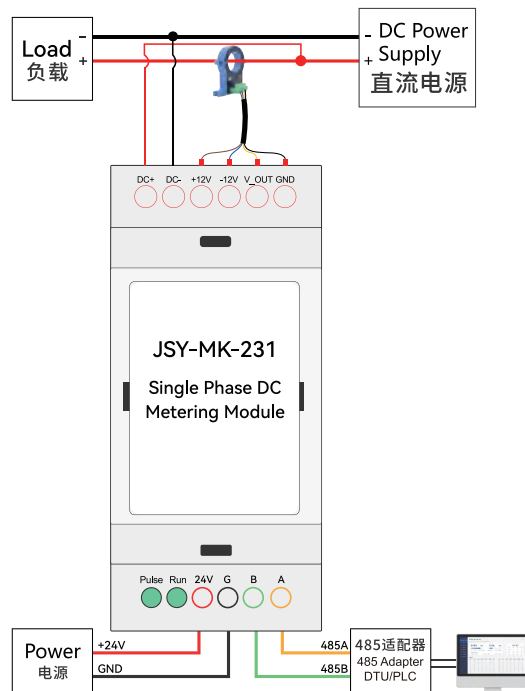
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
DC+	直流正极 DC positive	被测直流电压正极接口 Measured DC voltage positive terminal
DC-	直流负极 DC negative pole	被测直流电压负极接口 Measured DC voltage negative terminal
+12V	传感器工作电源 Sensor working power supply	接到传感器的+12V输入端口 Connected to the sensor's +12V input port
-12V	传感器工作电源 Sensor working power supply	接到传感器的-12V输入端口 Connected to the sensor's -12V input port
GND	传感器工作电源 Sensor working power supply	接到传感器的GND输入端口 Connected to the sensor's GND input port
V_OUT	传感器输出信号 Sensor output signal	接到传感器的Vo输出端口 Connected to the sensor's Vo output port
24V	采集器工作电源 Collector working power supply	正极输入口, 电压范围为12-36V Positive input port, voltage range 12-36V
G	采集器工作电源 Collector working power supply	负极输入口 Negative input port
A	485A	RS485通讯A口 RS485 communication port A
B	485B	RS485通讯B口 RS485 communication port B

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



04

多路电能计量模块 MULTI-CHANNEL ENERGY METER

JSY-MK-141G 6路电能计量模块(RS485通讯)
6-channel energy meter (RS485)

JSY-MK-138 12路电能计量模块(RS485通讯)
12-channel energy meter (RS485)

JSY-MK-238 8路直流电能计量模块(RS485通讯)
8-channel DC energy metering module (RS485)

JSY-MK-218 8路直流电能计量模块(RS485通讯)
8-channel DC energy meter (RS485)

JSY-MK-141G

6-CHANNEL ENERGY METER (RS485)
6路电能计量模块(RS485通讯)



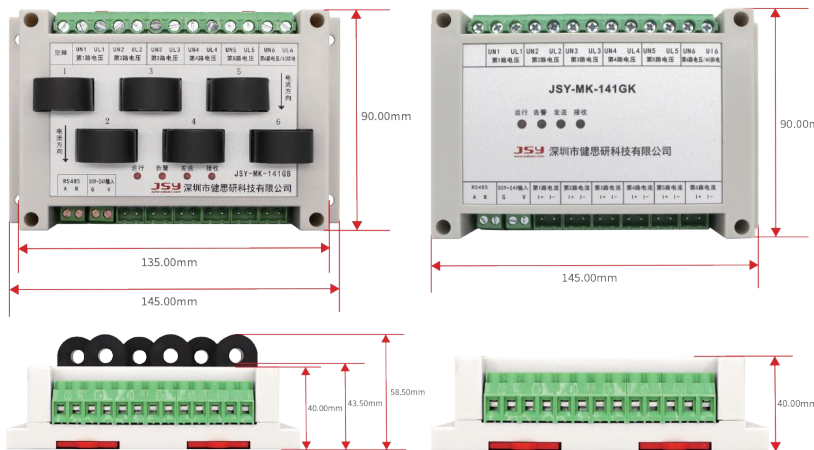
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA-50A, 20mA-80A, 20mA-100A
供电电源 Power Supply	DC 9-24V
频率 Frequency	50Hz 或者or 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	导轨式安装 DIN-rail installation 螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

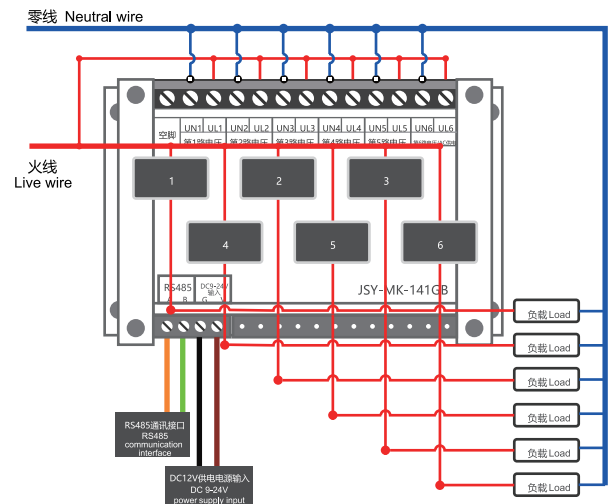
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
UN1~UN6	零线接口 Neutral wire port	被测零线1-6路接口 Measured neutral wire 1-6 channels ports
UL1~UL6	火线接口 Live wire port	被测火线1-6路接口 Measured fire wire 1-6 channels ports
A	485A	RS485通讯A口 RS485 communication port A
B	485B	RS485通讯B口 RS485 communication port B
G	负极输入 Negative input	模块工作直流电源9-24V负极输入 Module operating DC power supply 9-24V negative input
V	DC 9-24V正极输入 DC 9-24V positive input	模块工作直流电源9-24V正极输入 Module operating DC power supply 9-24V positive input
I+	1-6路电流+ 1-6 Channels current +	外接电流互感器正极接口 External current transformer positive terminal
I-	1-6路电流- 1-6 Channels current -	外接电流互感器正极接口 External current transformer positive terminal

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



JSY-MK-138

12-CHANNEL ENERGY METER (RS485)
12路电能计量模块(RS485通讯)



技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communtation/Protocol	RS485/Modbus-RTU
电压量程 Voltage Range	AC 1~300V
电流量程 Current Range	AC 20mA-50A, 20mA-100A
供电电源 Power Supply	DC 9-24V
频率 Frequency	50Hz 或者 or 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

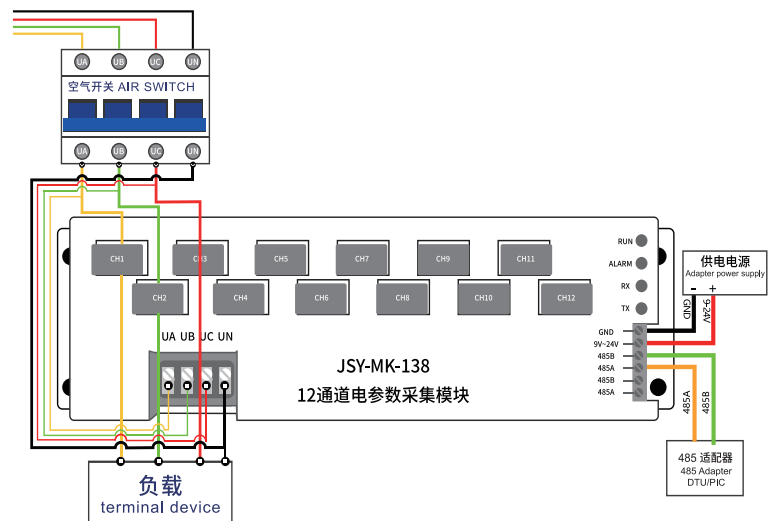
端子接口定义/Terminal interface definition

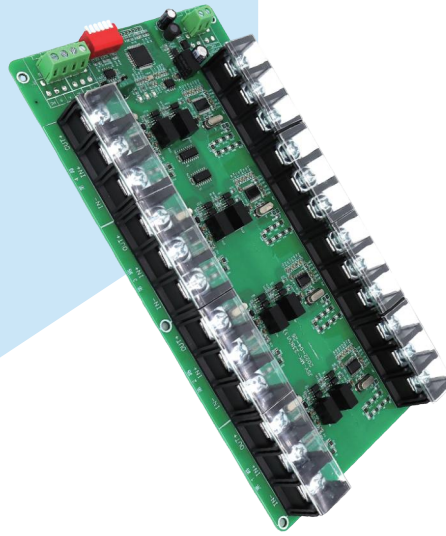
标识 Mark	特性 Feature	功能描述 Function description
UA	A相电压 Phase A voltage	被测三相电压A相接口 Measured three-phase voltage phase A interface
UB	B相电压 Phase B voltage	被测三相电压B相接口 Measured three-phase voltage phase B interface
UC	C相电压 Phase C voltage	被测三相电压C相接口 Measured three-phase voltage phase C interface
UN	零线电压 Neutral wire voltage	被测三相电压零线接口 Measured three-phase voltage neutral interface
GND	供电电源负极接口 Power supply negative terminal	产品直流供电电源负极输入 Product DC power supply negative input
9V-24V	供电电源正极 Power supply positive terminal	产品直流供电电源正极9-24V输入 Product DC power supply positive 9-24V input
485B	RS485接口 RS485 interface	RS485通讯接口B RS485 communication interface B
485A	RS485接口 RS485 interface	RS485通讯接口A RS485 communication interface A

尺寸图/Dimensional drawing



接线示意图/Wiring diagram





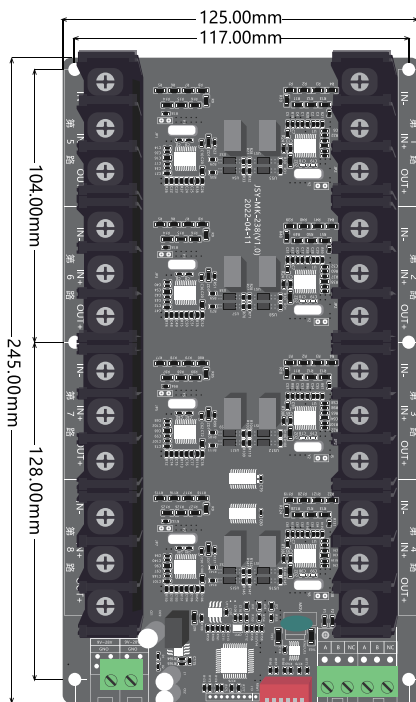
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	RS485/Modbus-RTU
电压量程 Voltage Range	DC 1~300V
电流量程 Current Range	DC 10mA-30A
供电电源 Power Supply	DC 9-28V
频率 Frequency	50Hz 或者 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

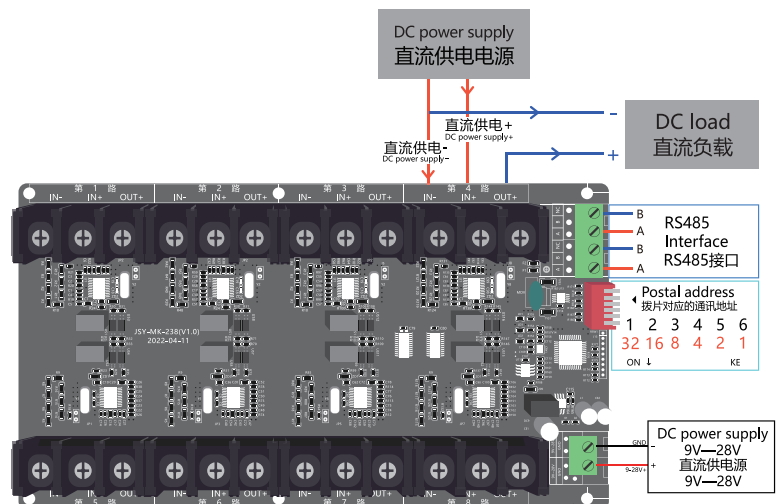
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
IN-	电源负极输入 Power negative input	被测直流电源负极输入 DC power supply to be measured, negative input
IN+	电源正极输入 Power positive input	被测直流电源正极输入 DC power supply to be measured, positive input
OUT+	电源正极输出 Power positive output	被测直流电源正极输出 (接负载) DC power supply to be measured, positive output (connected to I_{load})
B	RS485 B	RS485通讯B接口 RS485 communication port B
A	RS485 A	RS485通讯A接口 RS485 communication port A
GND	电源- Power-	产品直流供电电源负极接口 DC power supply negative port
9-28V	供电电源接口 Power supply port	产品直流供电电源9-28V正极接口 DC power supply 9-28V positive port

尺寸图/Dimensional drawing



接线示意图/Wiring diagram



JSY-MK-218

8-CHANNEL DC ENERGY METER (RS485)
8路直流电能计量模块(RS485通讯)



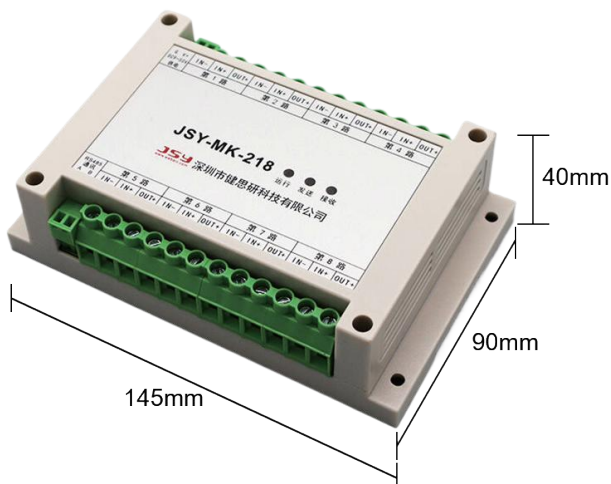
技术参数/Technical parameters

电能计量方向 Energy metering direction	正向计量 Non-bidirectional metering
通讯方式/协议 Communication/Protocol	RS485/Modbus~RTU
电压量程 Voltage Range	DC 1~300V
电流量程 Current Range	DC 10mA~8A
供电电源 Power Supply	DC 9~50V
频率 Frequency	50Hz 或者 60Hz
有功精度 Active power accuracy	±1%
安装方式 Installation	螺丝孔固定 Screw fixing
测量参数 Collect Values	电流、电压、功率、电能等. Current, voltage, power, electric energy, etc.

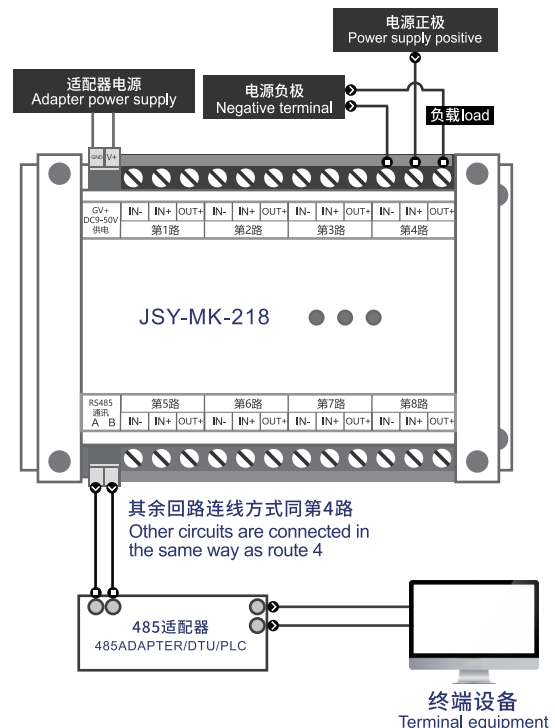
端子接口定义/Terminal interface definition

标识 Mark	特性 Feature	功能描述 Function description
IN-	电源负极输入 Power supply negative input	被测直流电源负极输入 DC power supply being measured, negative input
IN+	电源正极输入 Power supply positive input	被测直流电源正极输入 DC power supply being measured, positive input
OUT+	电源正极输出 Power supply positive output	被测直流电源正极输出 (接负载) DC power supply being measured, positive output (connected to load)
B	RS485 B	RS485通讯B接口 RS485 communication port B
A	RS485 A	RS485通讯A接口 RS485 communication port A
GND	电源- Power-	产品直流供电电源负极接口 DC power supply negative port
9~50V	供电电源正极 Power supply positive	产品直流供电电源9~50V正极接口 DC power supply 9~50V positive port

尺寸图/Dimensional drawing



接线示意图/Wiring diagram





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