

能耗篇

Energy Consumption

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

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【企业公众号】



ELECTRICITY METERING TECHNOLOGY SOLUTION COMPONENT PROVIDER

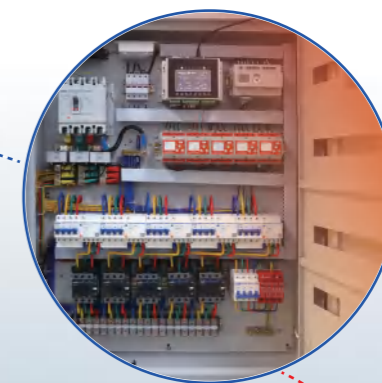
电能计量技术方案/组件提供商



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



电网
Grid



储能电池
Energy storage
battery



家庭负载
Home Load



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ENTERPRISE PROFILE 企业简介

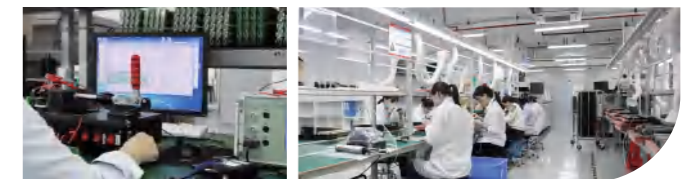
ELECTRICITY METERING TECHNOLOGY
SOLUTION COMPONENT PROVIDER
电能计量技术方案/组件提供商

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)。

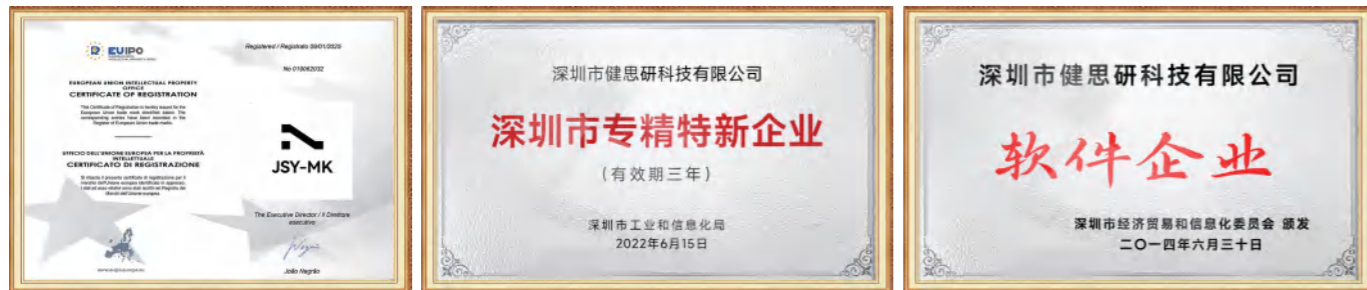
公司愿景：以科技驱动创新，以品质赢得信任，成为全球领先的电能计量解决方案提供商。



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

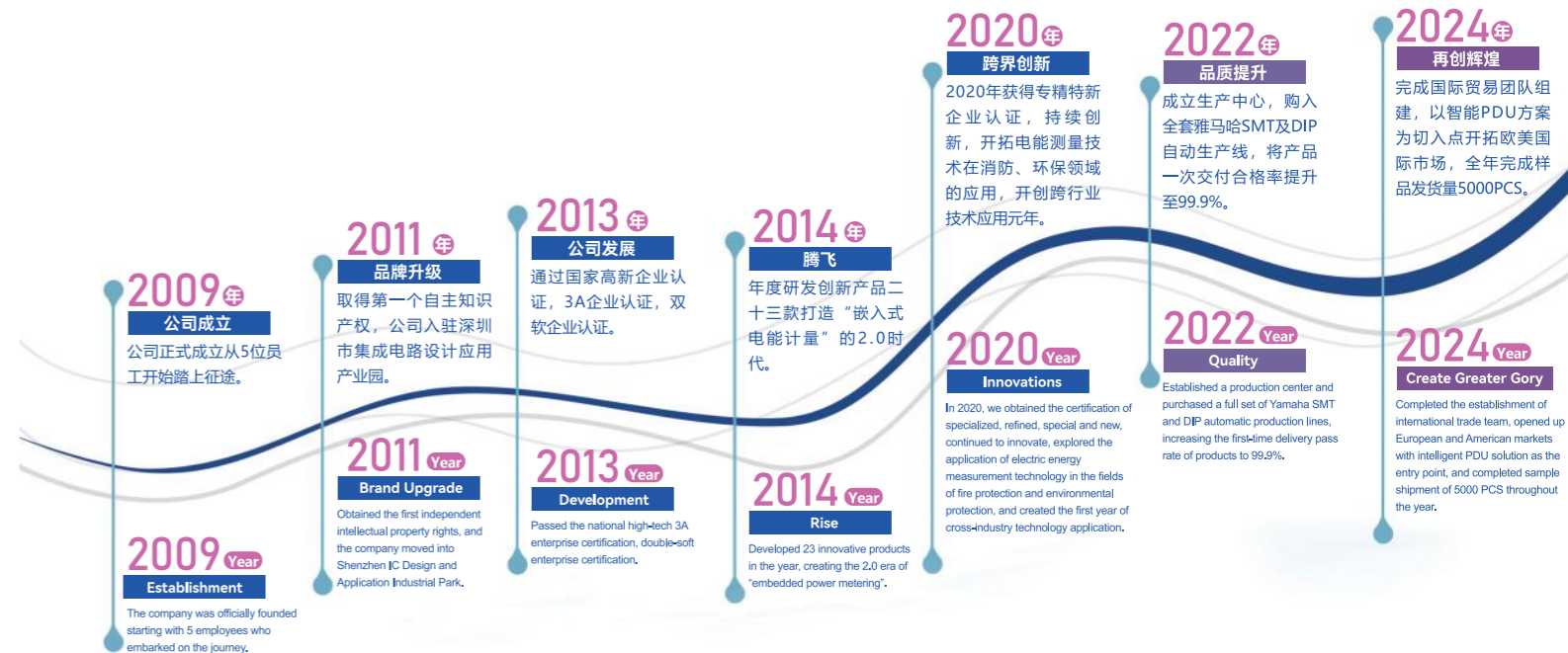


质量认证 Quality Certification



携手同行再创辉煌
WITNESSING 16 YEARS OF TRIALS AND HARDSHIPS
WE ARE ALWAYS ON THE ROAD

历程 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)

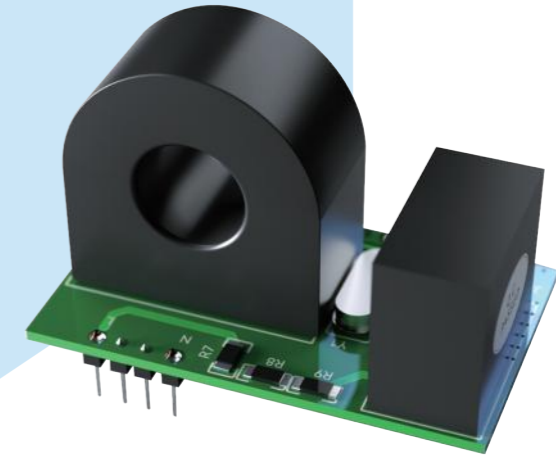
JSY1050 单相电能计量模块(TTL通讯)
Single-phase energy metering module (TTL)

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)

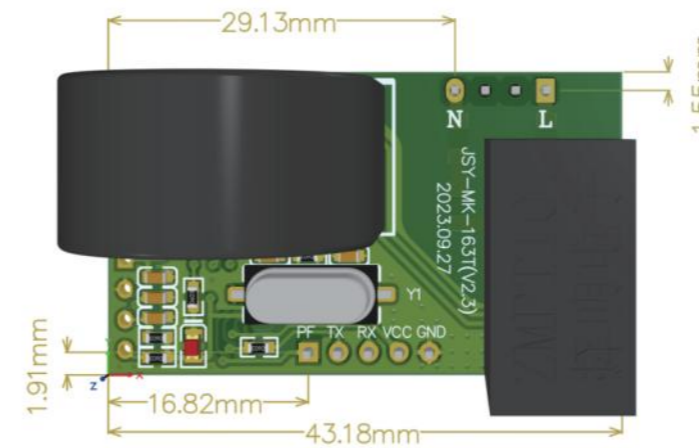
JSY-MK-149 单相导轨表(RS485通讯)
Single-phase energy meter (RS485)

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

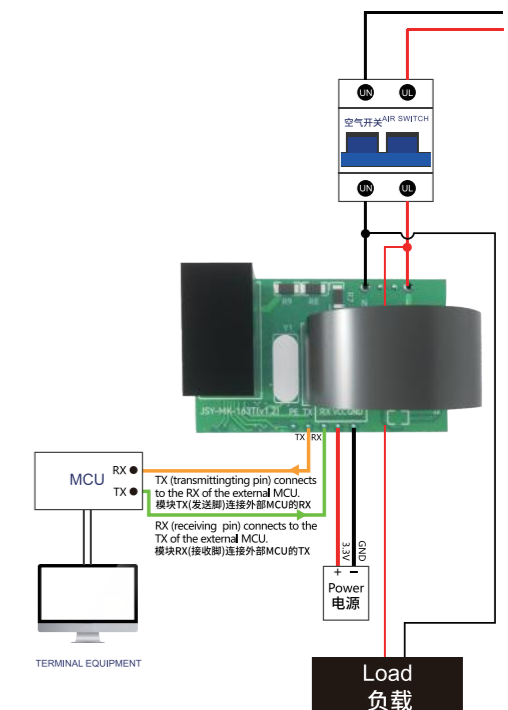


| 技术参数/Technical parameters | | 端子接口定义/Terminal interface definition | | |
|-------------------------------------|--|--------------------------------------|-----------------------|--|
| 电能计量方向 Energy metering direction | 双向计量(正向+反向) Bidirectional measurement(Positive+Negative) | 标识 Mark | 特性 Feature | 功能描述 Function description |
| 通讯方式/协议 Communitation/Protocol | TTL/Modbus-RTU | L | 火线 Live wire | 被测电压火线接线口 Measured voltage live wire connection port |
| 电压量程 Voltage Range | AC 1~300V | N | 零线 Neutral wire | 被测电压零线接线口 Measured voltage neutral wire connection port |
| 电流量程 Current Range | AC 20mA~50A AC 20mA~100A | 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. |
| 供电电源 Power Supply | DC 3.3V | TXD | 输出 Output | 模块TTL电平发送 Module TTL level sending |
| 频率 Frequency | 50Hz 或者or 60Hz | RXD | 输入 Input | 模块TTL电平接收 Module TTL level reception |
| 有功精度 Active power accuracy | ±1% | 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. |
| 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 | V- | 电源- Power supply - | 电源地 Power ground |
| 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. | | | |

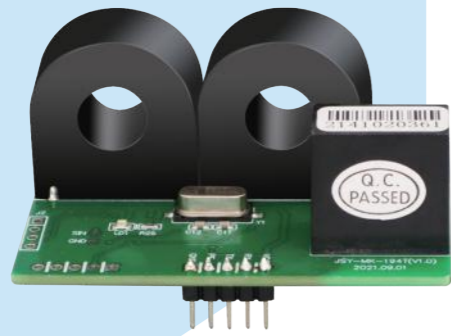
尺寸图/Dimensional drawing



接线示意图/Wiring Diagram

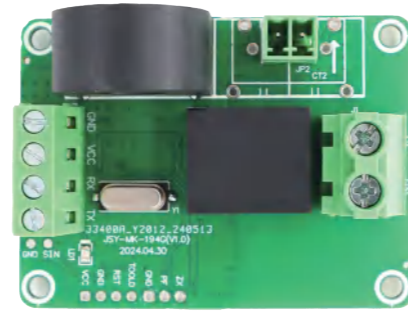


JSY-MK-194T

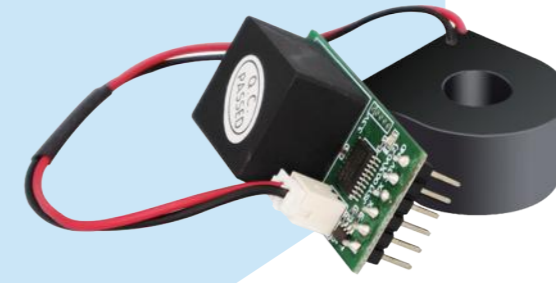


SINGLE-PHASE TWO-CHANNEL ENERGY METERING MODULE (TTL)
单相两路电能计量模块(TTL通讯)

JSY-MK-194G

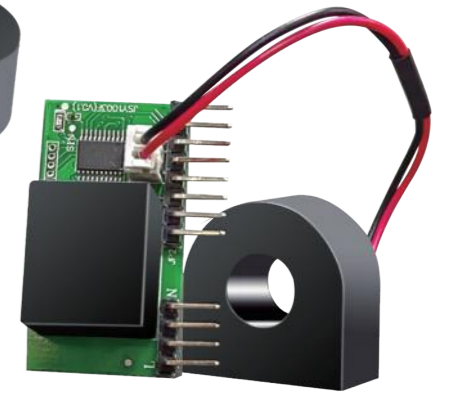


JSY1003H



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

JSY1003F



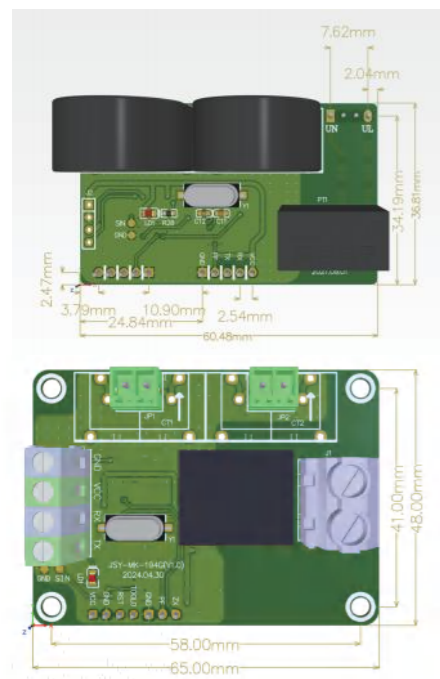
| 技术参数/Technical parameters | |
|-------------------------------------|--|
| 电能计量方向 Energy metering direction | 双向计量(正向+反向) Bidirectional measurement(Positive+Negative) |
| 通讯方式/协议 Communication/Protocol | TTL/Modbus-RTU |
| 电压量程 Voltage Range | AC 1~300V |
| 电流量程 Current Range | AC 20mA~50A AC 20mA~100A |
| 供电电源 Power Supply | DC 3.3V |
| 频率 Frequency | 50Hz 或者 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. |
| GND | 电源- Power supply - | 电源地 Power ground |

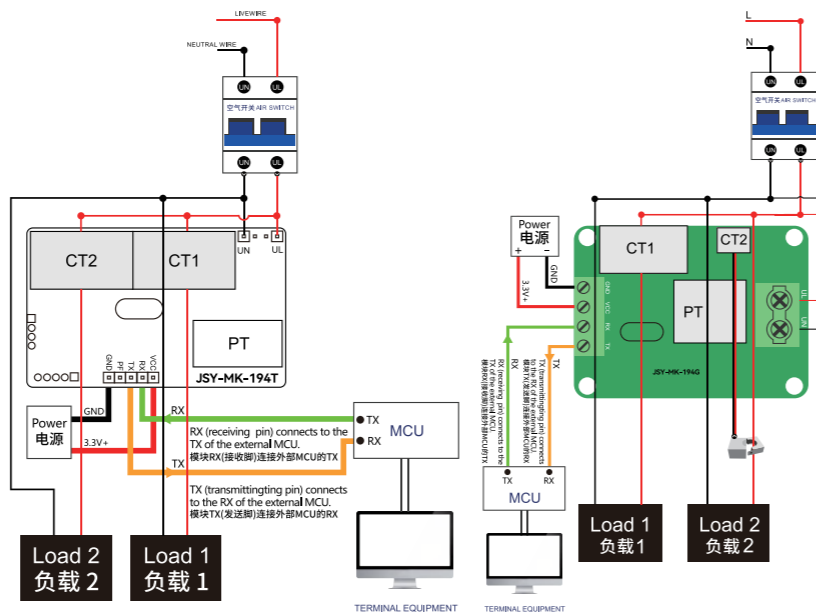
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communication/Protocol | TTL/Modbus-RTU |
| 电压量程 Voltage Range | AC 1~300V |
| 电流量程 Current Range | AC 20mA~50A |
| 供电电源 Power Supply | DC 3.3V |
| 频率 Frequency | 50Hz 或者 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 |
| 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 |

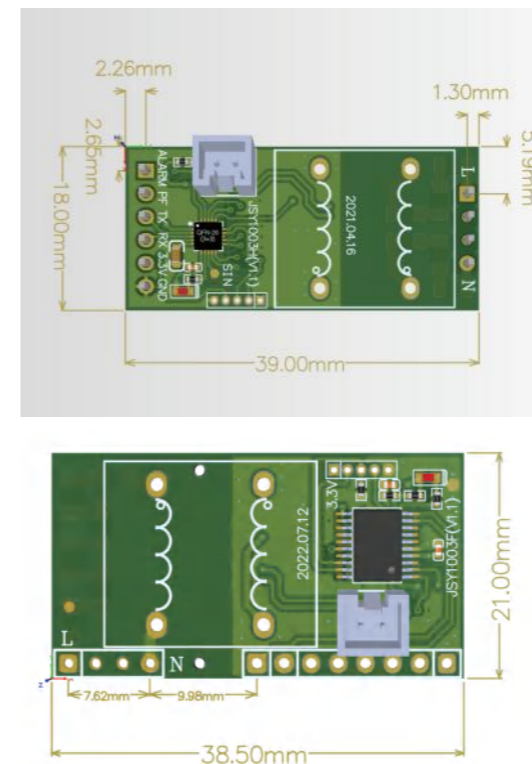
尺寸图/Dimensional drawing



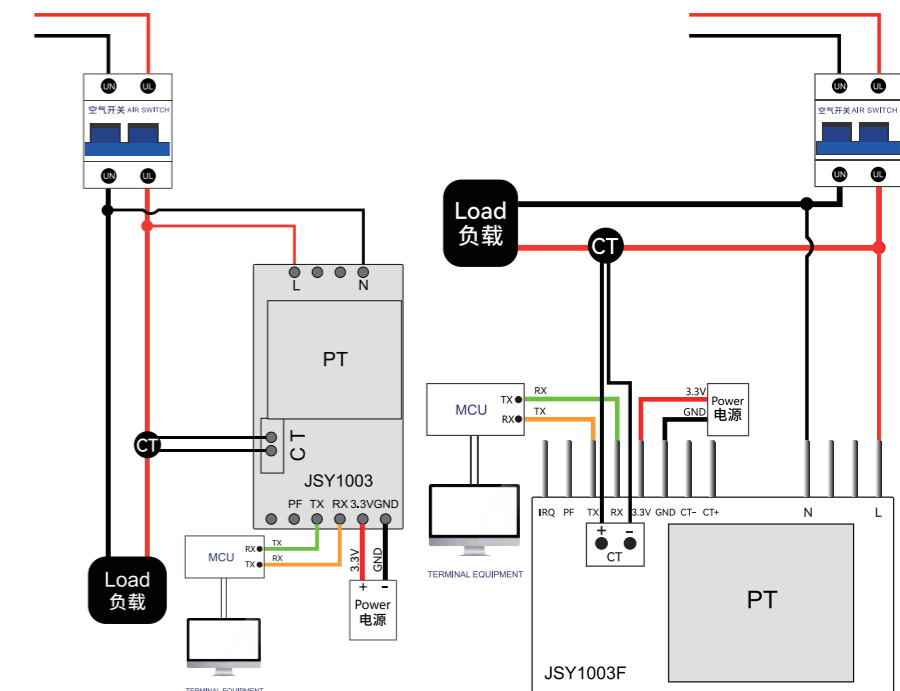
接线示意图/Wiring Diagram



尺寸图/Dimensional drawing



接线示意图/Wiring Diagram



JSY1017

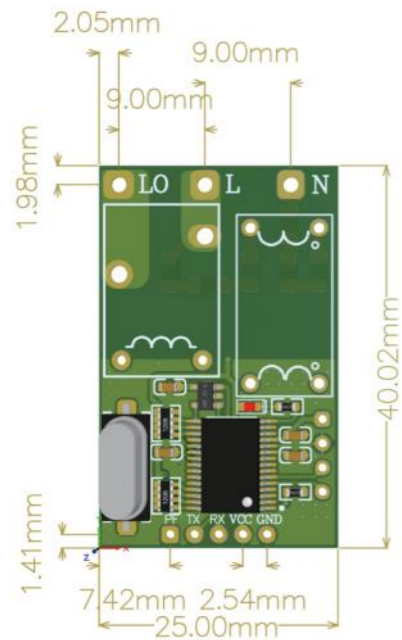
SINGLE-PHASE ENERGY METERING MODULE (TTL)
单相电能计量模块(TTL通讯)



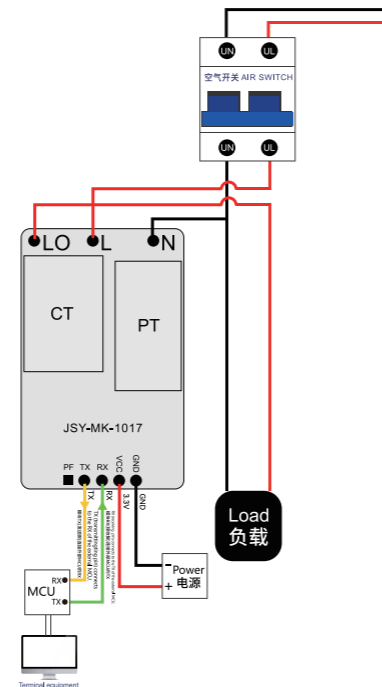
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communication/Protocol | TTL/Modbus-RTU |
| 电压量程 Voltage Range | AC 1~300V |
| 电流量程 Current Range | AC 20mA~16A |
| 供电电源 Power Supply | DC 3.3V |
| 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 |
| LO | 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

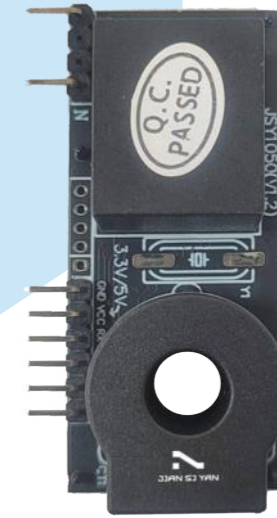


接线示意图/Wiring Diagram



JSY1050

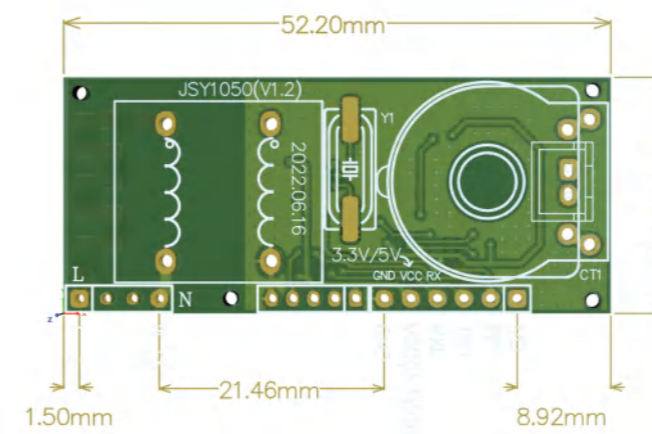
SINGLE-PHASE ENERGY METERING MODULE (TTL)
单相电能计量模块(TTL通讯)



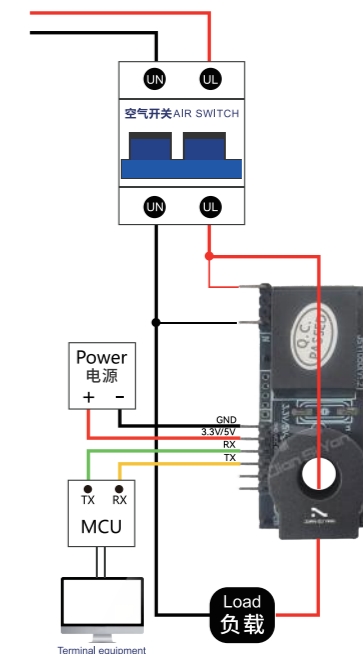
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communication/Protocol | TTL/Modbus-RTU |
| 电压量程 Voltage Range | AC 1~300V |
| 电流量程 Current Range | AC 20mA~30A |
| 供电电源 Power Supply | DC 3.3V |
| 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 |
| 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

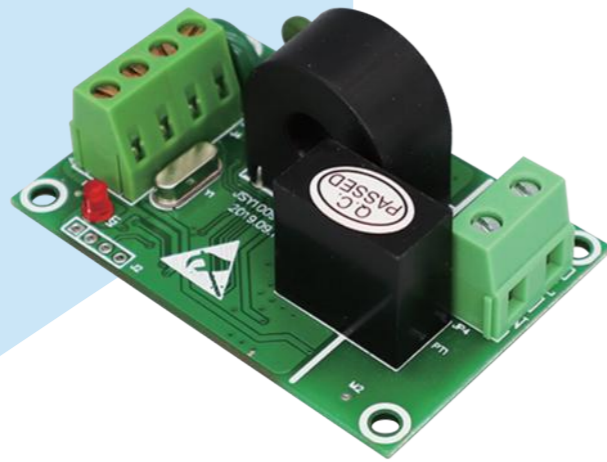


接线示意图/Wiring Diagram



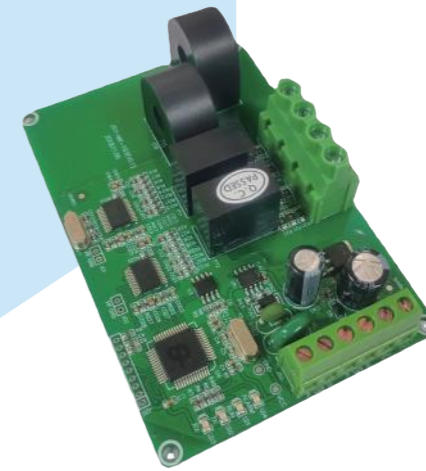
JSY1009

SINGLE-PHASE ENERGY METERING MODULE (RS485)
单相电能计量模块(RS485通讯)



JSY-MK-193

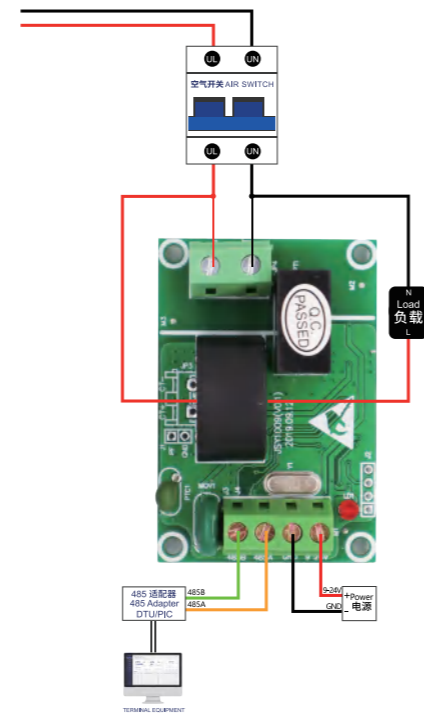
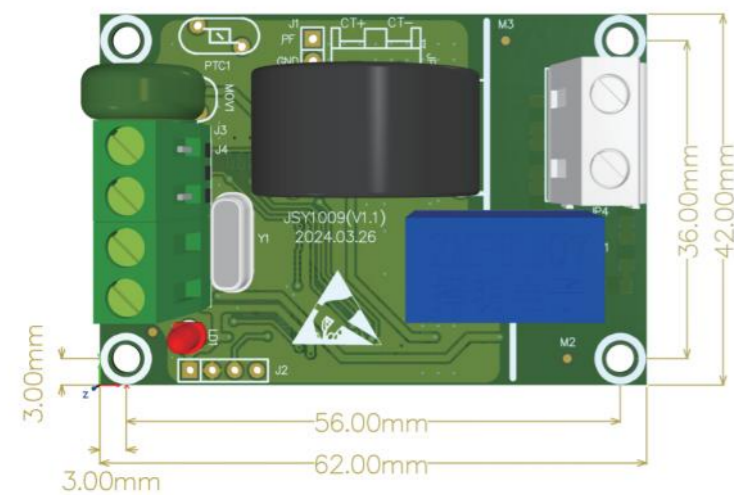
SINGLE-PHASE TWO-CHANNEL ENERGY METERING MODULE (RS485)
单相两路电能计量模块(RS485通讯)



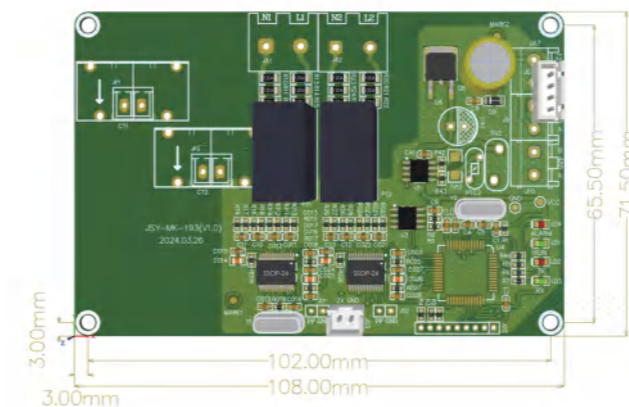
| 技术参数/Technical parameters | | 端子接口定义/Terminal interface definition | | |
|-------------------------------------|--|--------------------------------------|---------------|--|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering | NO. | 特性 Feature | 功能描述 Function description |
| 通讯方式/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. | | | |

| 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 | 特性 Feature | 功能描述 Function description |
| 通讯方式/协议 Communication/Protocol | RS485/Modbus-RTU | CT1 | 电流采样 Current sampling | 第一通道 Channel 1 |
| 电压量程 Voltage Range | AC 1~300V | CT2 | 电流采样 Current sampling | 第二通道 Channel 2 |
| 电流量程 Current Range | AC 20mA~50A AC 20mA~100A | N1 | 电压采样 Current sampling | 连接第一通道零线 Connect neutral wire to channel 1 |
| 供电电源 Power Supply | DC 9-24V | L1 | 电压采样 Current sampling | 连接第一通道火线 Connect live wire to channel 1 |
| 频率 Frequency | 50Hz 或者or 60Hz | N2 | 电压采样 Current sampling | 连接第二通道零线 Connect neutral wire to channel 2 |
| 有功精度 Active power accuracy | ±1% | L2 | 电压采样 Current sampling | 连接第二通道火线 Connect live wire to channel 2 |
| 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 | 12V | DC+ | 供电电压: +9V~30V Power supply voltage: +9V-30V |
| 安装方式 Installation | 螺丝孔固定 Screw fixing | GND | DC- | 电源地 Power ground |
| 测量参数 Collect Values | 电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc. | 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RS485B接口 Connect to RS485B port |

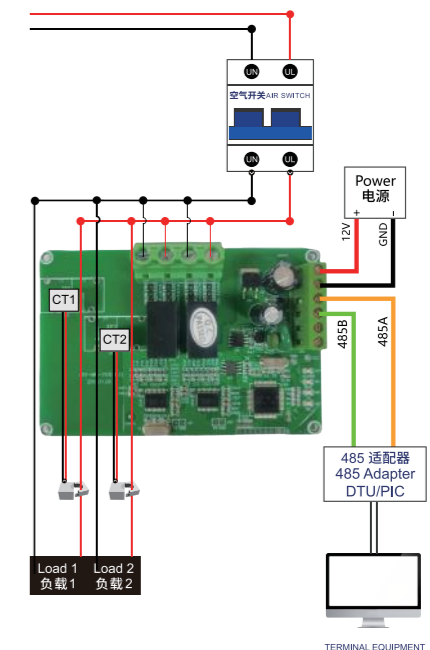
尺寸图/Dimensional drawing 接线示意图/Wiring Diagram



尺寸图/Dimensional drawing 接线示意图/Wiring Diagram

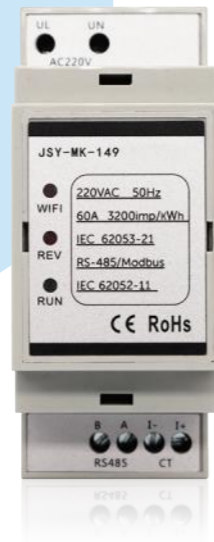


接线示意图/Wiring Diagram



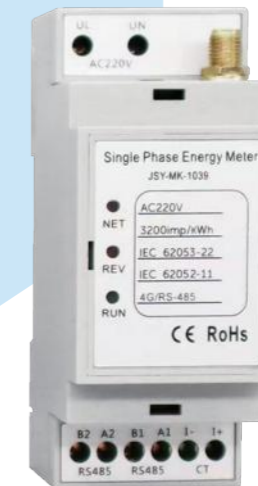
JSY-MK-149

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



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/Modbus-RTU |
| 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. |

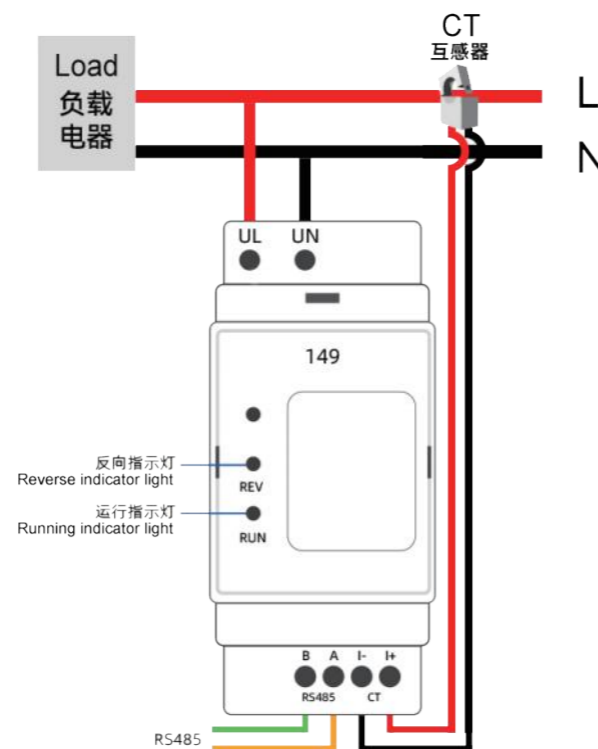
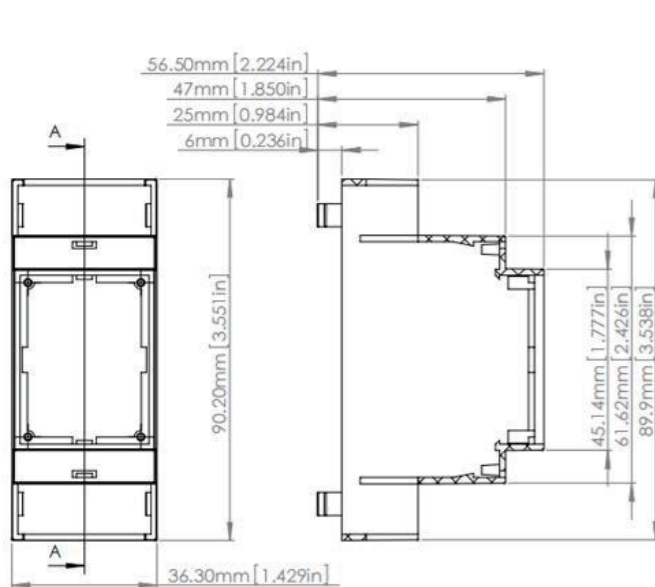
| 端子接口定义/Terminal interface definition | |
|--------------------------------------|---|
| No. | 功能描述 Function description |
| 1 | L (火线)、N (零线) 为被测电压接线口。 L (Live wire) and N (Neutral wire) are the voltage connection ports to be measured. |
| 2 | 被测电流线(按照互感器底部电流方向)从外接互感器中穿过。 The current line to be measured (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). |

| 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). |

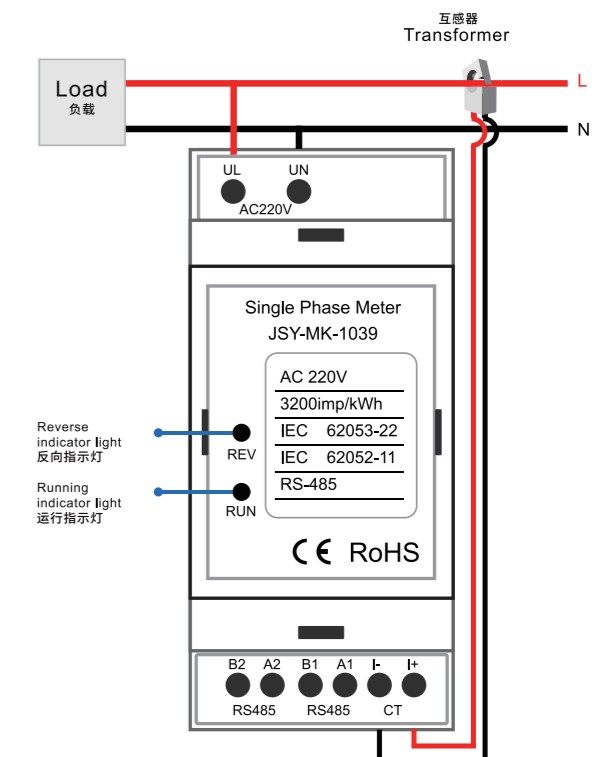
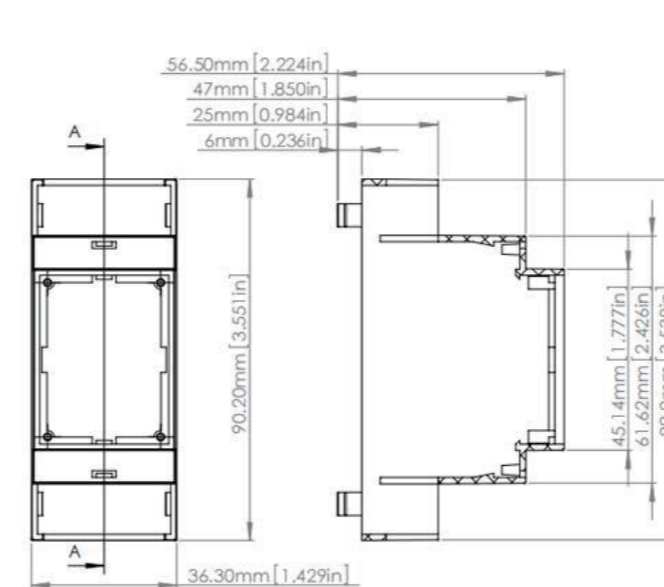
尺寸图/Dimensional drawing

接线示意图/Wiring Diagram



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

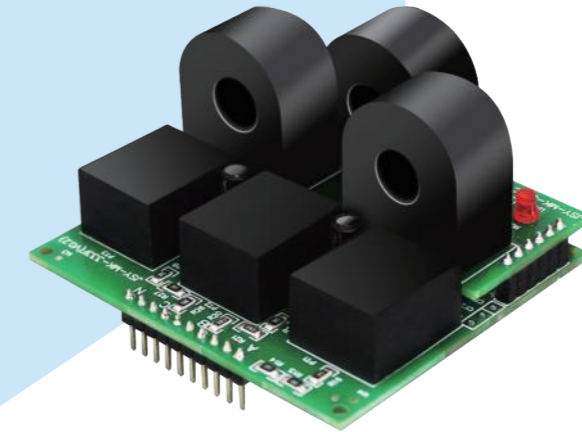
JSY-MK-333 三相电能计量模块(TTL/RS485通讯)
Three-phase energy metering module (TTL/RS485)

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)



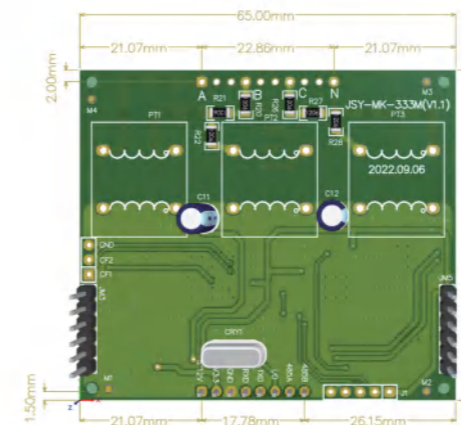
技术参数/Technical parameters

| | | |
|-------------------------------------|---|--|
| 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 & RS485 / Modbus-RTU | |
| 电压量程 Voltage Range | AC 1-300V | |
| 供电电源 Power Supply | DC 3.3V(TTL) DC 5-12V(RS485) | |
| 频率 Frequency | 50Hz 或者or 60Hz | |
| 有功精度 Active power accuracy | ±1% | |
| 电流量程 Current Range | 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 |
| 电流互感器 Current transformer(CT) | 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 |
| 安装方式 Installation | 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 |
| | AC 100mA-500A | 外接分芯式CT: 35mm ID External split-core CT: 35mm ID |
| 测量参数 Collect Values | 电流、电压、功率、电能等。 Current, voltage, power, electric energy, etc. | |

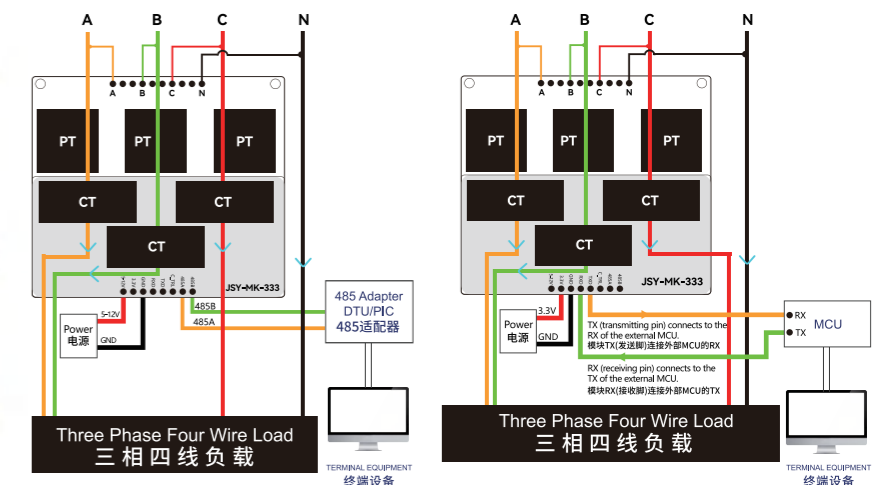
端子接口定义/Terminal interface definition

| 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 |
| 5-12V | 宽电压供电输入正极 (5-12VDC) Positive input of power supply (5-12VDC) |
| 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) |
| GND | 电源输入负极 Negative input of power supply |
| RXD | TTL接收脚 (3.3V电平) TTL Receiving pin (3.3V Level) |
| TXD | TTL发送脚 (3.3V电平) TTL transmitting pin (3.3V level) |
| I/O | 功能预留 Function Reserved |
| 485A | RS485通讯A口 RS485 communication port A |
| 485B | RS485通讯B口 RS485 communication port B |

尺寸图/Dimensional drawing

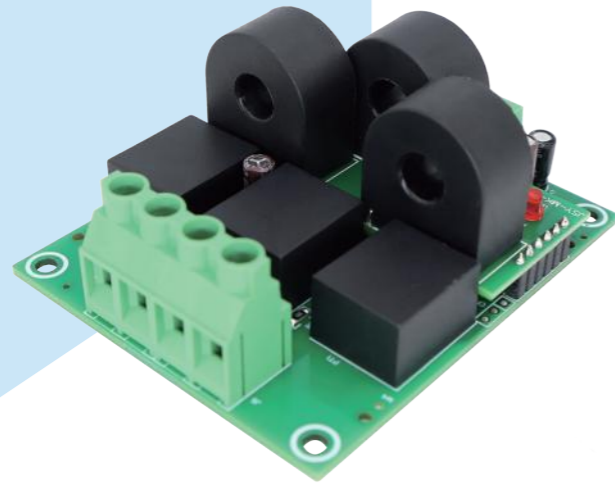


接线示意图/Wiring Diagram



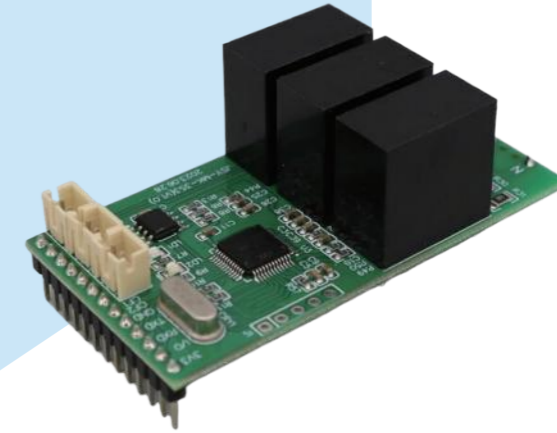
JSY-MK-333G

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



JSY-MK-353

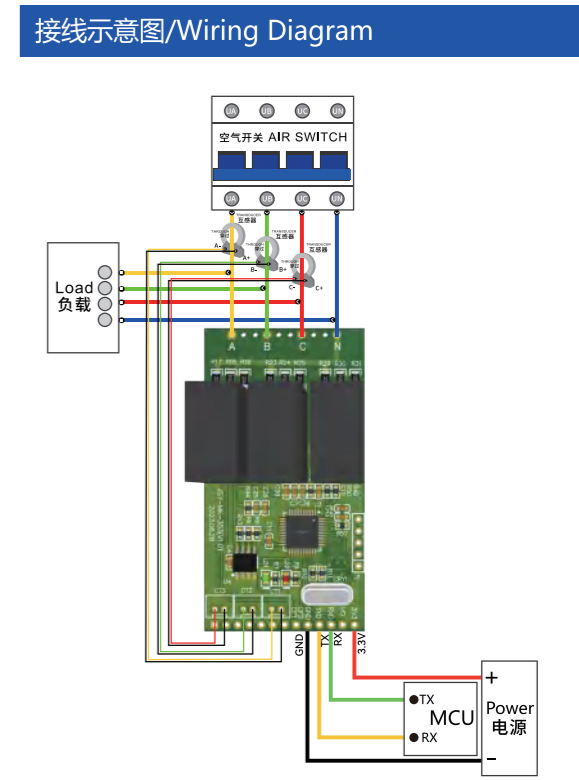
THREE-PHASE ENERGY METERING MODULE (TTL)
三相电能计量模块(TTL通讯)



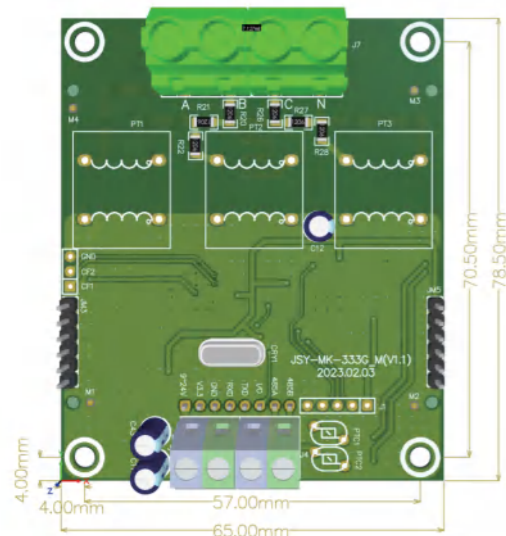
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 双向计量(正向+反向) Bidirectional measurement(Positive+Negative) |
| 通讯方式/协议 Communication/Protocol | RS485 / Modbus-RTU |
| 电压量程 Voltage Range | AC 1-300V |
| 供电电源 Power Supply | DC 9-24V |
| 频率 Frequency | 50Hz 或者or 60Hz |
| 有功精度 Active power accuracy | ±1% |
| 电流量程 Current Range | AC 1mA-5A 板载CT: 7.5mm ID AC 20mA-50A On-board CT: 7.5mm ID |
| | AC 20mA-63A 外接分芯式CT: 10mm ID AC 20mA-80A 外接圆形闭口CT: 10mm ID |
| 电流互感器 Current transformer(CT) | AC 20mA-80A 板载CT: 9.5mm ID AC 20mA-80A On-board CT: 9.5mm ID |
| | AC 20mA-80A 外接圆形闭口CT: 12mm ID AC 20mA-100A 外接分芯式CT: 16mm ID AC 50mA-250A 外接分芯式CT: 24mm ID AC 100mA-500A 外接分芯式CT: 35mm ID |
| | 外接分芯式CT: 16mm ID External split-core CT: 16mm ID |
| | 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 |

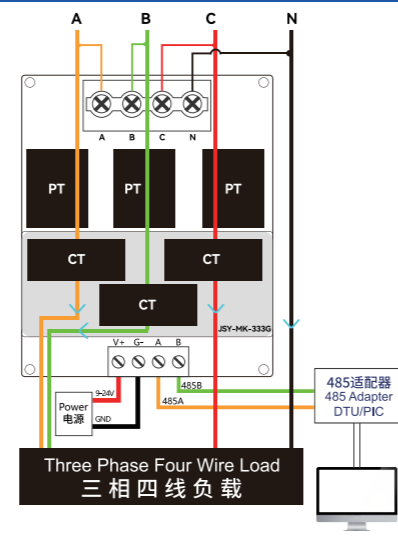
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 双向计量(正向+反向) Bidirectional measurement(Positive+Negative) |
| 通讯方式/协议 Communication/Protocol | TTL/Modbus-RTU |
| 电压量程 Voltage Range | AC 1-300V |
| 电流量程 Current Range | AC 20mA~50A |
| 供电电源 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. |



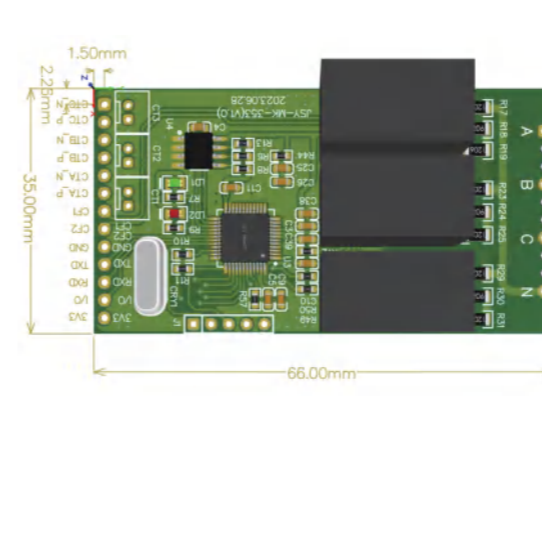
尺寸图/Dimensional drawing



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 | | |

JSY-MK-354

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

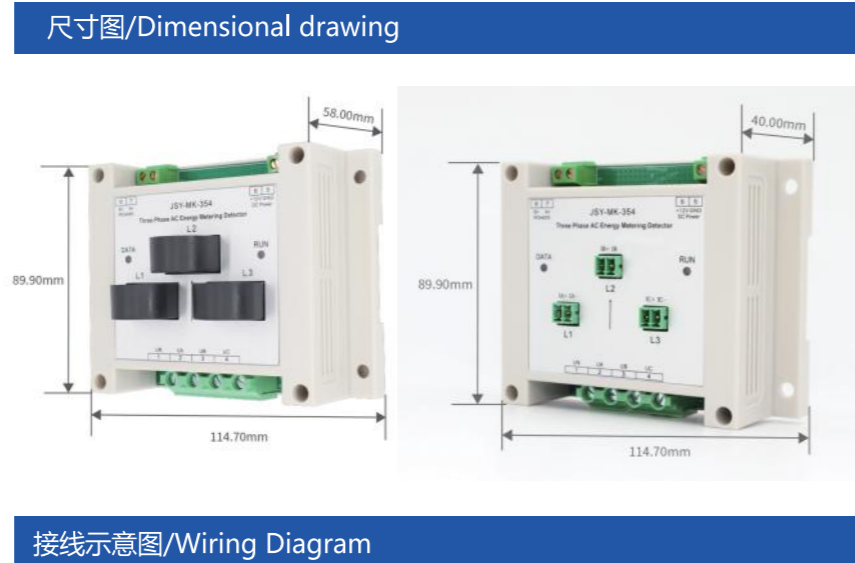


JSY-MK-339

THREE-PHASE ENERGY METER (4G/RS485)
三相电压电流采集器(4G/RS485通讯)



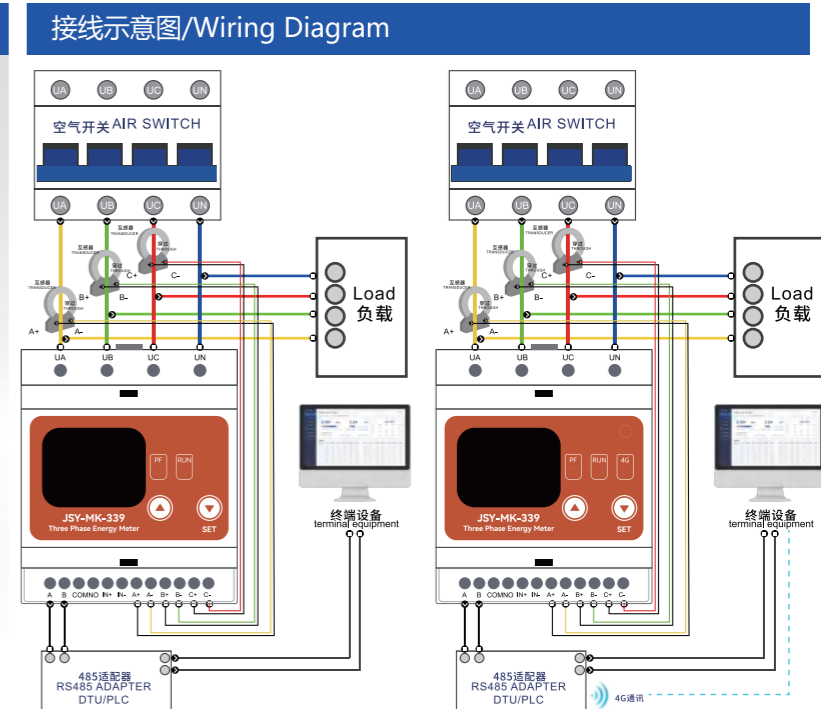
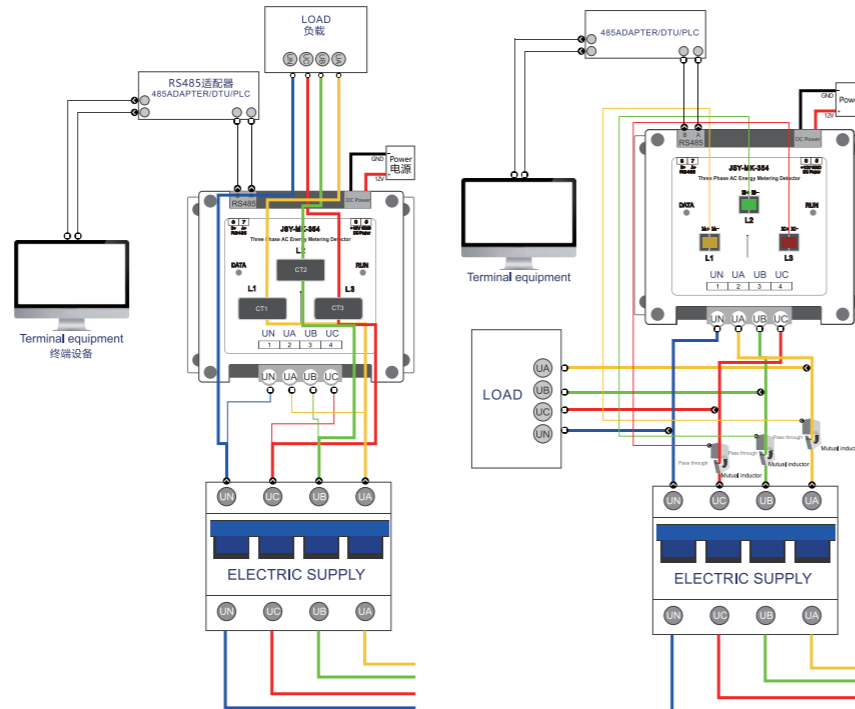
| 技术参数/Technical parameters | |
|-------------------------------------|--|
| 电能计量方向 Energy metering direction | 双向计量(正向+反向) Bidirectional measurement(Positive+Negative) |
| 通讯方式/协议 Communication/Protocol | RS485/Modbus-RTU |
| 电压量程 Voltage Range | AC 1-300V |
| 供电电源 Power Supply | DC 9-24V |
| 频率 Frequency | 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 |
| 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 |
| | 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. |



| 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 |
| | 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- |

| 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 |



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)

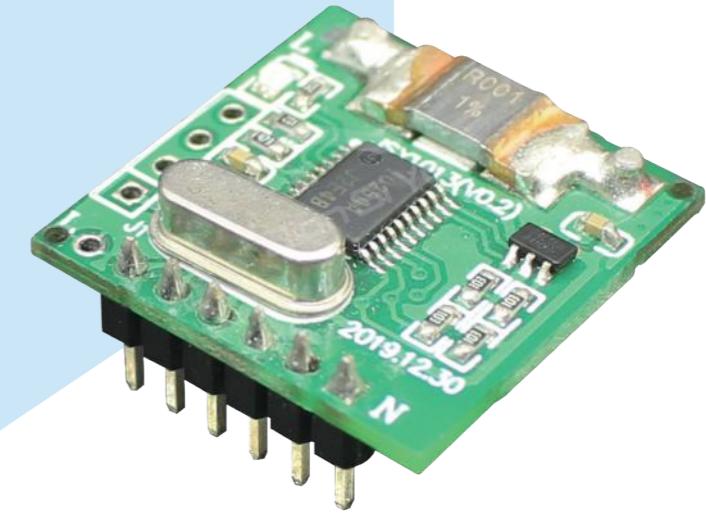
JSY1031 交流/直流自适应电能计量模块(TTL通讯)
AC/DC Self-adaptive energy metering Module (TTL)

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)

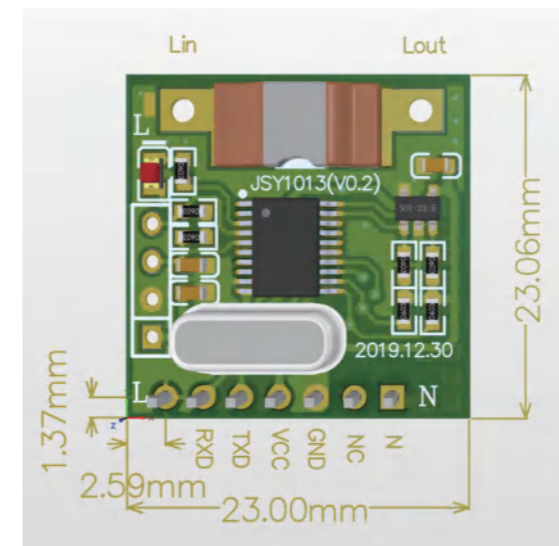
JSY-MK-229 单路交/直流采集器(RS485通讯)
Single-channel AC/DC metering module (RS485)

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)

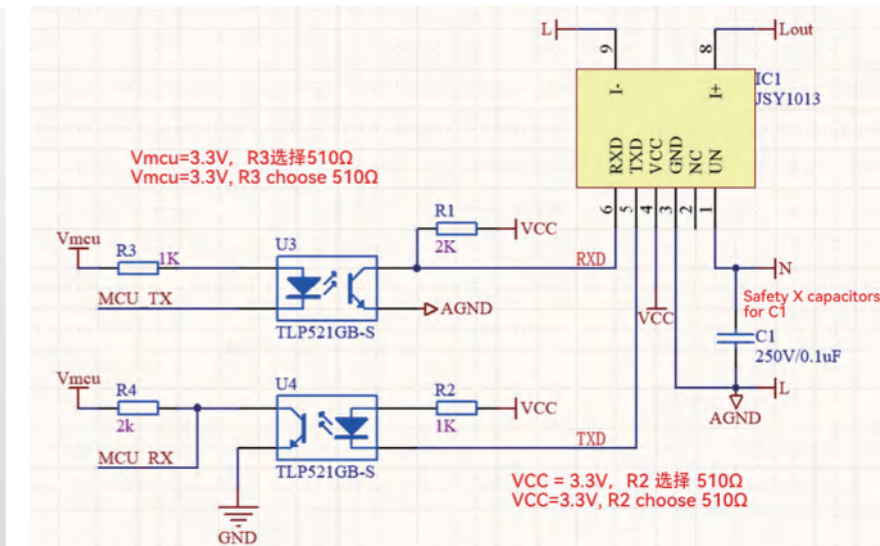


| 技术参数/Technical parameters | | 端子接口定义/Terminal interface definition | |
|-------------------------------------|---|--------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering | 标识 Mark | 功能描述 Function description |
| 通讯方式/协议 Communication/Protocol | TTL/Modbus-RTU | Lin | 被测交流火线进 The AC line under test enters |
| 电压量程 Voltage Range | AC/DC 5V~400V | Lout | 被测交流火线出 The AC live wire under test comes out |
| 电流量程 Current Range | AC 5mA~10A | N | 被测交流零线 AC neutral wire under test |
| 供电电源 Power Supply | DC 3.3V | NC | 空 Null |
| 频率 Frequency | 50Hz 或者or 60Hz | 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) |
| 有功精度 Active power accuracy | ±1% | 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) |
| 安装方式 Installation | 嵌入式可焊接, 插针间距2.54mm Embedded solderable, pin spacing 2.54mm | TXD | 模块数据发送脚 (需接光耦隔离) Module data sending pin (requires optocoupler isolation) |
| 测量参数 Collect Values | 电流、电压、功率、电能等. Current, voltage, power, electric energy, etc. | RXD | 模块数据接收脚 (需接光耦隔离) Module data receiving pin (requires optocoupler isolation) |
| | | | 被测直流正极进 The DC positive pole under test enters |
| | | | 被测直流正极出 The measured DC positive pole output |
| | | | 被测直流负极 Tested DC negative pole |

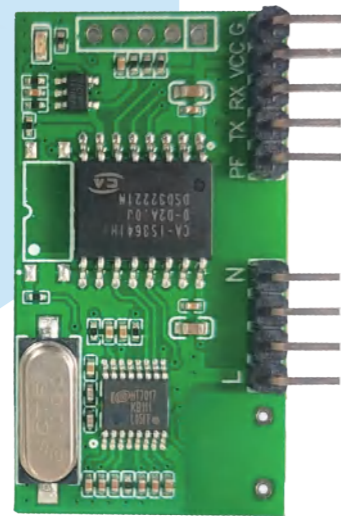
尺寸图/Dimensional drawing



接线示意图/Wiring Diagram



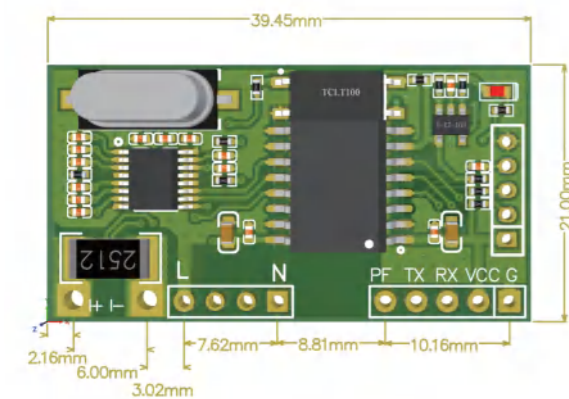
JSY1031



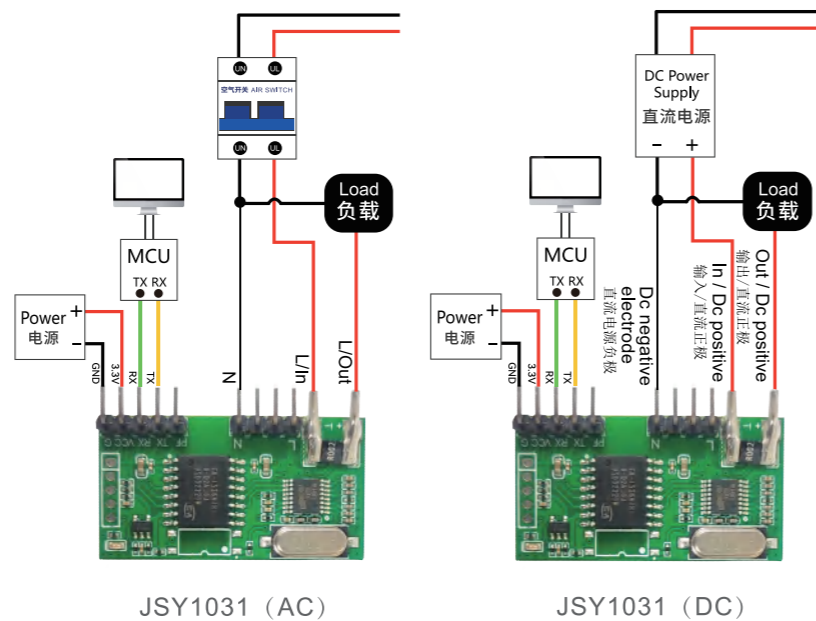
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communtation/Protocol | TTL/Modbus-RTU |
| 电压量程 Voltage Range | 1~300V |
| 电流量程 Current Range | 10mA~16A |
| 供电电源 Power Supply | DC 5V |
| 频率 Frequency | 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 |

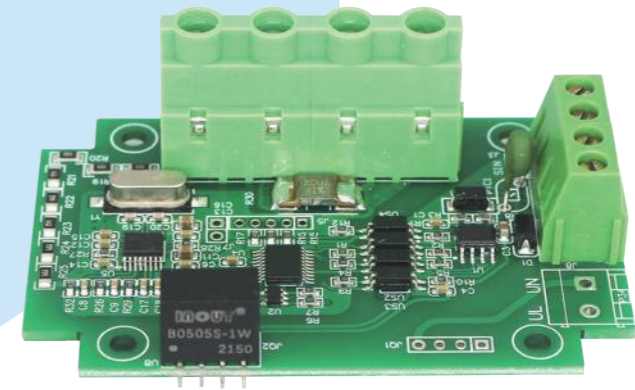
尺寸图/Dimensional drawing



接线示意图/Wiring Diagram



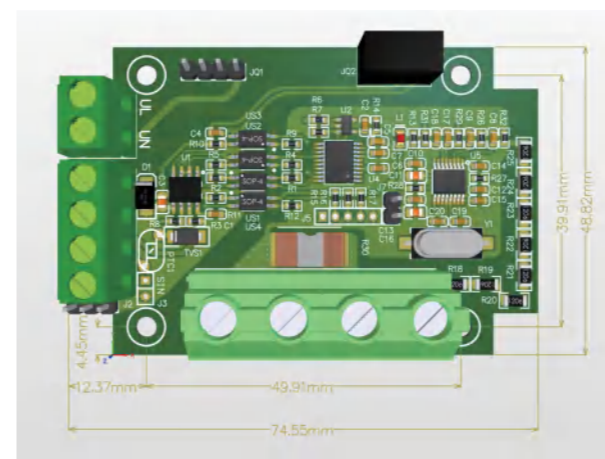
JSY-MK-211



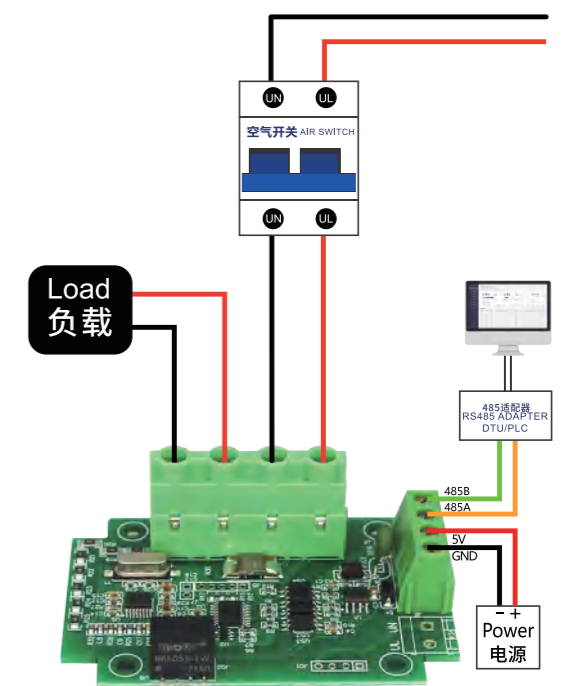
| 技术参数/Technical parameters | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communtation/Protocol | RS485/Modbus-RTU |
| 电压量程 Voltage Range | 1~300V |
| 电流量程 Current Range | 10mA~16A |
| 供电电源 Power Supply | AC 80V ~ 260V DC 5V |
| 频率 Frequency | 50Hz 或者 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 |
| 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 | 被测火线/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

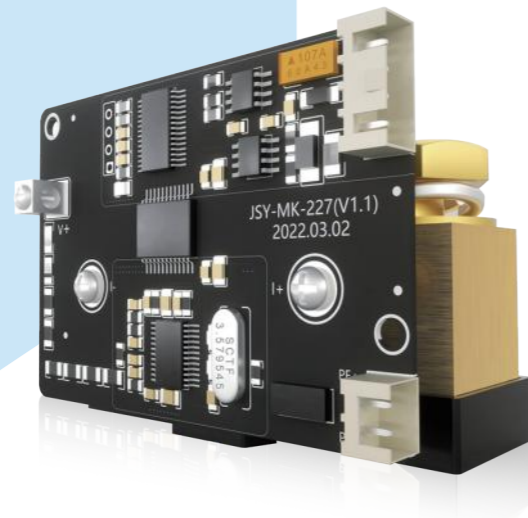


接线示意图/Wiring Diagram



JSY-MK-227

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



JSY-MK-229

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



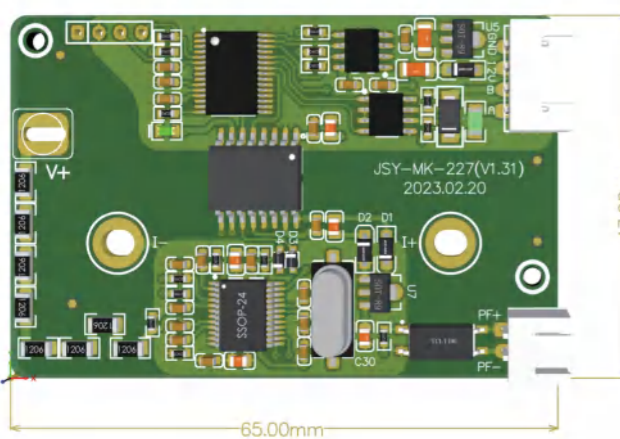
技术参数/Technical parameters

| | |
|-------------------------------------|---|
| 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 Communitation/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. |

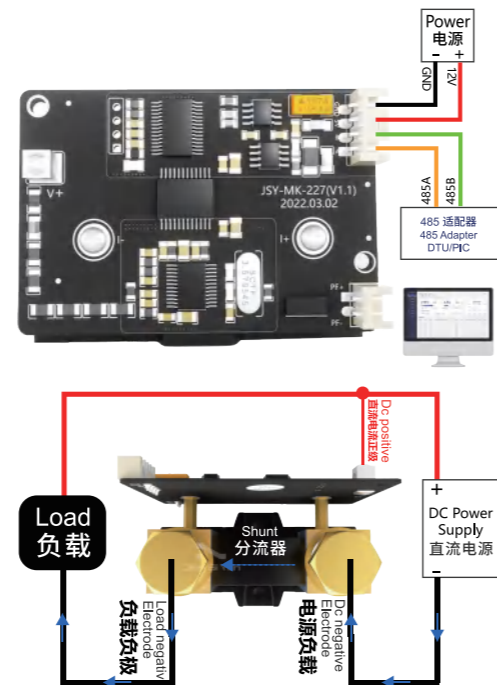
端子接口定义/Terminal interface definition

| 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



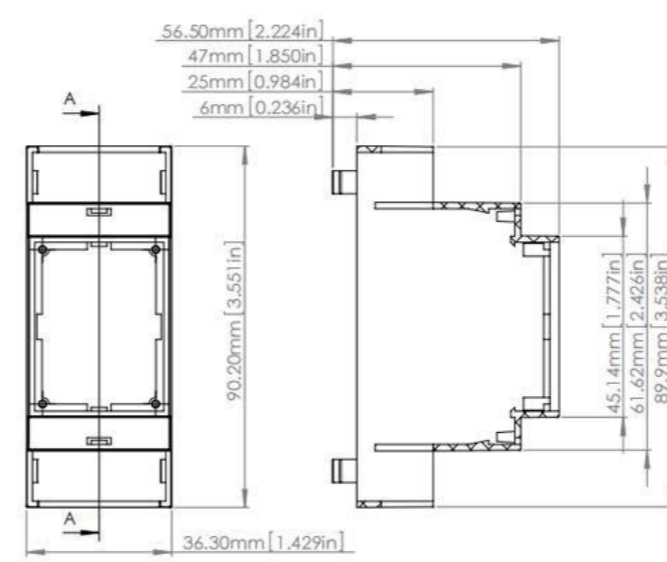
技术参数/Technical parameters

| | |
|-------------------------------------|---|
| 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 Communitation/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 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. |

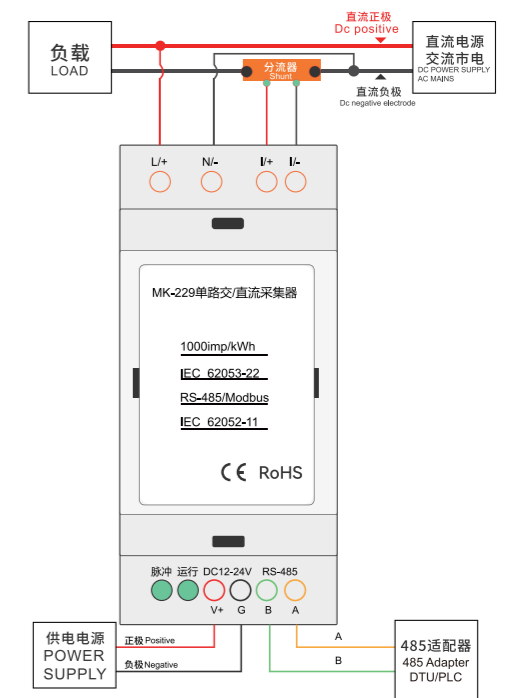
端子接口定义/Terminal interface definition

| 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

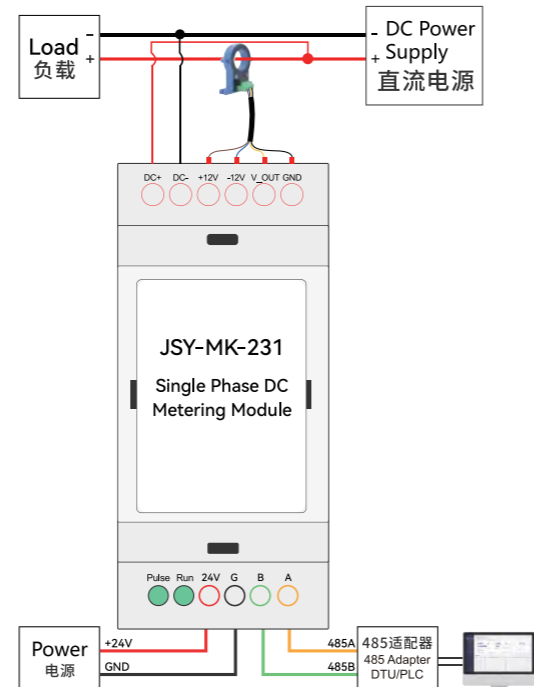
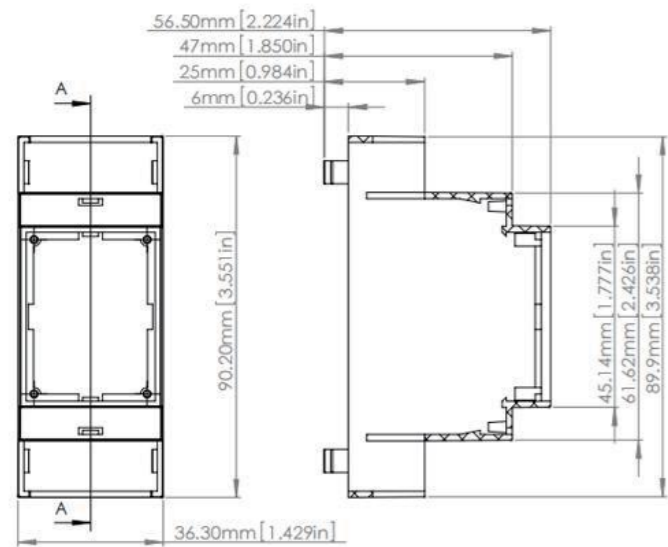


JSY-MK-231



| 技术参数/Technical parameters | | 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 | 特性 Feature | 功能描述 Function description |
| 通讯方式/协议 Communitation/Protocol | RS485/Modbus~RTU | DC+ | 直流正极 DC positive | 被测直流电压正极接口 Measured DC voltage positive terminal |
| 电压量程 Voltage Range | DC 1~400V | DC- | 直流负极 DC negative pole | 被测直流电压负极接口 Measured DC voltage negative terminal |
| 电流量程 Current Range | 0.5~100A | +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 |
| 供电电源 Power Supply | DC 12~36V | -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 |
| 频率 Frequency | 50Hz 或者or 60Hz | 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 |
| 有功精度 Active power accuracy | ±1% | 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 |
| 安装方式 Installation | 导轨式安装 DIN-rail installation | 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 |
| 测量参数 Collect Values | 电流、电压、功率、电能等. Current, voltage, power, electric energy, etc. | 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)



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 Communitation/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 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 |

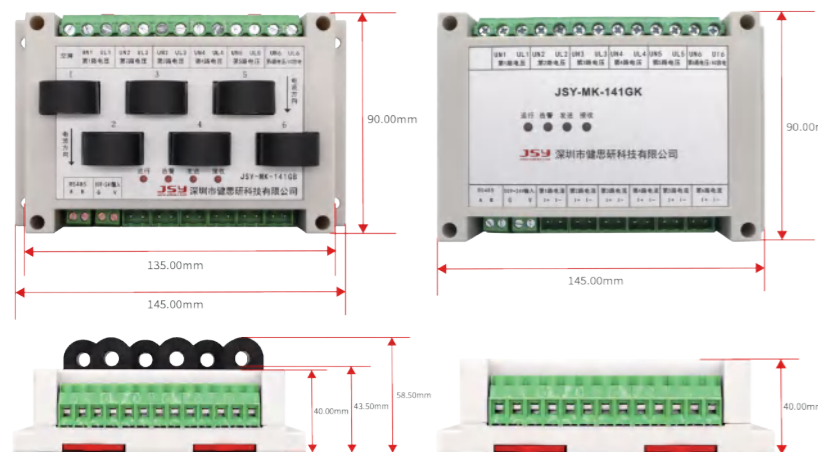
技术参数/Technical parameters

| | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communitation/Protocol | 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 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. |

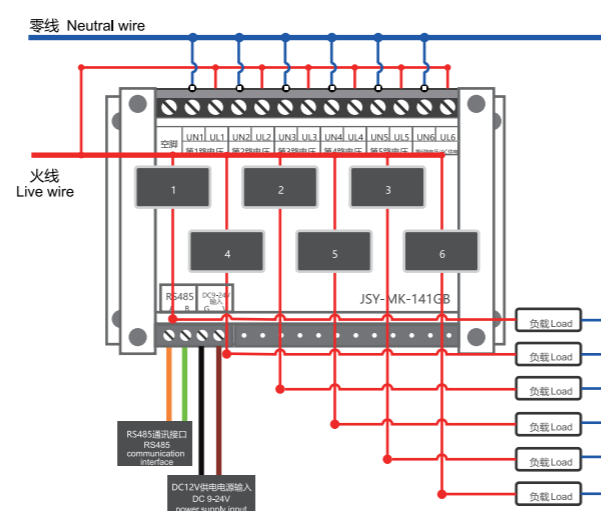
端子接口定义/Terminal interface definition

| 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



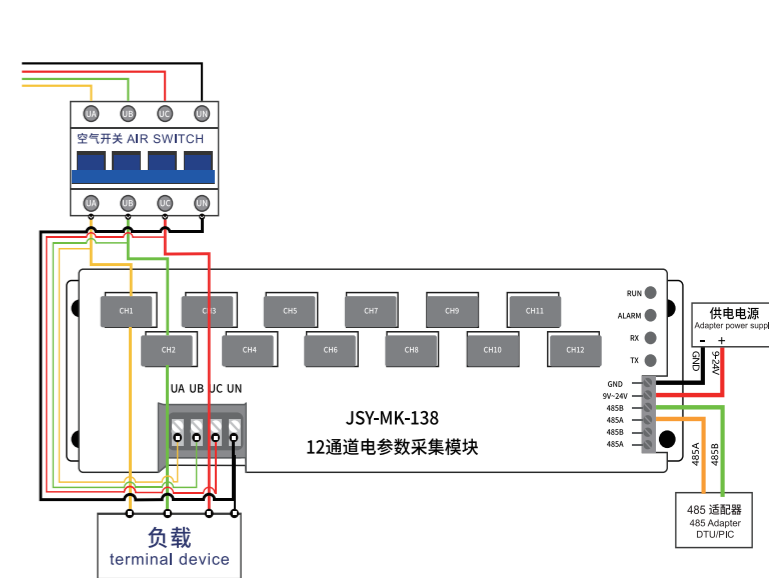
接线示意图/Wiring Diagram



尺寸图/Dimensional drawing

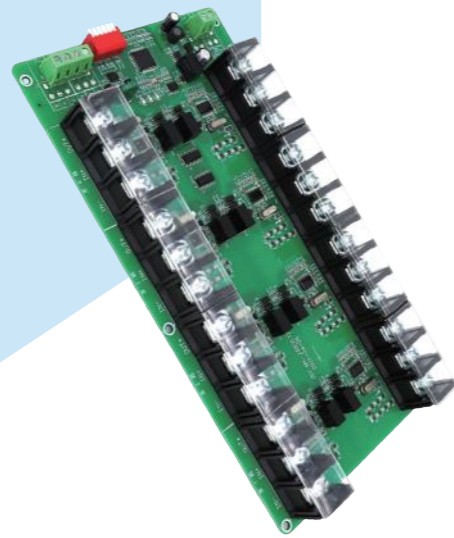


接线示意图/Wiring Diagram



JSY-MK-238

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



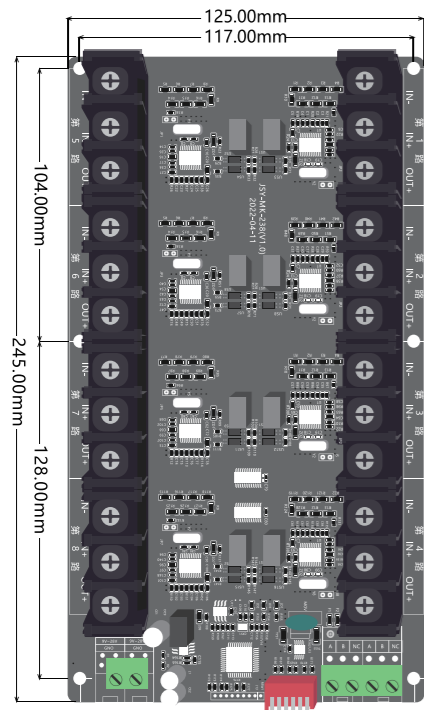
技术参数/Technical parameters

| | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communitation/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. |

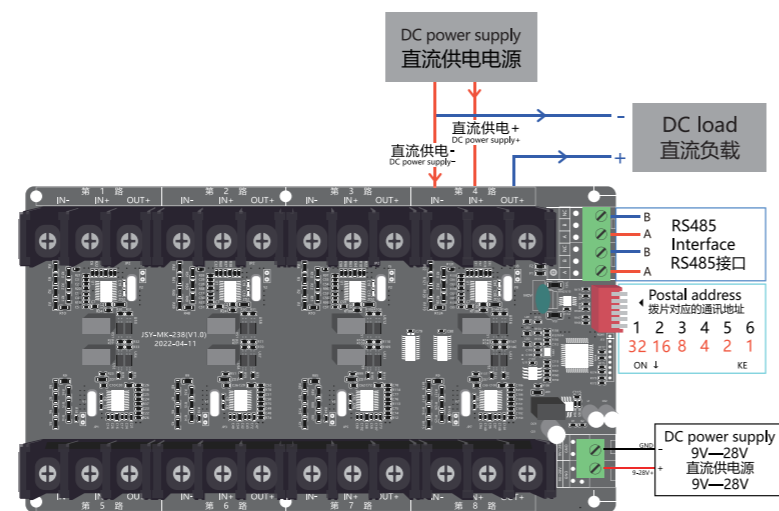
端子接口定义/Terminal interface definition

| 标识 Mark | 特性 Feature | 功能描述 Function description |
|------------|---|---|
| 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 load) |
| B | RS485 B接口 RS485 communication port B | RS485通讯B接口 RS485 communication port B |
| A | RS485 A接口 RS485 communication port 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)



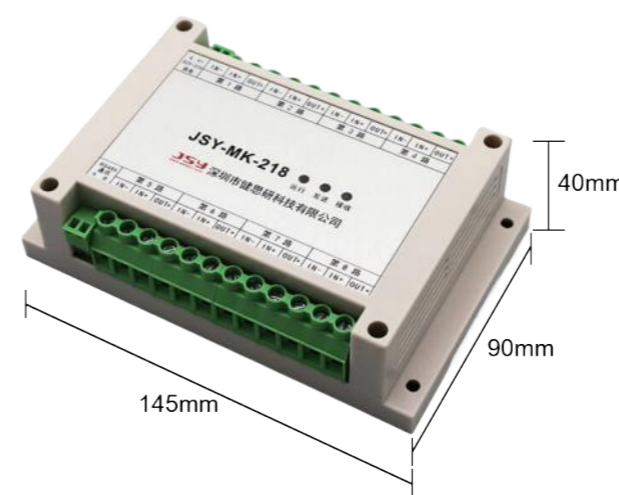
技术参数/Technical parameters

| | |
|-------------------------------------|---|
| 电能计量方向 Energy metering direction | 正向计量 Non-bidirectional metering |
| 通讯方式/协议 Communitation/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 |
|------------|---|---|
| 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接口 RS485 communication port B | RS485通讯B接口 RS485 communication port B |
| A | RS485 A接口 RS485 communication port 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

