



性能特点 Performance characteristics

- 1、高精度测量三相电压、三相电流、有功功率、无功功率、视在功率、功率因数、频率等电参量
- 2、四相限电能计量、正反向有功/无功电能计量
- 5、提供数码管或液晶显示，本地数据查询
- 6、菜单直观，按键操作简单
- 7、电流、电压变比可编程
- 8、提供多回路的漏电流监控
- 9、提供多回路控制节点，可用于报警、跳闸等控制
- 10、支持消防联动，远程切断故障回路
- 11、支持RS-485通讯，Modbus-RTU协议
- 12、支持开关量输入、开关量输出、模拟量变送输出、电能脉冲输出
- 13、安装方便，接线简单，工程量小
- 14、宽范围交直流通用电源：AC/DC 80V~270V
- 15、可完成SCADA、PLC中多种通讯软件的组网

1. High precision measurement of three-phase voltage, active power, reactive power, apparent power, power factor, frequency of electric parameters
2. Four phase quadrant measure energy, forward and reverse active/reactive energy measurement
5. To provide a nixie tube or liquid crystal display, local data query
6. Menu button intuitive, simple operation
7. Current, voltage gain Programmable
8. Provide multiple circuit leakage current monitoring
9. Provide multiple loop control nodes, can be used for the alarm, trip control
10. Support for fire control, remote cut off the fault circuit
11. Support for RS-485 communication, Modbus-RTU protocol
12. Support for switching input, output, analog quantity transmitting output
13. Convenient installation, wiring is simple, small engineering quantity
14. A wide range of AC/DC power supply: AC/DC 80V~270V
15. To be completed by SCADA, PLC in a variety of communications software networking.

适用范围 Application

多功能监控仪表是高性能的监控仪表，具有高精度电力参数实时测量、四相限电能计量、正反向有功/无功电能计量、电力品质分析、需量等功能，并配置有丰富的输入输出接口，可用于现场设备状态的监测与控制，还集成了RS-485通讯接口，可与各种智能配电系统和能量管理系统集成，共享丰富的监测数据和电能质量数据。多功能监控仪表有着极高的性价比，可以直接取代常规电力变送器、测量仪表、电能计量表以及相关的辅助单元，应用领域非常广泛，如能源管理系统、电力监控系统、工矿企业、公共设施、智能建筑和开关柜等配电网系统。

Multi-functional monitor and control meter is a high performance intelligent instrument, with such functions of measuring power parameters and four phase quadrant measure energy, measuring positive and negative active/reactive energy, analyzing electric quality, demands and etc. also it provides various input and output interfaces for monitoring and control on site, and integrated with RS-485 port, cooperated with different intelligent distribution system and administration system, share the parameters and data of system. This meter has very high performance and price index, completely replace power transmitter, measuring instruments, energy meters and associated parts, widely used in energy administration system, power monitoring system, mineral enterprises, public facilities, smart buildings, switch gears and etc intelligent power system.

技术指标 Technical index

测量精度

- 电压：0.5级
- 电流：0.5级
- 有功功率：0.5级
- 无功功率：0.5级
- 功率因数：0.5级
- 频率： $\pm 0.02\text{Hz}$
- 有功电能：0.5S级或0.2S级
- 无功电能：1级或2级

信号输入

- ◆接线方式：三相四线，三相三线
- ◆额定电压：AC 57.7V, AC 100V, AC 220V, AC 450V
- ◆额定电流：AC 1A, AC 5A
- ◆过负载：电压：1.2倍(持续)，2倍/1秒(瞬时)
电流：1.2倍(持续)，10倍/5秒(瞬时)
- ◆功耗：电压： $<1\text{VA/相}$ ，电流： $<0.4\text{VA/相}$
- ◆阻抗：电压： $>300\text{k}\Omega$ ，电流： $<20\text{m}\Omega$
- ◆频率：45~65Hz

功能模块

- ◆通讯接口：1路RS-485通讯，Modbus-RTU协议
波特率：1200~9600bps，默认2400bps
- ◆开关量输入：支持4路干结点输入
- ◆开关量输出：支持3路继电器输出，容量：AC 250V/5A，DC 30V/5A
- ◆变送输出：支持1路模拟量输出：0/4~20mA或0~5/10V
- ◆电能脉冲输出支持2路电能脉冲输出，不变：8000imp/kwh(kvaLT)

Accuracy of measurement

- Voltage level 0.5
- Current level 0.5
- Active power 0.5
- Reactive power level 0.5
- Frequency $\pm 0.02\text{Hz}$
- Active electric energy class 0.5S or class 0.2S
- Reactive energy grade 1 or grade 2
- Power factor 0.5

Signal input

- ◆Connection mode of four phase three wire, three phase, three line
- ◆Rated voltage AC 57.7V, AC 100V, AC 220V, AC 450V
- ◆Rated current AC 1A, AC 5A
- ◆Overload voltage: 1.2 times(Continued),
2 times/second (instantaneous)
current: 1.2 times(Continued),
10 times/5 second (instantaneous)
- ◆Power consumption voltage: $<1\text{VA}$, current: $<0.4\text{VA/phase}$
- ◆Impedance voltage: $>300\text{mK}\Omega$, current: $<20\text{m}\Omega$
- ◆The frequency 45~65Hz

Function module

- ◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud rate:1200~9600bps, the default 2400bps
- ◆Switch input: support 4 stem node input
- ◆The switch output: support 3 relay output, capacity: AC 250V/5A, DC 30V/5A
- ◆Transmission output: support 3 analog output: 0/4~20mA or 0~5/10V
- ◆Electric energy pulse output support 2 electric energy pulse output, constant: 8000imp/KWh(kvarh)

辅助电源

- ◆工作范围：AC/DC：80V~270V
- ◆功耗： $<4\text{VA}$

安全

- ◆绝缘电阻： $>100\text{M}\Omega$
- ◆交流耐压：AC 2KV

电磁兼容性

- ◆静电放电：4级
- ◆电快速瞬变脉冲群：4级
- ◆浪涌(冲击)：4级

Auxiliary power supply

- ◆Working range AC/DC 80V~270V
- ◆Power consumption $<4\text{VA}$

Safety

- ◆Insulation resistance $>100\text{M}\Omega$
- ◆AC withstand voltage AC 2KV

Electromagnetic compatibility

- ◆ESD level 4
- ◆Electrical fast transient burst level 4
- ◆Surge(impact) level 4