数显表功能简易选型
Digital Meter Function Easy Selection

规格选型 Specifications Selection

产品 Model	电量测量 Electricity measurement	电能计量 Energy metering	分时计费 Sharing billing	谐波测量 Harmonic measurement	电力质量 Power Quality	电能脉冲 Energy pulse	通讯接口 Communication interface	开关量输入 Switch input	开关量输出 Switch output	模拟量输出 Analog output	事件记录 Event record
TEYD-AV、DV、3AV系列数显电压表 Series Digital Voltage Meter	√	-	-	-	-	-	√	√	√	√	-
TEYD-AA、DA、3AA系列数显电压表 Series Digital summeter	√	-	-	-	-	-	√	√	√	√	-
TEYD-F系列数显频率表 Series Digital Frequency Meter	√	-	-	-	-	-	√	√	√	√	-
TEYD-P、Q、3P、3Q系列数显频率表 SeriesDigital Power Meter	√	-	-	-	-	-	√	√	√	√	-
TEYD-H、3H系列数显频率表 Series Digital Power Factor Meter	√	-	-	-	-	-	√	√	√	√	-
TEYD系列数显组合表 Series Digital Combination table	√	-	-	-	-	-	√	√	√	√	-
TEYD-D、3D系列多功能电力仪表 Series Multi-function monitoring instrument	√	√	-	-	-	√	√	√	√	√	-
TEYD-3FD系列多费率电能表 Series Multi-rate energy meter	√	√	√	-	-	√	√	√	√	√	-
TEYD-3HD系列谐波多功能表 Series Harmonic energy meter	√	√	-	√	-	√	√	√	√	√	-
TEYD系列电量 Series Electricity Transducer	√	-	-	-	-	√	√	-	-	√	-

典型应用选型 Typical applications for selection

开关柜类型 Type of Switchgear	规格型号 Model	面框尺寸 Frame size(mm)	功能说明 Function Description
进线柜 Incoming Cabinet	TEYD-3D2/3D2Y	120×120	电网全部电量参数实时测量(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)、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters(three-phase voltage, active power, reactive power, apparent power, power factor, frequency), Forward and reverse active /reactive energy measurement
	TEYD-3D3	96×96	
	TEYD-3D3Y（液晶LCD）	96×96	
	TEYD-3HD2Y（液晶LCD）	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、谐波测量 Real-time measurement of all the power of the grid paneneters, forward and reverse active /reactive energy measurement, harmonic measurement
	TEYD-3HD3Y（液晶LCD）	96×96	
	TEYD-3FHD2Y（液晶LCD）	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、谐波测量、分时计费、电力品质分析、实时波形显示、事件记录 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, harmonic measurement, sharing billing, power quality analysis, real-time waveform display, evant record
	TEYD-3FHD3Y（液晶LCD）	96×96	
	TEYD-3FD2Y（液晶LCD）	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、分时计费、定时抄表、需量功能、事件记录 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, sharing billing, timing meter reading, demand function, event record
	TEYD-3LH3	96×96	电量参数测量、电能计量、漏电监控 Measurement of electric parameters, energy metering, leakage monitoring
出线固定柜 (GGD) Outgoing fixed cabinet	TEYD-AA21	120×120	单相电流 Single-phase current
	TEYD-AA31	96×96	
	TEYD-3AA23	120×120	三相电流 Three-phase current
	TEYD-3AA33	96×96	
	TEYD-AV21	120×120	单相电压 Single-phase voltage
	TEYD-AV31	96×96	
	TEYD-3AV23	120×120	三相电压 Three-phase voltage
	TEYD-3AV33	96×96	
	TEYD-3D2	120×120	电网全部电量参数实时测量 Real-time measurement of all the power of the grid parameters
	TEYD-3D3	96×96	
	TEYD-3D3Y 液晶LCD	96×96	
	TEYD-3E21	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement,
	TEYD-3E31	96×96	
	TEYD-3E3Y 液晶LCD	96×96	
	TEYD-3LD3	96×96	电量参数测量、电能计量、漏电监控 Measurement of electric parameters, energy metering, leakage monitoring

典型应用选型 Typical applications for selection

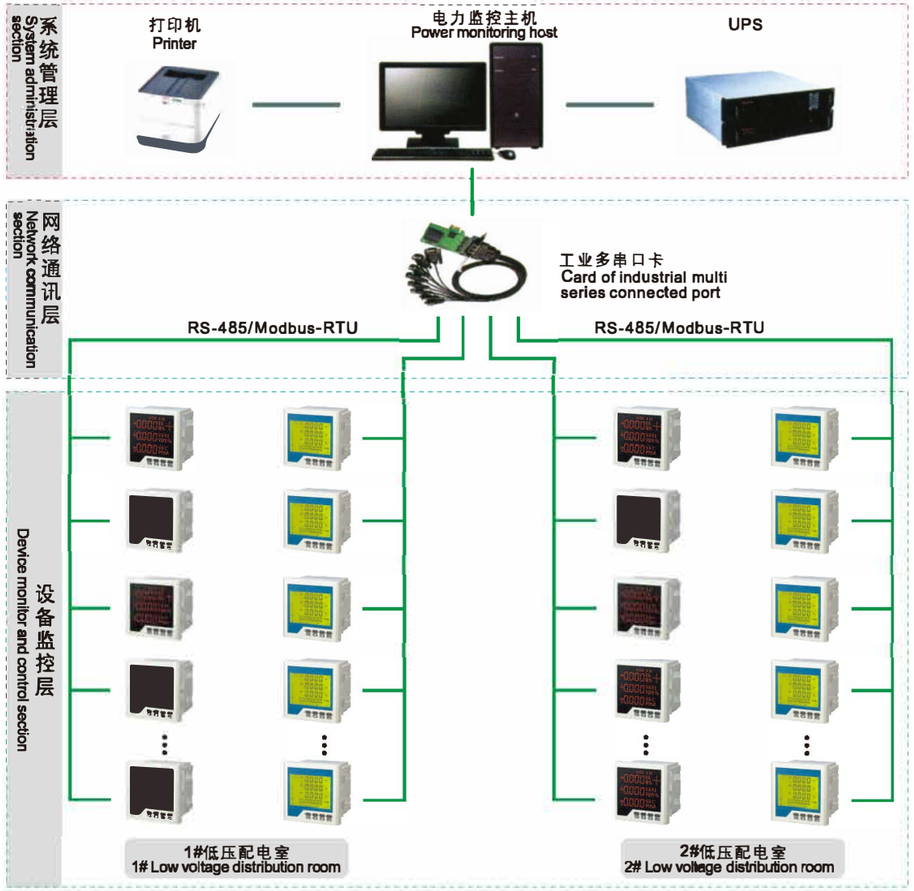
开关柜类型 Type of Switchgear	规格型号 Model	面框尺寸 Frame size(mm)	功能说明 Function Description
出线抽屉柜 (GCK/GCS/MNS) Outgoing drawer cabinet	TEYD-AA71	80×80	单相电流 Single-phase current
	TEYD-AA81	48×48	
	TEYD-AA51	96×48	
	TEYD-3AA73	80×80	三相电流 Three-phase current
	TEYD-3AA83	48×48	
	TEYD-AV71	80×80	单相电压 Single-phase voltage
	TEYD-AV81	48×48	
	TEYD-AV51	96×48	
	TEYD-3AV73	80×80	三相电压 Three-phase voltage
	TEYD-3AV83	48×48	
	TEYD-3D7	80×80	电网全部电量参数实时测量 Real-time measurement of all the power of the grid parameters
	TEYD-3D7	80×80	电网全部电量参数实时测量、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement,
	TEYD-3HD7Y(液晶LCD)	80×80	电网全部电量参数实时测量、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement,
出线计量柜 Outgoing metering cabinet	TEYD-3D2	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement,
	TEYD-3D3	96×96	
	TEYD-3D3Y（液晶LCD）	96×96	
	TEYD-3D7Y(液晶LCD)	80×80	
	TEYD-3HD2Y(液晶LCD)	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、谐波测量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, harmonic measurement
	TEYD-3HD3Y(液晶LCD)	96×96	
	TEYD-3FD3Y(液晶LCD)	96×96	电网全部电量参数实时测量、正反向有功/无功电能计量、分时计费 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, sharing billing
	TEYD-3FD2Y(液晶LCD)	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、分时计费、定时抄表、需量功能、事件记录 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, sharing billing, timing meter reading, demand function, event record
母联柜 Busbar connections cabinet	TEYD-3PQ23	120×120	有功功率、无功功率、视在功率 Active power, reactive power, apparent power
	TEYD-3D2	120×120	电网全部电量参数实时测量 Real-time measurement of all the power of the grid parameters
	TEYD-3D2	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement,
	TEYD-3FD2Y(液晶LCD)	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、分时计费、定时抄表、需量功能、事件记录 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, sharing billing, timing meter reading, demand function, event record
	TEYD-3PQ33	96×96	有功功率、无功功率、视在功率 Active power, reactive power, apparent power
电容柜 Capacity cabinet	TEYD-3PQ23	120×120	有功功率、无功功率、视在功率 Active power, reactive power, apparent power
	TEYD-3PQH23	120×120	功率因数、有功功率、无功功率 Active power, reactive power, apparent power
	TEYD-3D2	120×120	电网全部电量参数实时测量 Real-time measurement of all the power of the grid parameters
	TEYD-3D2	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement,
	TEYD-3H21	120×120	电量参数实时测量，功率因数控制 Real-time measurement of power parameters, power factor control
	TEYD-3PQ33	96×96	有功功率、无功功率、视在功率 Active power, reactive power, apparent power
配电计量柜 Power distribution metering cabinet	TEYD-3FD3Y(液晶LCD)	96×96	电网全部电量参数实时测量、正反向有功/无功电能计量、分时计费 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, sharing billing
	TEYD-3FD2Y(液晶LCD)	120×120	电网全部电量参数实时测量、正反向有功/无功电能计量、分时计费、定时抄表、需量功能、事件记录 Real-time measurement of all the power of the grid parameters, forward and reverse active /reactive energy measurement, sharing billing, timing meter reading, demand function, event record

TEYD2000
电力综合监控系统

Power Composite Monitoring System

系统典型应用方案 TyPical aPPlications scheme for system

小型化单机单网系统 Smali single machine indePendent system



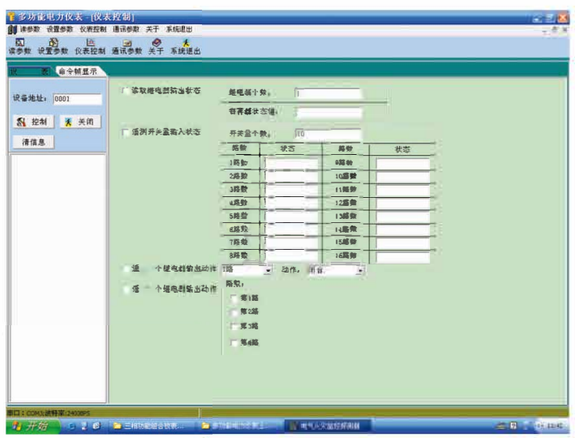
◆ 说明:

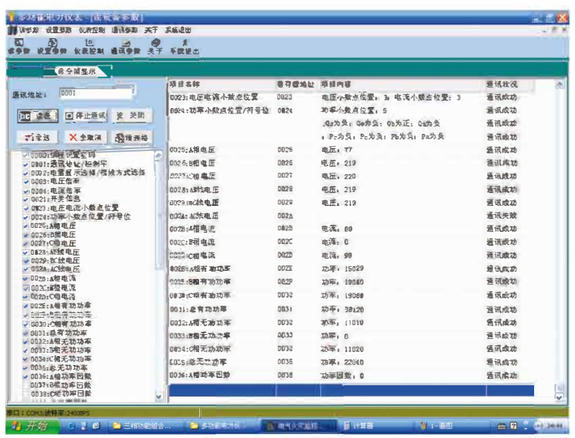
1. 现场监控层设备接口:单RS-485接口； 标准Modbus通讯规约;
2. 网络结构:总线单/双网、光纤、无线传输等可供选择;
3. 设备数据传输介质:屏蔽双绞线
4. 网络传输介质: 可选择屏蔽双绞线、单模/多模光纤;
5. 带载能力:建议每条总线带载8-32台智能设备，可根据现场情况制定实施方案;
6. 适用场合:中小型企业、学校、机场、智能楼宇等。

◆Notices:

1. Device interface of local monitoring and control section: RS-485 port, standard Modbus protocol
2. Network structure: bus single/dual net, optic fiber, wireless transmission and etc for choice.
3. Device data transmission medium: shielded twisted pair
4. Network transmission medium: shielded twisted pair, single mode/ multimodefiber for choice
5. Carrying capacity: each bus carry 8-32 pcs of intelligent device, perform the proper arrangement according to actual conditions.
6. Applicable site: middle and small enterprises, school, airport, intelligent building and etc.

功能介绍 Features





◆ 强大的数据采集

1、TEYD2000内建了丰富的设备支持库支持常见的PLC设备、智能仪表、智能模块，可采集和处理电力系统中几乎所有的遥测量、遥信量、脉冲量等。如需使用虚拟节点进行复杂的数据运算，运算后数据也可以被显示记录;
2、遥测量: 电压、电流、有功、无功等;
3、遥信量: 开关状态、刀闸位置、保护动作信号、事故跳闸总信号、预告信号等;
4、脉冲量: 电度量、周波、时间量、设备参数、保护定值等; 非电量: 温度、压力、湿度、火灾报警、防盗报警等;
5、系统通过Modbus-RTU或Modbus-TCP通讯协议进行直接通讯。可扩展平台让用户在初始投资的基础上，能根据需求添加新的设备和客户端，并与其他
6、自动化系统(如SCADA、BAS、DCS、ERP)进行数据共享。

技术指标

1、遥信传送时间: <2S
2、遥测传送时间: <2S
3、变位响应时间: <2S
4、遥控、遥调传送时间: <2S
5、事故推画面时间: <1S
6、调用画面响应时间: <2S
7、操作员从上位机接口发出命令到就地控制单元时间: <1S
8、单元控制装置接受命令到开始执行时间: <1S
9、网络速率: 100Mbps或1000Mbps
10、事件记录正确率: ＞99.9999%
11、遥控正确率: 100%
12、遥信正确率: 100%
13、遥调正确率: 100%
14、遥测正确率: ＞99.9999%
15、系统时钟误差: <10MS/年
16、海拔高度: ＜4000m
17、工作环境温度: -20℃~+65℃
18、存储环境温度: -40℃~+85℃
19、相对湿度: <95%ZM
20、系统使用寿命: >10年
21、系统平均无故障运行时间(MTBF): >50000小时
22、CPU负载率: 正常<10%，事故<30%

系统结构

1、TEYD2000电力综合监控系统主要采用分层分布式结构分为系统管理层网络通讯层和现场监控层。
2、系统管理层包括: 监控计算机、打印机、UPS电源等设备。
3、网络通讯层包括: 网络交换机、网络通讯控制器以及相关网络线缆等设备。
4、现场监控层包括: 低压系统的智能数显仪表、多功能监控仪表、电气火灾监控探测器、无功功率自动补偿控制器及电动机保护控制器等设备，高压系统的微机综合保护装置及测控仪表。
5、其中网络通讯层可以根据现场的具体情况，采用通讯电缆、无线传输、以太网或光纤进行网络配置。
6、TEYD2000电力综合监控系统支持多种通讯协议: CDT IEC-60870-101/102/103/104、DNP3.0、1801、MODBUS等，可与SEL、ABB、西门子、施耐德、GE、南瑞、南自、四方、许继等微机保护装置通过以上协议联网;同时支持多种通讯协议转发、模拟盘通讯控屏及规约扩展; 支持各种现场总线，包括: 工业以太网、PROFIBUS、DEVICE NET、LONWORKS、CANBUS等。

◆ Powerful data acquisition

1. TEYD2000 set up the full device support database, support the popular PLC device, intelligent instruments, intelligent module, it can acquisition and process all remote measured, signaling, and pulse values from the power system, if it need virtual node to perform complicated data calculation, the resulted data can be displayed and record.
2. Remote measurement values: voltage, current, active power, reactive power and etc.
3. Remote signaling value: the status of switch, blade position, protection tripping signal, fault tripping signal, pre-alarming signal and etc;
4. Pulse values: energy value (KWh), cycle, time, device parameters, tripping values and etc, Non electric values: temperature, pressure, humidity, fire alarm, anti-tamper alarm and etc.
5. The system performs direct communication via Modbus-RTU or Modbus-TCP protocol, The extensible function, can help user add new device and end users according to requirement based on the former system, and shared the data with other automatic system (such as SCADA, BAS, DCS, ERP)

Technical index

1. Transmission time of remote signaling: <2S
2. Transmission time of remote measured value: <2S
3. Response time of displacement: <2S
4. Transmission time of remote control and remote adjustment: <2S
5. Time from fault occur to panel display: <1S
6. Picture invoked response time: <2S
7. Time from operator sending a command in host machine to local controlled unit: <1S
8. Time from command receipt to starting execution<1S
9. Network speed rate: 100Mbps or 1000Mbps
10. Accuracy rate of event record: =99.9999%
11. Accuracy rate of remote control: 100%
12. Accuracy rate of remote signaling: 100%
13. Accuracy rate of remote adjustment: 100%
14. Accuracy rate of remote measurement: =99.9999%
15. System clock error: <10ms/per year
16. Altitude: =4000m
17. Ambientworking temperature: -20℃~+65℃
18. Storage temperature: -40℃~+85℃
19. Relative humidity: <95%ZM
20. System servicing life: > 10 years
21. Average operating time of the system without fault (MTBF): > 50000 hours
22. CPU loading rate: < 10% at normal status, < 30% under fault.

System structure

1. TEYD2000 power comprehensive monitor and control system adopted stratified structure, divided into system administration section, network communication section and local monitor and control section.
2. System administration section includes: monitoring computer, printer, UPS powar source and etc.
3. Network communication section covers: network switch, network communication controller and associated network cables and etc.
4. Local monitoring and control section contains: low voltage system intelligent digital displaying instruments, multifunctional monitoring meters, electric fire protection detector reactive power auto compensation controller and motor protected controller and etc, micro-computer comprehensive protective device and measurement and control instrument in high voltage system
5. According to local actual condition, network communication section can adopt cable, wireless transmission, Ethernet or optical fiber to set up network system.
6. TEYD2000 power comprehensive monitor and control system supported many com-munication protocols: CDT、IEC-60870-101 /102/103/104 DNP3.0、1801、 MODBUS and etc, it can link with micro computer protective devices of SEL, ABB, SIMENS, SCHNEIDER, GE, NARI, NANJINGAUTOMATION, SIFANG, XJ GROUP and etc via above-mentioned protocols, also it supported many protocol to forward, simulate communication control panel and stipulation extension, supported local different bus, including industrial Ethernet, PROFIBUS、DEVICE NET、LONWORKS, CANBUS and etc.

TEYD

智能数显仪表

Series Intelligent Digital Meter

型号及其含义 Code and implication

TEYD-□□□□-□□□□

(省略)-无模拟变送输出功能，nD-模拟变送输出(n=1路、2路、3路.....)
(Omitted) No function of analog conversion transmission output, nD - analog conversion transmission output (n = 1 feeder, 2 feeders, 3 feeders.....)

(省略)-无RS485通讯，nT-RS485通讯(n=1路、2路)
(Omitted) No RS485 port, nT-RS485 communication (n = 1 feeder, 2 feeders)

(省略)-无报警(开关量)输出，nO-报警(开关量)输出(n=1路、2路、3路.....)
(Omitted) No alarm (switching value) output, nO Alarm (switch value) output
(n = 1 feeder, 2 feeders, 3 feeders.....)

(省略)-无开关量输入，nI-开关量输入(n=1路、2路、3路.....)
(Omitted) No (switching value) input, nI - switching value input (n = 1,2,3 feeder.....)

显示方式：
1-单排显示，2-两排显示，
3-三排显示，4-四排显示，
5-五排显示，6-六排显示
Y-LCD液晶显示

Display mode：
1-Display in single row, 2-Display in two rows,
3-Display in three rows, 4-Display in four rows,
5-five rows, 6-six rows
Y-LCD: LCD display

外形尺寸: Outline dimensions

外形代号 Overall Code	对应指针表型号 Associated model of Pointer meter	面框尺寸 Frame size(mm)	开孔尺寸 Hole size (mm)
1	16槽形 Groove-shape	160x80	152x76
2	42方形 Square shape	120x120	111x111
3	9方形 Mini square shape	96x96	92x92
4	46槽形 Groove-shape	120x60	114x56
5	5槽形 Groove-shape	96x48	92x45
6	61方形 Square shape	80x80	68x68
7	6方形 Square shape	80x80	76x76
8	微方形Mini square shape	48x48	45x45

功能代号: Function code

AA-交流电流,DA-直流电流,AV-交流电压,DV-直流电压,F-频率,H-功率因数,P-有功功率,Q-无功功率,E-有功电能,RE-无功电能,I/U-电流电压组合,I/U/F-电流电压频率组合,P/Q/H-有功无功功率功率因数组合, Z-I/U/F/H/PQ组合

AA- AC current , **DA-**DC current, **AV-** AC voltage, **DV-** DC voltage, **F-** frequency **H-** power factor, **P-**active power, **Q-**reactive power, **E-**active energy , **RE-**reactive energy, **I/U-**current and voltage combinations, **I/U/F-** current, voltage, frequency combination, **P/Q/H-** active/reactive power, power factor combinations **Z-** I/U/F/H/PQ combinations

相别：(省略)-单相，3-三相
Type of phase: (Omitted)-single phase, 3-three phase

公司代号 Company Code

适用范围 Application

智能数显仪表适用于电力电网、自动化控制系统中对电压、电流、有功功率、无功功率、视在功率、功率因数和频率等电参量的测量，由数码管(LED)或液晶(LCD)直接显示。具有显示直观、精度高、性能稳定、隔离性强、抗振动等优点。可选配多种扩展功能，包括RS-485通讯、开关量输入、开关量输出和模拟量变送输出等，丰富的外型尺寸可方便地替代指针式仪表。

Intelligent digital display meter is suitable for power network, automatic control system to measure voltage, current, active power, reactive power, apparent power, power factor, frequency and etc parameters, directly displayed via LED or LCD. Advantages: direct display, high accuracy, stable, high isolation, anti-shock and etc. it can provide different extension functions, including RS-485 port, switching value input, switching value output, analog conversion output and etc, with different sizes. It can replace pointer meters completely.

产品标准 Conforming to standards

1、GB/T 22264.1-2008：安装式数字显示电测量仪表第1部分：定义和通用要求
2、GB/T 22264.2-2008：安装式数字显示电测量仪表第2部分：电流表和电压表的特殊要求
3、GB/T 22264.3-2008：安装式数字显示电测量仪表第3部分：功率表和无功功率表的特殊要求
4、GB/T 22264.4-2008：安装式数字显示电测量仪表第4部分：频率表的特殊要求
5、GB/T 22264.5-2008：安装式数字显示电测量仪表第5部分：相位表和功率因数表的特殊要求
6、GB/T 22264.8-2008：安装式数字显示电测量仪表第8部分：推荐的试验方法

1. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part1: Definitions and general requirements
2. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part2: Special requirements for ammeter and voltmeter.
3. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part3: Special requirements for power meter and reactive power meter
4. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part4: Special requirement for freq meter
5. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part5: Special requirement for phase angle meter and power factor meter
6. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part8: Recommended test methods

TEYD-AA、DA

系列数显单相电流表

Series Digital Single-phase Ammeter

技术指标

测量精度
电流：0.5级

信号输入
◆接线方式：单相
◆额定电流：AC 1A、AC 5A、DC 20mA、DC 1A、DC 5A、DC 75mV
◆过负载：1.2倍(持续)，10倍/5秒(瞬时)
◆功耗：<0.4VA/相
◆阻抗：<20mΩ
◆频率：45~65Hz或直流

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V、
◆功耗：<4VA

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2400 bps
◆开关量输入：支持2路干结点输入
◆开关量输出：支持2路继电器输出，容量：AC 250V/5A、DC 30V5A
◆变送输出:支持1路模拟量输出:0/4~20mA或0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：≤93%，无腐蚀性气体场所
◆海拔：≤2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC 2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Current level 0.5

Signal input
◆Connection mode single phase
◆Rated current of AC 1A, AC 5A, DC 20mA, DC 1A, DC 5A, DC 75mV
◆Over load(Continued)1.2 times, 10times for/5 seconds (instantaneous)
◆Power consumption<0.4VA/phase
◆Impedance<20mΩ
◆The frequency 45~65Hz or DC

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V
◆Power consumption<4VA

Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud r ate:1200~9600bps, the default 2400bps
◆Switch input: support 2 stem node input
◆The switch output: support 2 relay output, capacity: AC 250V/5A, DC 30V/5A
◆Transmission output: support 1 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltage AC 2KV

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

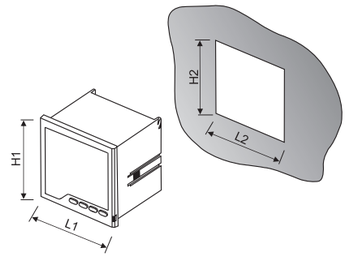
性能特点

1、高精度测量单相交流电流或直流电流
2、提供数码管显示，本地数据查询
3、电流变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision to measure single phase alternating current or DC current
2. Provide the digital tube display, local data query
3. Current ratio programmable settings
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76
◆Frame size(mm) of 120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆Hole size(mm) of 111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76

TEY**D-3AA**

系列数显三相电流表

Series Digital Three-phase Ammeter

性能特点

1、高精度测量三相交流电流
2、提供数码管显示，本地数据查询
3、电流变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision to measure single phase alternating current or DC current
2. Provide the digital tube display, local data query
3. Current ratio programmable settings
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

技术指标

测量精度
电流：0.5级

信号输入
◆接线方式：三相四线、三相三线
◆额定电流：AC 1A、AC 5A
◆过负载：1.2倍(持续)，10倍/5秒(瞬时)
◆功耗：<0.4VA/相
◆阻抗：<20mΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V
◆功耗：<4VA

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2400 bps
◆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3路模拟量输出：0/4~20mA或0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：＜93%，无腐蚀性气体场所
◆海拔：＜2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC 2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Current level 0.5

Signal Input
◆Connection mode of four phase three wire, three phase three line
◆Rated voltege of AC 1A, AC 5A
◆Over load(Continued)1.2 times, 10times for/5 seconds (instantaneous)
◆Power <0.4VA/phase
◆Impedance<20mΩ
◆The frequencyfo 45~65Hz

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V
◆Power consumption<4VA

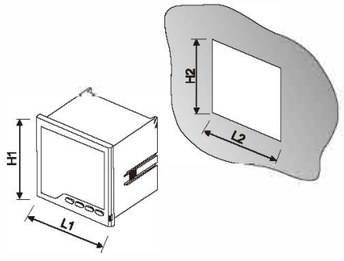
Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud r ate:1200~9600bps, the default 2400bps
◆Swiich input: support 2 stem node input
◆The switch output: support 2 relay output, capacity: AC 250V/5A, DC 30V/5A
◆Transmission output: support 1 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltageAC 2KV

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

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45
◆Frame size(mm) of 120×120；80×80；96×48；96×96；80×80；48×48
◆Hole size(mm) of 111×111；76×76；92×45；92×92；68×68；45×45

TEY**D-V、DV**

系列数显单相电压表

Series Digital Single-phase Voltage Meter

性能特点

1、高精度测量单相交流电压或直流电压
2、提供数码管显示，本地数据查询
3、电压变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of single phase AC voltage or DC coltage
2. Provide the digital tube display, local data query
3. Programmable voltage ratio
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

技术指标

测量精度
电压：0.5级

信号输入
◆接线方式：单相
◆额定电压：AC 57.7V、AC 100V、AC 220V、AC380V、DC2V、DC20V、DC200V、DC600V
◆过负载：1.2倍(持续)，2倍/1秒(瞬时)
◆功耗：<1VA/相
◆阻抗：>300KΩ
◆频率：45~65Hz或直流

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V
◆功耗：<4VA

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2400 bps
◆开关量输入：支持2路干结点输入
◆开关量输出：支持2路继电器输出，容量：AC 250V/5A，DC 30V5A
◆变送输出：支持1路模拟量输出：0/4~20mA或0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：＜93%，无腐蚀性气体场所
◆海拔：＜2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC 2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Electric current 0.5

Signal Input
◆Connection mode of single phase
◆Rated voltage of AC 57.7V、AC 100V、AC 220V、AC380V、DC2V、DC20V、DC200V、DC600V
◆Over load 1.2 times(Continued), 2 times/second (instantaneous)
◆Power <1VA/phase
◆Impedance>300KΩ
◆The frequency fo 45~65Hz or DC

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V
◆Power consumption<4VA

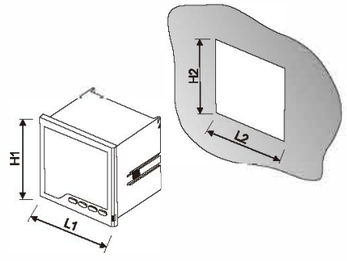
Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud r ate:1200~9600bps, the default 2400bps
◆Switch input: support 2 stam node input
◆The switch output: support 2 relay output, capacity: AC 250V/5A, DC30V/5A
◆Transmission output: support 1 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltegeAC 2KV

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

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76
◆Frame size(mm) of 120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆Hole size(mm) of 111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76

TEYD-3V
系列数显三相电压表
Series Digital Three-phase Voltage Meter

性能特点

1、高精度测量三相交流电压
2、提供数码管显示，本地数据查询
3、电压变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of three- phase AC voltage
2. Provide the digital tube display, local data query
3. Programmable voltage ratio
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

技术指标

测量精度
电压：0.5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,AC380V
◆过负载：1.2倍(持续)，2倍/ 1秒(瞬时)
◆功耗：<1VA/相
◆阻抗：>300KΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V
◆功耗：<4VA

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 30V5A
◆变送输出：支持路模拟量输出:0/4~20mA或0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：≤93%，无腐蚀性气体场所
◆海拔：≤2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC 2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Voltage level 0.5

Signal Input
◆Connection mode of four phase three wire, three phase three phase three line
◆Rated voltage of AC 57.7V、AC 100V、AC 220V、AC380V
◆Over load 1.2 times(Continued), 2 times/second (instantaneous)
◆Power <1VA/phase
◆Impedance>300K Ω
◆The frequency fo 45~65Hz or DC

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V
◆Power consumption<4VA

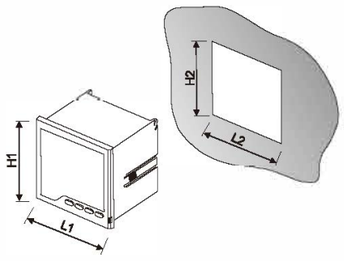
Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud rate:1200~9600bps, the default 2400bps
◆Switch input: support 4 stem node input
◆The switch output: support 3 relay output, capacity:AC 250V/5A, DC 30V/5A
◆Transmission output: support 3 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltageAC 2KV

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

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Framesize(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；
96×96；80×80；48×48
◆开孔尺寸(mm)：111×111；76×76；92×45；
92×92；68×68；45×45
◆Frame size(mm) of 120×120；80×80；96×48；
96×96；80×80；48×48
◆Hole size(mm) of 111×111；76×76；92×45；
92×92；68×68；45×45

TEYD-F
系列数显频率表
Series Digital Frequency Meter

性能特点

1、高精度测量单相交流频率
2、提供数码管显示，本地数据查询
3、支持RS-485通讯，Modbus-RTU协议
4、支持开关量输入、开关量输出、模拟量变送输出
5、辅助电源：AC/DC 80V~270V、AC220V
6、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of single- phase AC frequency
2. To provide a nixie tube or liquid crystal display, local data query
3. Support for RS- 485 communication, Modbus -RTU protocol
4. Support for switching input, output, analog quantity transmitting output
5. Auxiliary power supply: AC/DC 80V~270V, AC220V
6. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

技术指标

测量精度
频率：±0.02Hz

信号输入
◆接线方式：单相
◆额定频率：45~65Hz
◆额定电压：AC 57.7V, AC 100V, AC 220V, AC 380V
◆过负载：1.2倍(持续)，2倍/1秒(瞬时)
◆功耗：<1VA/相
◆阻抗：>300KΩ

辅助电源
◆工作范围：AC/DC 80V~270V,AC220V,AC380V
◆功耗：<4VA

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2路干结点输入
◆开关量输出：支持2路继电器输出，容量:
AC 250V/5A，DC30V5A
◆变送输出：支支持1路模拟量输出：0/4~20mA或
0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：≤93%，无腐蚀性气体场所
◆海拔：≤2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Frequency: 0.02Hz

Signal Input
◆Connection mode of single-phase
◆Rated frequency: 45~65Hz
◆Rated voltageAC 57.7V,AC 100V,AC 220V,AC 380V
◆Overload: 1.2 times(Continued), 2 times/second (instantaneous)
◆Power consumption: <1VA/phase
◆Impedanc :>300mKΩ

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V, AC380V
◆Power consumption<4VA

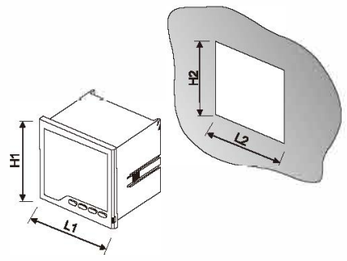
Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud rate:1200~9600bps, the default 2400bps
◆Switch input: support 2 stem node input
◆The switch output: support 2 relay output, capacity: AC 250V/5A, DC 30V/5A
◆Transmission output: support 1 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltage AC 2KV

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

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；
96×96；80×80；48×48
◆开孔尺寸(mm)：111×111；76×76；92×45；
92×92；68×68；45×45
◆Frame size(mm) of 120×120；80×80；96×48；
96×96；80×80；48×48
◆Hole size(mm) of 111×111；76×76；92×45；
92×92；68×68；45×45

TEYD-P、Q
系列数显功率表
Series Digital Power Meter

性能特点

1、高精度测量三相电网的有功功率、无功功率、视在功率
2、提供数码管或液晶显示，本地数据查询
3、电流、电压变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of three- phase active power, reactive power, apparent power
2. To provide a nixie tube or liquid crystal display, local data query
3. Current and voltage gain programmable settings
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

技术指标

测量精度
有功功率：0.5级
无功功率：0.5级
视在功率：0.5级

信号输入
◆接线方式：单相、三相四线、三相三线
◆额定电压：AC 57.7V,AC 100V,AC 220V,AC 380V
◆额定电流：AC 1A、AC5A
◆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：<1VA/相，电流：<0.4VA/相
◆阻抗：电压：>300kΩ，电流：<20mΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V、AC380V
◆功耗：<4VA

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2400 bps
◆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3路模拟量输出:0/4~20mA或0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：＜93%，无腐蚀性气体场所
◆海拔：＜2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Active power 0.5
Reactive power level 0.5
Depending on the power level 0.5

Signal input
◆Connection mode of single-phase, three-phase four wire, three phase three line
◆Rated voltage AC 57.7V,AC 100V,AC 220V,AC 380V
◆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:<1VA/, current:<0.4VA/phase
◆Impedance voltage:>300mKΩ, current:<20mΩ
◆The frequency 45~65Hz

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V, AC380V,
◆Power consumption<4VA

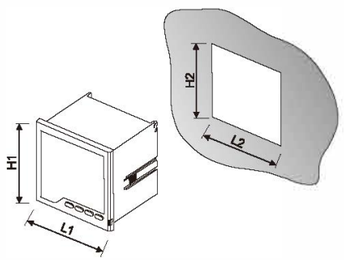
Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud rate:1200~9600bps, the default 2400bps
◆Switch input: support 4 stem node input
◆The switch output: support 3 relay output, capacity: AC 250V/5A, DC 30V/5A
◆Transmission output: support 3 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltageAC 2KV

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

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76
◆Frame size(mm) of 120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆Hole size(mm) of 111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76

TEYD-H
系列数显功率因数表
Series Digital Power Factor Meter

性能特点

1、高精度测量三相电网的功率因数
2、提供数码管显示，本地数据查询
3、电流、电压变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of three- phase power factor
2. Provide the digital tube display, local data query
3. Current and voltage gain programmable settings
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

技术指标

测量精度
功率因数：0.5级

信号输入
◆接线方式：单相、三相三线
◆额定电压：AC 57.7V,AC 100V,AC 220V,AC 380V
◆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：<1VA/相，电流：<0.4VA/相
◆阻抗：电压：>300kΩ，电流：<20mΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V、AC380V、AC100V、DC48V、DC24V
◆功耗：<4VA

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2400 bps
◆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

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：＜93%，无腐蚀性气体场所
◆海拔：＜2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Power factor 0.5

Signal input
◆Mode of connection of single-phase three-phase three wire
◆Rated voltage AC 57.7V,AC 100V,AC 220V,AC 380V
◆Rated current of 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:<1VA/, current:<0.4VA/phase
◆Impedance voltage:>300mKΩ, current:<20mΩ
◆The frequency 45~65Hz

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V, AC380V, AC100V,DC48V、DC24V
◆Power consumption<4VA

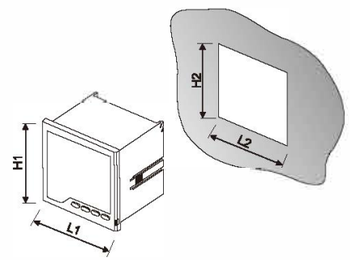
Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud rate:1200~9600bps, the default 2400bps
◆Switch input: support 4 stem node input
◆The switch output: support 3 relay output, capacity: AC 250V/5A, DC 30V/5A
◆Transmission output: support 3 analog output: 0/4~20mA or 0~5/10V

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltage AC 2KV

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

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76
◆Frame size(mm)of 120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆Hole size(mm) of 111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76

TEYD
系列数显组合表
Series Digital Combination table

技术指标

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：±0.02Hz

信号输入
◆接线方式：单相、三相四线、三相三线
◆额定电压：AC 57.7V、AC100V、AC 220V、AC380V
◆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：<1VA/相，电流：<0.4VA/相
◆阻抗：电压：>300kΩ，电流：<20mΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V
◆功耗：<4VA

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2400 bps
◆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：
AC250V/5A，DC 30V/5A
◆变送输出：支持1路模拟量输出：0/4~20mA或
0~5/10V

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：≤93%，无腐蚀性气体场所
◆海拔：≤2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Voltage level0.5
Current level 0.5
Active power 0.5
Reactive power level 0.5
Power factor 0.5
Frequency ±0.02Hz

Signal input
◆Connection mode of single-phase, three-phase four wire, three phase three line
◆Rated voltage AC 57.7V,AC 100V,AC 220V,AC 380V
◆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:<1VA/, current:<0.4VA/phase
◆Impedance voltage:> 300mKΩ, current:<20mΩ
◆The frequency 45~65Hz

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V
◆Power consumption<4VA

Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud r ate: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

Environment
◆Working temperature: -10℃~+55℃
◆Storagetamperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltage AC 2KV

Electromagnetic compatibility
◆ESD level4
◆Electrical fast transient burst level 4
◆Surge(impact) level 4

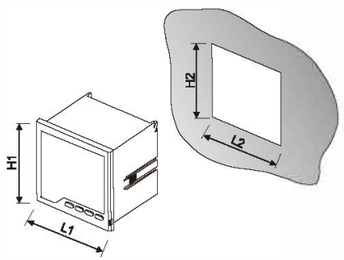
性能特点

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、提供数码管或液晶显示，本地数据查询
3、电流、电压变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出、模拟量变送输出
6、辅助电源：AC/DC 80V~270V、AC220V
7、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of three- phase voltage, three - phase current, active power, reactive power, apparent power, power factor, frequency of electric parameters
2. To provide a nixie tube or liquid crystal display, local data query
3. Current and voltage gain programmable settings
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. Auxiliary power supply: AC/DC 80V~270V, AC220V
7. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76
◆Frame size(mm) of 120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆Hole size(mm) of 111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76

TEYD-E/RE
系列电能表
Series Digital Energy meter

技术指标

测量精度
有功电能：1.0级
无功电能：2.0级

信号输入
◆接线方式：单相、三相四线、三相三线
◆额定电压：AC 57.7V, AC 100V, AC 220V ,AC 380V
◆额定电流：AC 1A、AC5A
◆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：<1VA/相，电流：<0.4VA/相
◆阻抗：电压：>300kΩ，电流：<20mΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC 80V~270V、AC220V、AC380V、AC100V
◆功耗：<4VA

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

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：≤93%，无腐蚀性气体场所
◆海拔：≤2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical index

Accuracy of measurement
Active energy level 1.0
Reactive energy level 2.0

Signal input
◆Connection mode of single-phase, three-phase four wire, three phase three line
◆Rated voltage AC 57.7V,AC 100V,AC 220V,AC 380V
◆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:<1VA/, current:<0.4VA/phase
◆Impedance voltage:>300mKΩ, current:<20mΩ
◆The frequency 45~65Hz

Auxiliary power supply
◆Working range of AC/DC 80V~270V, AC220V, AC380V, AC100V
◆Power consumption<4VA

Function module
◆Communication interface 1 way RS-485 communication, Modbus -RTU protocol baud r ate: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

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltage AC 2KV

Electromagnetic compatibility
◆ESD level4
◆Electrical fast transient burst level 4
◆Surge(impact) level 4

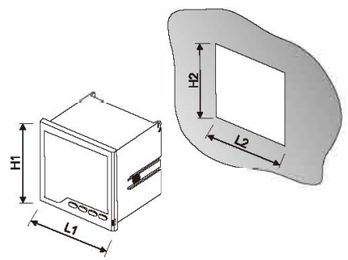
性能特点

1、高精度测量单相有功电能、无功电能，三相有功电能、三相无功电能
2、提供数码管或液晶显示，本地数据查询
3、电流、电压变比可编程设置
4、支持RS-485通讯，Modbus-RTU协议
5、支持开关量输入、开关量输出
6、一路或两路脉冲输出
7、辅助电源：AC/DC 80V~270V、AC220V
8、多种外形选择，满足不同柜体电气回路的要求

Performance characteristics

1. High precision measurement of active energy, reactive energy, three- phase active energy, three- phase reactive energy
2. To provide a nixie tube or liquid crystal display, local data query
3. Current and voltage gain programmable settings
4. Support for RS- 485 communication, Modbus -RTU protocol
5. Support for switching input, output, analog quantity transmitting output
6. One or two pulse output
7. Auxiliary power supply: AC/DC 80V~270V, AC220V
8. A variety of shapes, to meet the different requirements of the cabinet body electric circuit

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1
开孔尺寸(mm)：L2xH2
Frame size(mm): L1xH1
Hole size(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆开孔尺寸(mm)：111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76
◆Frame size(mm) of 120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
◆Holesize(mm) of 111×111；76×76；92×45；92×92；68×68；45×45；114x56；152x76

多功能监控仪表
Series Multi-function monitoring instrument

型号及其含义 Code and implication

TEYD - □ □ □ □

显示方式：(省略)—LED显示
Y—LCD显示

Display: (Omission)- LED display
Y-LCD display

仪表外形 Outline dimensions

外形代号 Overall Code	面框尺寸 Frame size(mm)	开孔尺寸 Hole size (mm)
2	120×120	111×111
7	80×80	76×76
3	96×96	92×92
6	80×80	68×68
8	48×48	45×45

产品系列代号：D—全电量多功能电力仪表
FD—全电量测量+多费率分时计量
HD—全电量测量+谐波测量
LD—全电量测量+火灾监控
FHD—全电量测量+多费率+谐波测量

Product series code:
D—Full-power Multi-function Power Meter
FD—Full power measurement+Multi-rate, hourly metering
HD—Full power measurement+Harmonic measurement
LD—Full power measurement+Fire monitoring
FHD—Full power measurement+Multi-rate+ Harmonic measurement

(省略)—单相，3—三相 (Omission)-single phase, 3-three phase

公司代号 Company Code

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、谐波测量、正反向有功/无功电能计量、分时电能计量、分时电能定时抄表、电力品质分析、实时波形显示、事件记录、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络系统。

Multi-functional monitorand control meter is a high performance intelligent instrument, with such functions of measuring power parameters and harmonic waves at real time, measuring positive and negative active / reactive energy, measuring energy at separate time zone, reading energy at fixed time zone, analyzing electric quality, displaying wave at real time, recording events, 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, switchgears and etc intelligent power system.

产品标准 Conforming to standards

1、GB/T 22264.1-2008：安装式数字显示电测量仪表 第1部分：定义和通用要求
2、GB/T 22264.7-2008：安装式数字显示电测量仪表 第7部分：多功能仪表的特殊要求
3、GB/T 22264.8-2008：安装式数字显示电测量仪表 第8部分：推荐的并验方法
4、GB/T 17215.322-2008：交流电测量设备-特殊要求-第22部分：静止式有功电能表(0.2S级和0.5S级)
5、GB/T 17215.323-2008：交流电测量设备-特殊要求-第23部分：静止式无功电能表(2级和3级)
6、DL/T 614-2007：多功能电能表
7、GB14287-2005：电气火灾监控系统
8、GB50045-95：高层民用建筑设计防火规范
9、GB50054-95：低压配电设计规范
10、GB50096：住宅设计规范
11、GB13955-2005：剩余电流动作保护装置的安装和运行
12、GB50016-2006：建筑设计防火规范

Conforming to standards

1. GB/T 22264.1-2008：Mounted digital display electric measuring instruments-Part1: Definitions and general requirements
2. GB/T 22264.7-2008：Mounted digital display electric measuring instruments-Part 7: Special requirements for multi-funcational meters
3. GB/T 22264.8-2008：Mounted digital display electric measuring instruments-Part8: Recommended test methods
4. GB/T 17215.322-2008：AC electric measurement devices Special requirements Part 22: Static active energy meter (class 0.2S and 0.5S)
5. GB/T17215.323-2008：AC electric measurement devices Special requirements Part 23: Static reactive energy meter (Class 2 and 3)
6. Multi-functional energy meter
7. Detector for electric fire protection
8. Codefor Fire Protection Design of Tall Civil Buildings
9. Code for Low voltage distribution design
10. Code for living building design
11. Installation and operation of residual current tripping protective device
12. Code of Design on Building Fire Prevention

技术指标

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：±0.02Hz
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 380V
◆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：<1VA/相，电流：<0.4VA/相
◆阻抗：电压：>300kΩ，电流：<20mΩ
◆频率：45~65Hz

辅助电源
◆工作范围：AC/DC：80V~270V
◆功耗：<4VA

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2400 bps
◆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，
常数：8000imp/KWh(Kvarh)

环境
◆工作温度：-10℃~+55℃
◆存储温度：-25℃~+70℃
◆相对湿度：＜93%，无腐蚀性气体场所
◆海拔：＜2500m

安全
◆绝缘电阻：>100MΩ
◆交流耐压：AC 2KV

电磁兼容性能
◆静电放电：4级
◆电快速瞬变脉冲群：4级
◆浪涌(冲击)：4级

Technical Index

Accuracy of measurement
Voltage level 0.5
Current level0.5
Active power 0.5
Reactive power level 0.5
Frequency ±0.02Hz
Active electric energy class 0.5S or class 0.2S
Reactive energy grade 1 or grade 2
Power factor0.5

Signal input
◆Connection mode of four phase three wire, three phase , three line
◆Rated voltageAC 57.7V,AC 100V,AC 220V,AC 380V
◆Rated currentAC 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:<1VA/, current:<0.4VA/phase
◆Impedance voltage:>300mKΩ, current:<20mΩ
◆The frequency 45~65Hz

Auxiliary power supply
◆Working range AC/DC80V~270V
◆Power consumption<4VA

Function module
◆Communication interface 1 way RS-485 communication, Modbus-RTU protocol baud r ate: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
◆Electirc energy pulse output support 2 electric energy pulse output, constant: 8000imp/KWh(kvarh)

Environment
◆Working temperature: -10℃~+55℃
◆Storage temperature: -25℃~+70℃
◆Relative humidity is less than 93%, no corrosive gas
◆Elevation≤2500m

Safety
◆Insulation resistance>100MΩ
◆AC withstand voltageAC 2KV

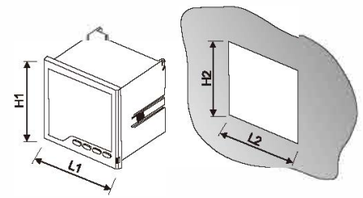
Electromagnetic compatibility
◆ESD level 4
◆Electrical fast transient burst level 4
◆Surge(impact) level 4

性能特点 Performance Characteristics

◆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
◆正反向有功/无功电能计量
◆分时电能计量、分时电能定时抄表
◆测量三相电压、三相电流的总谐波畸变率(THD)，2-31次奇次谐波分量
◆提供数码管或液晶显示，本地数据查询
◆菜单直观，按键操作简单
◆电流、电压变比可编程
◆提供多回路的漏电流监控
◆提供多回路控制节点，可用于报警、跳闸等控制
◆支持消防联动，远程切断故障回路
◆支持RS-485通讯，Modbus-RTU协议
◆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
◆安装方便，接线简单，工程量小
◆宽范围交直流通用电源：AC/DC 80V~270V
◆可完成SCADA、PLC中多种通讯软件的组网

◆High precision measurement of three-phase voltage, active power, reactive power, apparent power, power factor, frequency of electric parameters
◆Forward and reverse active /reactive energy measurement
◆Division of electric energy metering, time-sharing/ power timing meter reading
◆Measurement of three-phase voltage, three-phase current total harmonic distortion (THD), 2-31 odd harmonic component
◆To provide a nixie tube or liquid crystal display, local data query
◆Menu button intuitive, simple operation
◆Current, votlage gain Programmable
◆Provide multiple circuit leakage current monitoring
◆Provide mulitple loop control nodes, can be used for the alarm, trip control
◆Support for fire control, remote cut off the fault circuit
◆Support for RS-485 communication, Modbus -RTU protocol
◆Support for switching input, output, analog quantity transmitting output
◆Convenient installation, wiring is simple, small engineering quantity
◆A widerange of AC/DC power supply:AC/DC80V-270V
◆To be completed by SCADA, PLC in a variety of communications software networking.

外形尺寸 Outline dimensions



面框尺寸(mm)：L1xH1　Frame size(mm): L1xH1
开孔尺寸(mm)：L2xH2　Holesize(mm): L2xH2

◆面框尺寸(mm)：120×120；80×80；96×48；96×96；80×80；48×48；120x60；160x80
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