

AUX
奥克斯



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Ningbo Sanxing Electric Co., Ltd.
Ningbo AUX High Technology Co., Ltd.

<http://www.sanxing.com>

Brief

AUX GROUP

Built in 1986, AUX Group, one of Top 20 Private Owned Enterprises in China, is a famous manufacturer of Electric products, air conditioning, mobile phones, household appliances and refrigerators with 2 China Top Brands of Sanxing and AUX. AUX Group has also successfully entered into medical services, real estate, and logistics fields etc.

Now, AUX has developed for more than 20 years and has 30,000 employees. The great success is owing to its key culture, which are "Human Resource Centered" and "Economic Value Centered".

With the help of its corporate culture and decades of development, the production capacity of AUX Group is 25M units for electric meter, 3.5M kVA for transformer, 200K units for refrigerator(OEM), 5M units for mobile phone (2007), 7M units for air conditioner(2008), 1,200 beds in Mingzhou hospital and 0.8M m² floor area, and the sales revenue has reached US\$ 2.57 billion (export US\$ 320M) with total asset over US\$ 1.15 Billion.

We believe that based on the corporate culture and the implementation of Industry Updating Strategy, Human Resource Strategy and Internationalization Strategy, AUX Group will be a multinational company with global impact.





Sanxing Electric

Ningbo Sanxing Electric Co., Ltd. is a key branch company of AUX Group, which was founded in 1986. With more than 4,000 employees, Sanxing is one of the largest electric meter manufacturers in the world. Its production capacity is up to 25M pieces and the market possession ratio has reached 30% in China.

With more than 250 professional engineers and 8% of total sales revenue investment in R&D center, it was accredited as one of National Technology Centers, which has developed various products and services from long-life mechanical meters initially to all series of digital meters, AMR & prepaid system, and whole innovative project solutions now. Especially, the Sanxing prepaid system has dominated the domestic market.

Now, Sanxing has accelerated its informationization process. It has introduced Office Automation System, Enterprise Resource Planning System, Enterprise Human Resource System and Financial Management System to improve the efficiency, and it has been rated as a benchmarking enterprise by Ministry of Information Industry of PRC.

Having passed the ISO9001-94 certificate in 1997, ISO9001-2000 certificate in 2003 and KEMA certificate in 2004, with the distinguished brand image and strict quality management system, Sanxing has established sales and service network all over the country. And now, we have exported our products to many countries of Asia, Africa, South America, and Europe, etc..

We are looking forward to being the best for you. We believe that with excellent corporate culture, Sanxing will develop into a well-known multi-national manufacturer in electric field.

AUX High Technology

Ningbo AUX High Technology Co., Ltd. is a key branch company of AUX Group, which was founded in 1986 with manufacturing experience of electric power transformers, high and low voltage switchgear and movable substation etc.. Having employed 1,500 high-qualified operators and over 30 engineers, AUX High Technology is one of the largest manufacturers of electric power transformer with US\$ 50M sales revenue by now, and the total asset has reached US\$ 30M with modern workshops and advanced equipments for production and test.

Ningbo AUX High Technology Co., Ltd. has successfully passed the ISO9001-94 certificate in 1997 and ISO9001-2000 certificate in 2003. Some specifications of electric power transformers were certificated to meet IEC standard by CESI of Italy and China National Transformer Quality Supervision Testing Center. What's more, some products like 11KV and 33KV model D11 and S9 single and three phase electric power transformers are recommended by the Chinese government in Urban and Rural Electric Grid Upgrading Project. In overseas market, our products have entered Australia and other developing countries. Now, the

"AUX" brand has been acknowledged as a well-known brand in electric field.

We are constantly pursuing the quality and efficiency to win your trust. Tomorrow, AUX High Technology will be listed in most successful giants in the world.



DD202

Single-Phase Inductive Meter

DD202

Conformed Standards

- IEC 60521:1988: Class 0.5, 1 and 2 Alternating-Current Watthour Meters Second Edition
- IEC 60529: Degrees of Protection Provided by Enclosures



Technical Data of DD202

Model	DD202-4	DD202-5	DD202-6
Current Specification	2.5(10)A	5(25)A	5(30)A
	5(20)A	10(50)A	10(60)A
	10(40)A	15(75)A	15(100)A
	20(80)A		
Rated Voltage	220 V ,230V ,240V		
Rated Frequency	50Hz, 60 Hz		
Starting Current	$\leq 0.005I_b$		
Basic Revolution	17.6r/min	13.75r/min	11r/min
Maximum Impulse Voltage	6KV		
Power Loss of Current Coil	$\leq 1.2W, 5VA$		
Power Loss of Voltage Coil	1 VA		
Accuracy Reserve	1		
Accuracy Class	Class 2.0		
Insulation	Class 2.0		
Temperature Range	-30°C~55°C		
Relative Humidity	$\leq 95\%$		
Overall Dimensions	168mm×135mm×115 mm		
Life	More than 20 years		
Net weight	1.485Kg		

DT862 B

Three-Phase Inductive Meter

DT862 B

Conformed Standards

- IEC 60521:1988: Class 0.5, 1 and 2 alternating-current watt-hour meters
- IEC 60529: Degrees of Protection Provided by Enclosures



Technical Data of DT862-B

Model	DT862-B
Current Specification	1.5(6)A, 3(6)A, 5(20)A, 10(40)A, 15(60)A, 20(80)A, 30(100)A
Rated Voltage	3×220/380 V 3×230/400V 3×240/415V
Rated frequency	50Hz/60Hz
Starting current	≤0.005Ib
Basic revolution r/min	13.3r/min
Maximum impulse voltage	6KV
Power loss of voltage coil	≤1.4W ,6VA
Accuracy class	Class 2.0
Temperature range	-30℃~55℃
Relative humidity	≤95%
Outside dimensions	320mm×185mm×140mm
Life	More than 20 years
Net weight	3.654kg

DDS188

Single-Phase Static Meter

DDS188

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Static Watt-hour Meter Communication Protocol
- IEC 60529: Degrees of Protection Provided by Enclosures(IP Code)



Specifications

Accuracy Class		1.0	Starting Current	0.004Ib
Rated Voltage		110V, 220V	Fast Transient Burst	4kV
Normal Operational Voltage		0.7Un~1.2Un	AC Voltage Test	2kV
Limited Operational Voltage		0~1.3Un	Surge Test	4kV
Current Specification		2.5(10)A, 2.5(20)A, 5(30)A, 5(40)A, 10(60)A, 15(60), 20(100)A	Impulse Voltage Test	6kV
Power	Current Circuit	≤1VA	ESD	8kV
Consumption	Voltage Circuit	≤1.0W, 10VA	Operational Temperature	-25℃~55℃
			Limited Temperature	-40℃~70℃
Display		register	Storage Temperature	-40℃~70℃
Net Weight		≈0.5Kg	Average Rel. Humidity	≤85%
Life		10 years	Dimension	169mm×122mm×56mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Data reserved over 100 years under power failure condition
- For details, please refer to User Manual

DDS188 H1

Single-Phase Static Meter

DDS188 H1

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Static Watt-hour Meter Communication Protocol
- IEC 60529: Degrees of Protection Provided by Enclosures(IP Code)



Specifications

Accuracy Class		1.0	Starting Current	0.004Ib
Rated Voltage		110V, 220V	Fast Transient Burst	4kV
Normal Operational Voltage		0.7Un~1.2Un	AC Voltage Test	2kV
Limited Operational Voltage		0~1.3Un	Surge Test	4kV
Current Specification		2.5(10)A, 2.5(20)A, 5(30)A, 5(40)A, 10(60)A, 15(60), 20(100)A	Impulse Voltage Test	6kV
Power	Current Circuit	≤1VA	ESD	8kV
Consumption	Voltage Circuit	≤1.0W, 5VA	Operational Temperature	-25℃~55℃
			Limited Temperature	-40℃~70℃
Display		LCD	Storage Temperature	-40℃~70℃
Net Weight		≈0.5Kg	Average Rel. Humidity	≤85%
Life		10 years	Dimension	220mm×60mm×120mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Optional IR and RS485 communication, programmable configuration and power on or off control
- LED pulse output for calibration
- LCD availability under power failure condition
- Data reserved over 100 years under power failure condition
- For details, please refer to User Manual

DDS188 N

Single-Phase Static Meter

DDS188 N

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Static Watt-hour Meter Communication Protocol
- IEC 60529: Degrees of Protection Provided by Enclosures (IP Code)



Specifications

Accuracy Class		1.0	Starting Current	0.004Ib
Rated Voltage		110V, 220V	Fast Transient Burst	4kV
Normal Operational Voltage		0.7Un~1.2Un	AC Voltage Test	2kV
Limited Operational Voltage		0~1.3Un	Surge Test	4kV
Current Specification		2.5(10)A, 2.5(20)A, 5(30)A, 5(40)A, 10(60)A, 15(60), 20(100)A	Impulse Voltage Test	6kV
Power	Current Circuit	≤1VA	ESD	8kV
Consumption	Voltage Circuit	≤1.0W, 10VA	Operational Temperature	-25℃~55℃
			Limited Temperature	-40℃~70℃
Display		LCD	Storage Temperature	-40℃~70℃
Net Weight		≈0.65kg	Average Rel. Humidity	≤85%
Life		10 years	Dimension	220mm×60mm×120mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Optional IR and RS485 communication, programmable configuration by IR or RS485
- LED pulse output for calibration
- Anti-tamper feature
- Data reserved over 100 years under power failure condition
- For details, please refer to User Manual

DDSI188 A1

Single-Phase PLC Static Meter

DDSI188 A1

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Static Watt-hour Meter Communication Protocol
- DL/T 698-1999: Automatic meter reading for LV customers
- IEC 60529: Degrees of Protection Provided by Enclosures (IP Code)



Specifications

Accuracy Class		1.0	Starting Current	0.004Ib
Rated Voltage		110V, 220V	Fast Transient Burst	4kV
Normal Operational Voltage		0.7Un~1.2Un	AC Voltage Test	2kV
Limited Operational Voltage		0~1.3Un	Surge Test	4kV
Current Specification		2.5(10)A, 2.5(20)A, 5(30)A, 5(40)A, 10(60)A, 15(60), 20(100)A	Impulse Voltage Test	6kV
			ESD	8kV
Power Consumption	Current Circuit	≤1VA	Baud rate of PLC	384bps
	Voltage Circuit	≤1.0W, 5VA	Operational Temperature	-25℃~55℃
			Limited Temperature	-40℃~70℃
Display		LCD	Storage Temperature	-40℃~70℃
Net Weight		≈0.8kg	Average Rel. Humidity	≤85%
Life		10 years	Dimension	172mm×120mm×63mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Programmable configuration by HHU(Hand Held Unit) or remote controller
- Energy pulse output for accuracy verification
- AMR feature by PLC(Power Line Communication)
- For details, please refer to User Manual

DDSY188 F2

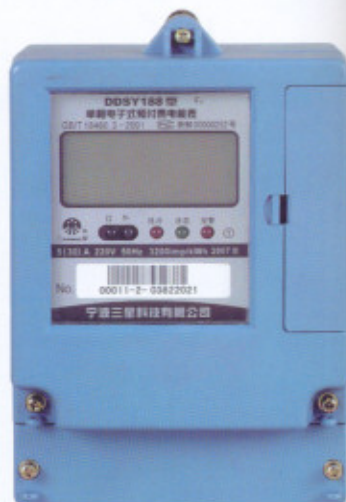
Single-Phase Prepaid Static Meter

DDSY188 F2

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- GB/T 18460-2001: Prepaid Vending System Using Integrated Circuit(s) Cards with Contacts
- ISO/IEC 7816-1997: Information Technology - Identification Cards - Integrated Circuit Card with Contacts - Parts 3 Electronic Signals and Transmission Protocols
- IEC 60529: Degrees of Protection Provided by Enclosures(IP Code)

Specifications



Accuracy Class		1.0	Starting Current	0.004Ib
Rated Voltage		110V, 220V	Fast Transient Burst	4kV
Normal Operational Voltage		0.7Un~1.2Un	AC Voltage Test	2kV
Limited Operational Voltage		0~1.3Un	Surge Test	4kV
Current Specification		2.5(10)A, 2.5(20)A, 5(30)A, 5(40)A, 10(60)A, 15(60)A, 20(100)A	Impulse Voltage Test	6kV
			ESD	8kV
Power Consumption	Current Circuit	≤1VA	RTC Accuracy	≤0.5s/d(23℃)
	Voltage Circuit	≤1.0W, 5VA	Tariffs and TOD	3Tariffs, 8 TOD intervals
Display		LCD with optional backlight	Operational Temperature	-25℃~55℃
Backup Battery		3.6VDC, Cap. ≥1000mAh	Limited Temperature	-40℃~70℃
Net Weight		≈1.1kg	Storage Temperature	-40℃~70℃
Life		10 years	Average Rel. Humidity	≤85%
			Dimension	167.5mm×110mm×60mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Prepaid feature, configurable credit
- One card one user, ease of electricity management
- Data security: smart card optional embedded CoS plus dynamic 3DES encryption, embedded ESAM chip
- Multi-Tariff feature(optional), configurable tariff (peak, flat, valley) and TOD
- IR and optional PLC
- Over credit and overload power off
- Integrated prepaid vending system and consumption inspection feature
- For details, please refer to User Manual

DDSF2000 E2

Single-Phase Multi-Tariff Static Meter

DDSF2000 E2

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Static Watt-hour Meter Communication Protocol
- GB/T15284-2002: Particular Requirements for Multi-Rate Electricity Meter.
- IEC 60529: Degrees of Protection Provided by Enclosures(IP Code)



Specifications

Accuracy Class		1.0	Starting Current	0.004Ib
Rated Voltage		110V, 220V	Fast Transient Burst	4kV
Normal Operational Voltage		0.7Un~1.2Un	AC Voltage Test	2kV
Limited Operational Voltage		0~1.3Un	Surge Test	4kV
Current Specification		2.5(10)A, 2.5(20)A, 5(30)A, 5(40)A, 10(60)A, 15(60)A, 20(100)A	Impulse Voltage Test	6kV
			ESD	8kV
Power Consumption	Current Circuit	≤1VA	Tariffs and TOD	4Tariffs, 8 TOD intervals
	Voltage Circuit	≤1.0W, 5VA	RTC Accuracy	0.5s/d(23℃)
Display		LCD with optional backlight	Operational Temperature	-25℃~55℃
Backup Battery		3.6VDC, Cap. ≥1200mAh	Limited Temperature	-40℃~70℃
Net Weight		≈1kg	Storage Temperature	-40℃~70℃
Life		10 years	Average Rel. Humidity	≤85%
			Dimension	167.5mm×110mm×60mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Optional IR and RS485 communication, programmable configuration by IR or RS485
- Independent energy measurement according to each tariff
- Accurate RTC & calendar with optional temperature compensation function
- LCD awaking by the remote controller or HHU
- LCD availability under power failure condition (at least 6 days)
- Last 12 months' energy data records
- AMR feature by RS485, IR, PLC(optional)
- For details, please refer to User Manual

DTS/DSS188 H1

Three-Phase Four-Wire/Three-Phase Three-Wire Static Meter

DTS/DSS188 H1

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Watt-Hour Meter Communication Protocol
- IEC 60529: Degrees of Protection Provided by Enclosures(IP code)



Specifications

Accuracy Class	1.0	Power Consumption	Voltage Circuit	≤1.0W, 5VA
Rated Voltage	3×100V, 3×220V/380V		Current Circuit	≤1VA
Operational Voltage	0.7Un~1.2Un	Fast Transient Burst		4kV
Limited Operational Voltage	0~1.3Un	AC Voltage Test		2kV
Reference Frequency	50/60Hz	Impulse Voltage Test		6kV
Current Specification	1.5(6)A, 5(30)A, 5(40)A, 10(40)A, 10(60)A, 20(100)A	Surge Test		4kV
Starting Current	0.004Ib	ESD		8kV
Backup Battery	3.6VDC, Cap. ≥1200mAh	Operational Temperature		-25℃~55℃
Display	LCD	Limited Temperature		-40℃~70℃
Net Weight	≈1.8kg	Storage Temperature		-40℃~70℃
Life	10 years	Average Rel. Humidity		≤85%
		Dimension		249mm×170mm×75mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process.
- Bidirectional active energy measurement, energy consumption unidirectional accumulation
- Optional IR and RS485 communication, programmable configuration by IR or RS485
- LCD availability under power failure condition
- Event records: potential missing, current missing, record reset, monthly MD of last 3 months
- LED indication: voltage, reverse current, phase failure
- Monthly total energy consumption record of last 12 months
- Programmable display sequence by push-button
- AMR feature by IR or RS485
- Three phase power, constant accuracy under one or two phases' power failure condition
- For details, please refer to User Manual

DTSY188/DSSY188 F

Three-Phase Four-Wire/Three-Phase Three-Wire Prepaid Static Meter

DTSY188 /DSSY188 F

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- GB/T 18460.3-2001: Prepaid Watt-Hour Meter
- IEC 60529: Degrees of Protection Provided by Enclosures (IP code)



Specifications

Accuracy Class	1.0	Power Consumption	Voltage Circuit	≤1W, 5VA
Rated Voltage	3×100V, 3×380V, 3×220/380V		Current Circuit	≤1VA
Operational Voltage	0.7Un~1.2Un	Fast Transient Burst		4kV
Limited Operational Voltage	0~1.3Un	AC Voltage Test		2kV
Reference Frequency	50/60Hz	Impulse Voltage Test		6kV
Current Specification	2.5(10)A, 5(20)A, 10(40)A, 15(60)A, 20(100)A	Surge Test		4kV
Starting Current	0.004Ib	ESD		8kV
Display	LCD with optional backlight	Operational Temperature		-25℃~55℃
Net Weight	≈1.8kg	Limited Temperature		-40℃~70℃
Life	10 years	Storage Temperature		-40℃~70℃
		Average Rel.Humidity		≤85%
		Dimension		249mm×170mm×76.5mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active/reactive energy measurement, energy consumption unidirectional accumulation
- Data security: HW logic encryption or smart card - embedded CoS plus optional dynamic 3DES encryption, embedded ESAM chip, etc.
- Over credit and overload power off (Internal large capacity magnetic holding relay)
- Integrated prepaid vending system and consumption inspection feature
- Programmable overdrawn credit
- Remaining credit alarm by LCD and buzzer (optional)
- Optional IR and RS485 Communication
- Energy pulse output for accuracy verification
- For details, please refer to User Manual

DTSF188/DSSF188 F1

Three-Phase Four-Wire/Three Phase Three-Wire Multi-Tariff Static Meter

DTSF188/DSSF188 F1

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 645-1997: Multi-Function Static Watt-hour Meter Communication Protocol
- GB/T 15284-2002: Particular Requirements for Multi-Rate Electricity Meter.
- IEC 60529: Degrees of Protection Provided by Enclosures (IP code)

Specifications



Accuracy Class	Active	1.0	Power Consumption	Voltage Circuit	≤1W /5VA
	Reactive	2.0		Current Circuit	≤1VA
Rated Voltage		3×100V,3×220V/380V			
Operational Voltage		0.7Un~1.2Un	Fast Transient Burst		4kV
Limited Operational Voltage		0~1.3Un	AC Voltage Test		2kV
Reference Frequency		50/60Hz	Impulse Voltage Test		6kV
Current Specification	5(20)A,5(30)A,5(40)A,10(80)A,20(100)A		Surge Test		4kV
			ESD		8kV
Starting current	0.004Ib		Operational Temperature		-25℃~55℃
	0.002In		Limited Temperature		-40℃~70℃
Display	LCD		Storage Temperature		-40℃~70℃
Net Weight	≈1.5kg		Average Rel.Humidity		≤85%
Life	10 years		Dimension		249mm×170mm×76.5mm

Main Features

- Advanced measuring chip and high reliable CPU, manufactured with advanced SMT process
- Bidirectional active/reactive energy measurement, energy consumption unidirectional accumulation, save the monthly energy consumption of last 3 months
- Programmable 4 seasons, 4 tariffs, 5 TOD solutions and 10 TOD intervals
- Event detection and record: independent potential missing, independent current missing, meter configuration, MD reset, power on and off, cover opening, the time of MD happening
- LED indication for each potential missing
- Forward/reverse active/reactive MD measurement with programmable demand interval, accurate RTC (real-time clock & calendar) with optional temperature compensation function
- Load profile: record load data hourly of last 36 days
- Save monthly total energy consumption of last 12 months
- Communication interface: double RS485 interfaces, remote infrared interface, second pulse output for RTC accuracy verification, energy pulse output for accuracy verification
- For details, please refer to User Manual

DTSD188S/DSSD188S D5

Three-Phase Four-Wire/Three-Phase Three-Wire Multi-Function Static Meter

Conformed Standards

- IEC 60687:1992 : Alternating Current Static Watt-Hour Meters for Active Energy (classes 0.2S and 0.5S)
- IEC 62053-23:2003: Static Meters for Reactive Energy (classes 2 and 3)
- DL/T 645-1997: Multi-Function Watt-Hour Meter Communication Protocol
- DL/T 614-1997: Multi-Function Watt-Hour Meter
- IEC 60529: Degrees of Protection Provided by Enclosures(IP code)



DTSD188S/DSSD188S D5

Specifications

Accuracy Class	Active	0.5S	Power Consumption	Voltage Circuit	≤1W/5VA
	Reactive	2.0		Current Circuit	≤1VA
Rated Voltage		3×100V 3×57.7V/100V 3×220V/380V	RTC Accuracy		0.5s/d(23℃)
			Backup Battery		3.6VDC,Cap.≥1000mAH
Normal Operational Voltage		0.7Un~1.2Un	Fast Transient Burst		4kV
Limited Operational Voltage		0~1.3Un	AC Voltage Test		2kV
Current Specification		1.5(6)A, 5(20)A, 10(40)A, 15(60)A ,20(100)A	Impulse Voltage Test		6kV
			Surge Test		4kV
Starting Current		0.001In(Active 0.5)	ESD		8kV
		0.003In(Reactive2.0)	Operational Temperature		-25℃~55℃
Reference Frequency		50/60Hz	Limited Temperature		-40℃~70℃
Display		LCD with optional backlight	Storage Temperature		-40℃~70℃
Net Weight		≈3.8kg	Average Rel. Humidity		≤85%
Life		10 years	Dimension		274mm×165mm×70mm

Main Features

- Forward/reverse active/reactive energy measurement, total active/reactive energy measurement, 4-quadrant reactive energy measurement
- Independent phase energy and tariff energy (active/reactive) measurement
- Forward/reverse active/reactive MD measurement with programmable demand interval
- Programmable tariff (peak/off-peak/valley), TOD, season, and holidays
- Accurate RTC (real-time clock & calendar) with optional temperature compensation
- Instantaneous parameter measurement: rms voltage, rms current, power factor, frequency, power
- Event detection and record: potential missing, current missing, over voltage, over load, voltage qualification rate, meter configuration, MD reset, power on and off, cover opening, imbalanced current, etc
- Meter awaking by push-button or IR under power failure condition and accessible, current detection when all phase voltages failure, scroll-display and push-button display
- Load profile: 7 types of data (refer to User Manual), up to 12 months' demand and energy data records
- Insulated double RS485, remote IR, second pulse output for RTC accuracy verification, energy pulse output for accuracy verification, remote load control, the demand interval and TOD switching pulse output
- Instantaneous and periodically energy consumption reset, forward active energy frozen when season switching, operational time of backup battery record
- Data Security: multiple password authorization management
- For details, please refer to User Manual

SX129PTU DW2

Distribution Transformer Terminal

SX129PTU DW2

Conformed Standards

- IEC 62053-21:2003: Alternating Current Static Watt-hour Meters for Active Energy (classes 1 and 2)
- DL/T 743-2001: Remote Terminal Unit of Integrated Totals
- DL/T 721-2000: Remote Terminal Function of Distributing Net Automation System
- DL/T 533-93: Radio Load Control Two-Way Terminal Technical Requirement

Specifications



Accuracy Class	Active	1.0.	Communication interface	GPRS/CDMA, 9.6kbps ~115.2kbps
	Reactive	2.0		RS485, 1.2kbps ~38.4kbps
Rated Voltage		3×220/380V		RS232, 1.2kbps ~115.2kbps
Normal Operational Voltage		0.7Un~1.3Un		IR, 1.2kbps ~9.6kbps
Limited Operational Voltage		0~1.3Un		Ethernet(optional), 10M/100M
Current Specification		3×1(2)A, 3×5(10)A	Operational Temperature	-25℃~55℃
Reference Frequency		50/60Hz	Limited Operational Temperature	-25℃~65℃
Power Consumption	≤3W (static)			
	≤5 W(max)		Storage Temperature	-25℃~70℃
RTC Accuracy		0.5s/d(23℃)	Average Rel. Humidity	≤95%
RTC Battery		3.0VDC, Cap. ≥1000mAh	Display	LCD
Backup Battery		4.8VDC, Cap. ≥730mAh	Data reserve	100 years
Remote state		5 routs of state detection	Dimension	304mm×183mm×98mm

Main Features

- Advanced measuring chip with high reliable CPU and manufactured with advanced SMT process
- Forward/Reverse active/reactive energy measurement, total active/reactive energy measurement, 4-quadrant reactive energy measurement
- Active energy measurement of each phase, active/reactive energy measurement of each tariff, total energy measurement, MD measurement, the time of power on or off
- Instantaneous parameter measurement: rms voltage, rms current, power factor, frequency, power
- State measurement: the time of phase failure, current missing and potential missing
- Meter reading by GPRS/CDMA, programmable time interval and content, such as phase current, phase voltage, potential missing, current missing, phase failure, reactive power, active power, current MD, MD last month, RTC, etc.

SX129PTU DW2

Distribution Transformer Terminal

- Data reserve: load profile, daily data, monthly data, alarm event, instantaneous parameter measurement
- Daily data: daily active energy of each tariff, daily total active energy, daily reactive energy of each tariff, daily total reactive energy, default daily data reading at 0 o'clock or other time which is programmable, the accumulated time of exceeding upper limit and lower limit, which are programmable.
- Monthly data: monthly active energy of each tariff, monthly total active energy, monthly reactive energy of each tariff, monthly total reactive energy, default monthly data reading at 0 o'clock of the end of month or other time which is programmable, the accumulated time of exceeding upper limit and lower limit, which are programmable, and voltage qualification rate, MD and the time of MD happening.
- Profile data: monthly active energy, monthly reactive energy, 4-quadrant reactive energy, phase current, phase voltage, phase power, total power, reactive power, phase power factor, total power factor.
Programmable data collection interval. All these daily, monthly and profile data live 60 days
- Event record: recording the last 400 events such as cover opening, energy differences, power differences, phase sequence disorder, reverse current, TOD and tariff programming, RTC abnormality, low battery voltage, self running, decreasing of energy consumption, stop metering, abnormal communication of RS485, terminal power on or off, over load, over current, over voltage, no voltage with current, no voltage and current, current imbalance, over compensation of reactive power, inadequate compensation of reactive power etc
- Immediate abnormal events information report, such as the name of manufacturer, the time of its happening and recovering, the content etc
- RTC calibration: terminal RTC calibrated by master server, programmable interval for calibration, meter RTC calibrated by terminal
- Read last settlement of electricity consumption under power failure condition
- Data security: terminal password for parameter editing, 24 hours' parameter editing rejection for repeated wrong password input. Encryption-zipped data for communication
- Manage up to 16 multi-function meters
- Harmonics analysis: analyzes up to 21st harmonic of voltage and current, the ratio of voltage and current distortion
- LED indication: operational state, communication state, active/reactive energy pulse
- For details, please refer to User Manual

DTSD188S/DSSD188S H

Three-Phase Four-Wire/Three-Phase Three-Wire GPRS Multi-Function Static Meter

DTSD188S/DSSD188S H

Conformed Standards

- IEC 60687:1992 : Alternating Current Static Watt-hour Meters for Active Energy (classes 0.2 S and 0.5 S)
- IEC 62053-23:2003: Static Meters for Reactive Energy (classes 2 and 3)
- DL/T 645-1997: Multi-Function Watt-Hour Meter Communication Protocol
- DL/T 614-1997: Multi-Function Watt-Hour Meter
- IEC 60529: Degrees of Protection Provided by Enclosures(IP code)

Specifications



Accuracy Class	Active	0.5S	Power	Voltage Circuit	≤1W/5VA
	Reactive	2.0	Consumption	Current Circuit	≤1VA
Rated Voltage		3×100V 3×57.7V/100V 3×220V/380V	RTC Accuracy		0.5s/d(23℃)
			RTC Battery		3.6VDC,Cap.≥1000mAh
			Backup Battery		4.8VDC,Cap.≥730mAh
Normal Operational Voltage		0.7Un~1.2Un	Fast Transient Burst		4kV
Limited Operational Voltage		0~1.3Un	AC Voltage Test		2 kV
Current Specification		1.5(6)A , 5(20)A, 10(40)A, 15(60)A ,20(100)A	Impulse Voltage Test		6kV
			Surge Test		4kV
Starting Current		0.001In(Active 0.5)	ESD		8kV
		0.003In(Reactive2.0)	Operational Temperature		-25℃~55℃
Reference Frequency		50/60Hz	Limited Temperature		-40℃~70℃
Display		LCD with optional backlight	Storage Temperature		-40℃~70℃
Net Weight		≈3.8kg	Average Rel. Humidity		≤85%
Life		10 years	Dimension		245mm×170mm×81.5mm

Main Features

- Forward/reverse active/reactive energy measurement, total active/reactive energy measurement, 4-quadrant reactive energy measurement
- Independent phase and tariff energy (active/reactive) measurement
- Forward/reverse active/reactive MD measurement with programmable demand interval
- Multi-tariff feature: programmable tariff (peak/off-peak/valley) and TOD, season, and holidays
- Accurate RTC (real-time clock & calendar) with optional temperature compensation
- Instantaneous parameter measurement: rms voltage, rms current, power factor, frequency, power
- Event detection and record: potential missing, current missing, over voltage, over load, voltage qualification rate, meter configuration, MD reset, power on and off, cover opening, imbalanced current, etc
- Meter awaking by push-button or IR under power failure condition, and accessible
- Load profile: 7 types of data (refer to User Manual), up to 12 months' demand and energy data records
- Insulated double RS485, remote IR, second pulse output for RTC accuracy verification, energy pulse output for accuracy verification, remote load control, the demand interval and TOD interval switching pulse output
- Authorized and chaseable instantaneous and periodical energy consumption reset, forward active energy frozen when season switching, operational time of backup battery record
- Data Security: multi-level password authorization management
- Real-time GPRS communication for abnormal event reporting, data accessing, relay controlling, data relay for AMR and remote updating
- For details, please refer to User Manual