



HXE130

Single Phase

Smart Prepayment Meter

Focus on creating value for clients



HXE130 is a new generation of single phase smart prepayment meter which migrating CTS/STS with AMI functions. It provides local and remote credit charging. The meter is supported by Hexing's sophisticated vending system software.

■ Highlights

- Optional ultrasonic structure with high security and protection degree.
- STS/CTS standard protocol ensures an open and secure operating system
- Optical communication, open protocol: DLMS/COSEM (E mode)
- Internal switch relay for load demand control by configuration or remote communication
- Prepayment and post-payment mode switchable for users' convenience
- A plug-and-play communication module (GPRS/RF/PLC)
- Built-in RS485 communication
- Optional Keypad on measurement unit

■ Main Functionalities

- Measurement
 - Unidirectional Measurement
 - Record active energy in tariffs
 - Instantaneous value measurement
- 12-month billing data and other frozen data for inquiry
- Prepayment is made via a numeric token with extended ways of recharging
- **LCD Display**
 - Balance display configurable
 - Large digit LCD display, easy for reading
 - LCD backlights to increase readability in low light conditions(optional)
 - Scrolling display configurable for instant information enquiry
 - Display readable without main power (RWP)
 - 6-month billing data (active energy) displayable
- RTC
 - Clock accuracy (daily deviation): $\leq 0.5s$
- Daylight saving time configurable
- **Event Record**
 - Fraud protection function. The relay will be disconnected for fraud protection once detects the Battery cover open and terminal cover open events
 - Multiple event detections and records with categories of operation, power grid and tampering
- RS485 Communication with interface in accordance to DLMS standard
- Emergency Credit
- User-friendly mode for energy supply for low credit during weekends or holidays (optional)
- **Tampering Proof**
 - Module Cover open detection and record
 - Meter terminal detection and record
 - Bypass detection
 - Large magnetic event(optional)

- **Demand**
 - Demand Interval configurable
 - Block or slide mode configurable
 - Forward and reverse active MD with time stamp
- **Tariff**
 - TOU
 - Step configurable
- **Load profile**
 - Channel quantity customized before leaving the factory; up to 8 channels
 - Data for load profile record configuration

■ Specifications

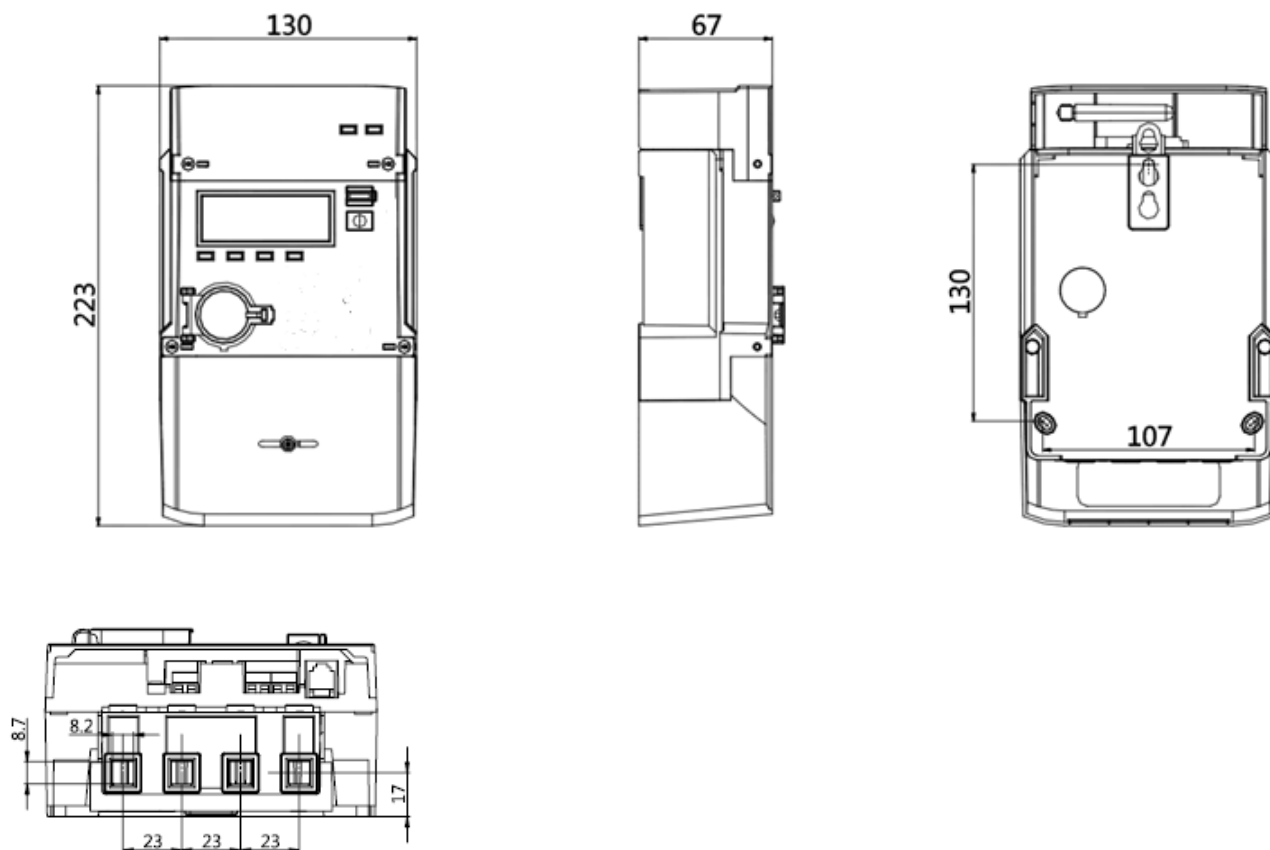
Description	Value
Accuracy	Active class 1 Reactive class 2(optional)
Voltage Reference voltage Operating voltage range	230V 50%-120%Un
Current Basic current Maximum current Starting current	5A 80A/100A < 0.4%Ib
Frequency	50Hz
Temperature Operation range Limit range for storage and transport	-25 °C to +55 °C -40 °C to +75 °C
Humidity	Up to 95%
Power Consumption Power consumption in voltage circuit (active) Power consumption in voltage circuit (apparent) Power consumption in current circuit	≤2 W ≤5 VA ≤1 VA
Insulation Strength AC voltage test Impulse voltage test	4kV during 1min 1.2/50μs mains connections 6kV
EMC Electrostatic discharges (Contact discharges) Electrostatic discharges (Air discharges) Surge immunity test Fast transient burst test Electromagnetic RF fields (80MHz to 2000MHz)	8kV 15kV 4kV 4kV 10V/m (with current), 30V/m (without current)
Connection Terminals	Ø8.7 mm
Housing Protection degree Meter cove Meter base Terminal cover	IP54 Opaque PC+ fiber glass with a transparent window Opaque PC+ fiber glass Opaque PC+ fiber glass
Display Digit size Number of digits	10mm x 6 mm 8

Communication Interface	
Optical communication	DLMS/COSEM
RS485 communication	DLMS/COSEM
A plug-and-play communication module	DLMS/COSEM
Weight	
Net weight	Approx. 0.88kg (+GPRS communication module) Approx. 0.88kg (+PLC communication module)
Dimension	
	223mm×130mm×67mm (Extended terminal cover)

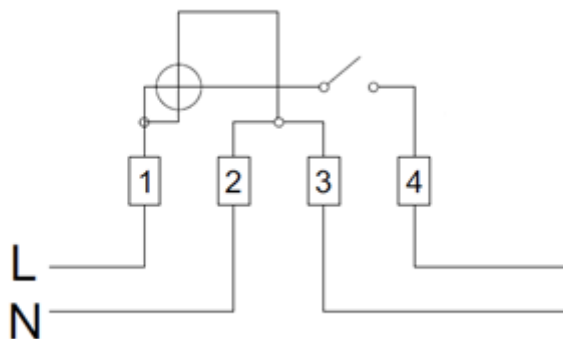
■ Standard

IEC62052-11	Electricity metering equipment (a.c.) General requirements, tests and test conditions – Part 11: Metering equipment
IEC62053-21	Electricity metering equipment (a.c.) Particular requirements –Part 21: Static meters for active energy (classes 1 and 2)
IEC62053-23	Electricity metering equipment (a.c.) Particular requirements –Part 23: Static meters for reactive energy (classes 2 and 3)
IEC62054-21	Electricity metering (AC) - Tariff and load control - Part 21: Particular requirements for time switches
IEC62056-46	Electricity metering – Data exchange for meter reading, tariff and load control – Part 46: Data link layer using HDLC protocol
IEC62055-31	Electricity metering –Payment systems–Part 31: Particular requirements –Static payment meters for active energy (classes 1 and 2)
IEC62056-46	Electricity metering – Data exchange for meter reading, tariff and load control – Part 46: Data link layer using HDLC protocol
IEC62056-47	Electricity metering – Data exchange for meter reading, tariff and load control – Part 47: COSEM transport layer for IP networks
IEC62056-53	Electricity metering – Data exchange for meter reading, tariff and load control – Part 53: COSEM Application layer
IEC62056-61	Electricity metering – Data exchange for meter reading, tariff and load control – Part 61: OBIS Object identification system
IEC62056-62	Electricity metering – Data exchange for meter reading, tariff and load control – Part 62: Interface classes
EN50470-1	Electricity metering equipment (a.c.) —Part 1: General requirements, tests and test conditions — Metering equipment (class indexes A, B and C)
EN50470-3	Electricity metering equipment (a.c.) —Part 3: Particular requirements —Static meters for active energy (class indexes A, B and C)

■ Dimensions



■ Connection Diagram



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