HEXING

HXP100DI

Single Phase Two Wire Rail Prepayment Meter

Focus on creating value for clients

HXP100DI is a DIN Rail installation metering and control unit used in one phase two wire power network. Combined with CIU EV-KP or CIU EV-SP, it works as keypad or smart card split prepayment meter complying with STS standard.

Highlights

- STS standard protocol ensures an open and secure operating system
- Optical Communication, Open Protocol: DLMS /COSEM Standard
- Internal switch relay for load demand control by configuration or remote communication
- Prepayment and post-payment mode switchable for users' convenience

Main Functionalities

- **Measurement**
  - Unidirectional or Bi-directional Measurement
  - Active energy, Active reverse energy Measurement
  - Instantaneous value measurement
- Prepayment is made via a numeric token
- Communication with CIU via PLC/MBUS/RF, depending on the site
- 12-month billing data and more frozen data for inquiry
- Remote connection/disconnection control for the Power Grid's direct management to residential power consumption (optional)
- Emergency Credit for a certain sum of energy supply depending on User's Credit Level
- User-friendly mode for energy supply for low credit during weekends or holidays (optional)
- **Tampering Proof**
  - Meter Cover open detection and record (optional)

Specifications

Description	Value
Accuracy	Class 1 or 2 (IEC), Class A or B (MID)
Voltage	
Reference voltage	110-127V,220-240V
Operating voltage range	70%-120%Un
Current	
Basic current	5A,10A
Maximum current	60A, 80A, 100A
Starting current	⩽ 0.4%Ib

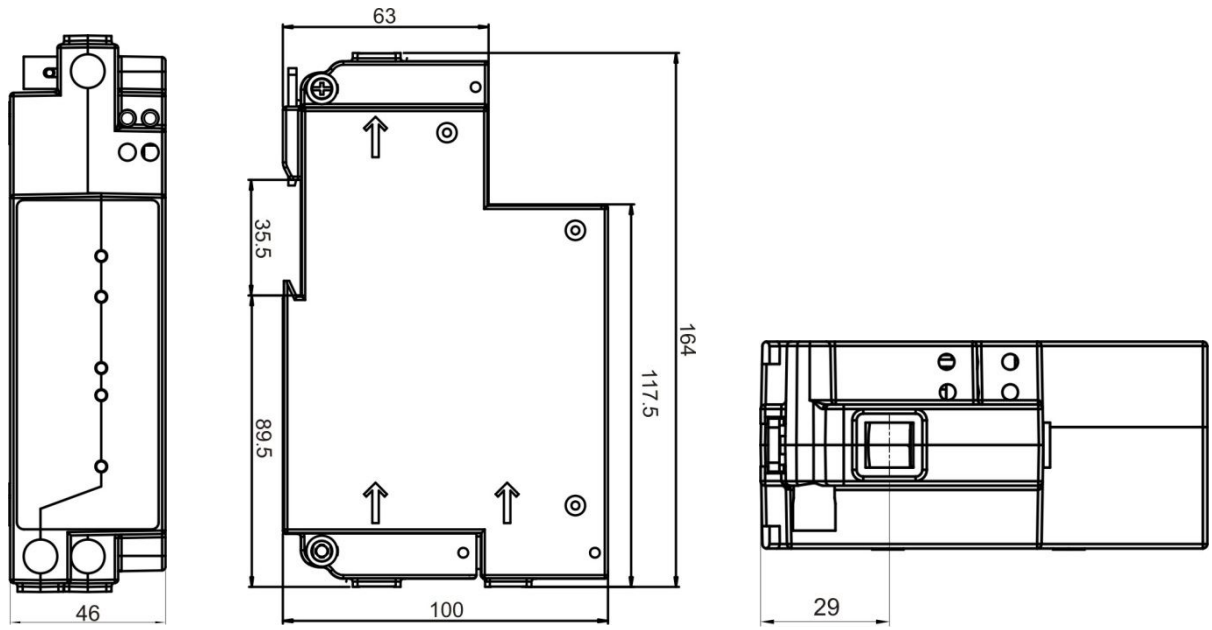
Frequency	50Hz or 60Hz
Temperature	
Operation range	-25℃ to +60℃
Limit range for storage and transport	-40℃ to +75℃
Humidity	Up to 95%
Power Consumption	
Power consumption in voltage circuit (active)	≤2 W
Power consumption in voltage circuit (apparent)	≤10 VA
Power consumption in current circuit	≤1 VA
Insulation Strength	
AC voltage test	4kV during 1min
Impulse voltage test	1.2/50μs mains connections 6kV
EMC	
Electrostatic discharges(Contact discharges)	8kV
Electrostatic discharges(Air discharges)	15kV
Surge immunity test	4kV
Fast transient burst test	4kV
Electromagnetic RF fields (80MHz to 2000MHz)	10V/m(with current), 30V/m(without current)
Connection Terminals	¢10mm
Housing	
Protection degree	IP51
Meter cove	Opaque PC+ fiber glass with a transparent window Transparent PC (optional)
Meter base	Opaque PC+ fiber glass
Communication Interface	
Optical communication PLC/MBUS/RF alternative	DLMS/COSEM
Weight	
Net weight	Approx.0.53kg
Package	Approx.0.08kg
Dimension	164mm×100mm×46mm

■ Standard

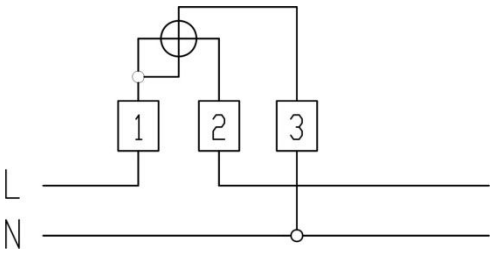
IEC62052-11	Electricity metering equipment (a.c.) General requirements, tests and test conditions – Part 11: Metering equipment
IEC62053-21	Electricity metering equipment (a.c.) Particular requirements –Part 21:Static meters for active energy(classes 1 and 2)
IEC62055-41	Electricity metering - Payment systems - Part 41: Standard transfer specification (STS) - Application layer protocol for one-way token carrier systems
IEC62055-51	Electricity metering - Payment systems - Part 51: Standard transfer specification (STS) - Physical layer protocol for one-way numeric and magnetic card token carriers
IEC62056-46	Electricity metering – Data exchange for meter reading, tariff and load control – Part 46: Data link layer using HDLC protocol

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)
IEC62056-21	Electricity metering – Data exchange for meter reading, tariff and load control – Part 21:Direct local data exchange

■ Dimensions



■ Connection Diagram



Asymmetric Connection

COMPANY HEADQUARTERS
Add: 1418-5 Moganshan Road,
Shangcheng Industrial Zone, 310011,
Hangzhou City, China
Tel: 86 571 28029898
Fax: 86 571 28029258