



HEXING
South Africa



HXP100DI

Single Phase

DIN Rail Prepayment Meter



HXP100DI is a DIN Rail installation metering and control unit used in a 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.

■ 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, Bi-directional Measurement or Import Only
 - Active energy, Active reverse energy Measurement
 - Instantaneous value measurement
- Prepayment is made via a numeric token
- Communication with CIU via PLC or MBUS
- 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	
Base current	5A, 10A
Maximum current	60A, 80A, 100A
Starting current	IEC 62053-21

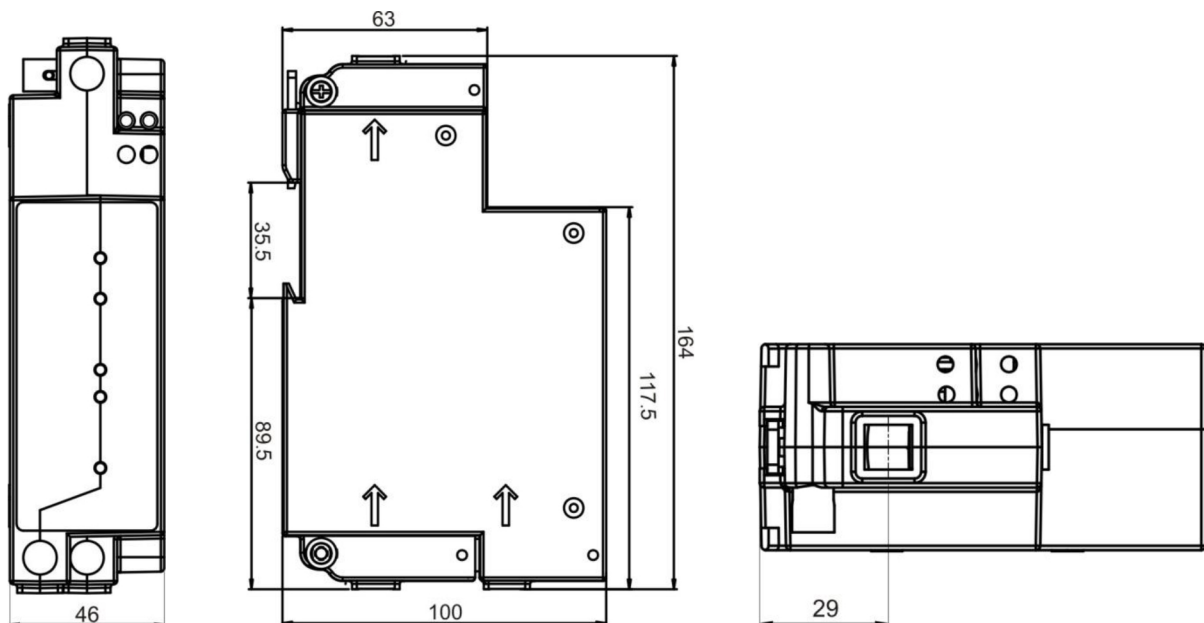
Frequency	50Hz or 60Hz
Temperature Operation range Limit range for storage and transport	-25℃ to +60℃ -40℃ to +75℃
Humidity	Up to 95%
Power Consumption Power consumption in voltage circuit (active) Power consumption in voltage circuit (apparent) Power consumption in current circuit	≤2 W ≤10 VA ≤1 VA
Insulation Strength AC voltage test Impulse voltage test	4kV for 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	∅ 10mm
Housing Protection degree Meter cove Meter base	IP51 Opaque PC+ fiber glass with a transparent window Transparent PC (optional) Opaque PC+ fiber glass
Communication Interface Optical communication PLC/MBUS alternative	DLMS/COSEM
Weight Net weight Package	Approx.0.53kg Approx.0.08kg
Dimension	164mm×100mm×46mm

■ Standard

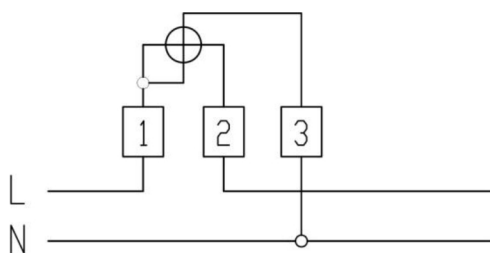
IEC62052-11	Electricity metering equipment (a.c.) General requirements, tests and test conditions – Part 11: Metering equipment
IEC62053-21	Electricity metering equipment (a.c.) Particular requirements –Part 21:Static meters for active energy(classes 1 and 2)
IEC62055-41	Electricity metering - Payment 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

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