Sensway
SE-120 series

SE-120 series is a three phase smart meter with modular design.
It's used for the accurate metering
of commercial and residential customers.

Key Benefits

· Time-of-Use (TOU) Metering

· kWh/kvarh/kVAhMetering

· Measurement Profiling

· RS-485 Daisy-Chain Port

· DLMS Protocol

· Power Quality MonitoringKey

Easy to Direct Access

With the adoption of IEC62056 and DLMS, this meter
provides the easy way to directly access to the
metering data for AMR and AMI applications

Time-of-Use Meter

Adopting an integrated solution, the meter provides an
optimal TOU metering alternatives for medium load
customers of residential & commercial applications:
- Up to 4-tariffmetering
- Up to 4-selfreads: energy, demand & PF
- Support TOU pending program

Various & Versatile Measurement

With four-quadrant, vector-summed, & bi-directional
metering and measurement capabilities, the meter can
measure and record an accumulated & interval energy
consumption of active, reactive and apparent power:
- Up to 8-metering recording channels
- User-definedkW(h), kvar(h), kVA(h)
- Max.demand Cum. demand with time stamp
- User-define PF calculation

Load Profile Capacity

For the interval metering, the meter measures and
records the user-defined interval data in to the non-
volatilememory:
-Up to 8-channel for interval data metering
-Up to 6, 240-records for 4-channel/15-minutes
-Status event of interval data
:powerfail, DR, programupdate, TOUupdate,
 abnormal wiring, & tariff of interval data

Communications

With RS-485 communication port,the meter can be read
and programmed locally and remotely up to 38, 400-bps.
For the detachable modem, the meter supplies an
operating power for modem like PLC and RF:
- IEC 62056 DLMS protocol
- DC12V, 2.5VA

Instrumentation & PQ

With the meter software, the technicians can test and
verify the installation and operation of the meter:
- Per-phase measuring : power, voltage, ampere,
angle It can provide with the PQ monitoring capabilities:
- Voltage-THD, Sag & Swell

Self Diagnosis

To ensure the reliable meter operation, the meter
detects and indicates the faulty conditions:
- Under voltage, reverse flow, memory & battery
error To avoid the tampering & theft operation,
the meter detects and indicates the faulty conditions:
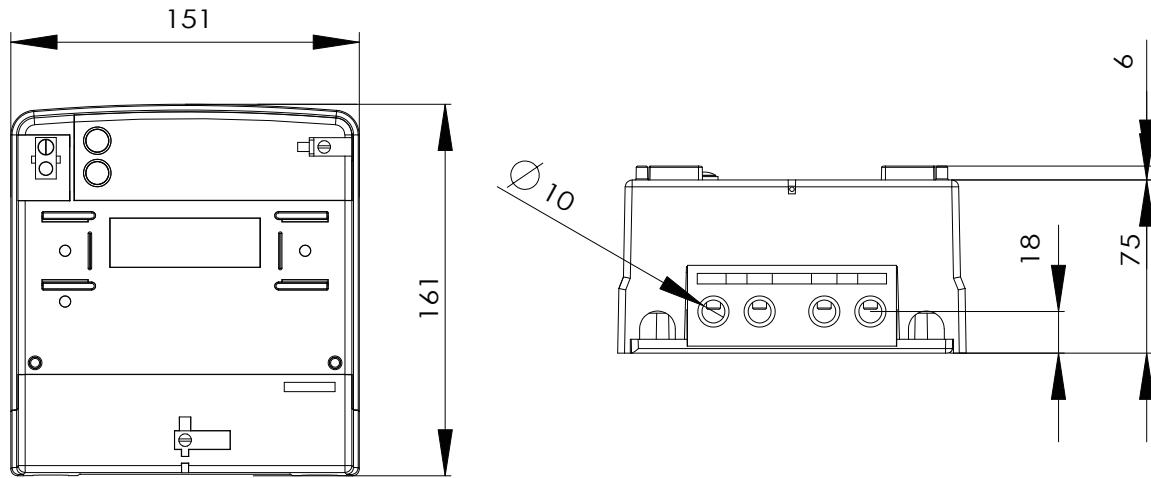- Magnetic force, abnormal temperature,
and cover-open

External Output

The meter provides an external output which is an
open-collector type and is programmable by user:
- Time Switch, remote load control, current limiting

Dimensions

(Unite: mm)

151

161

6

10

18

75

Specifications and Technical Data : JND1210DR-100S

Voltage	220V (10% of nominal voltage)
Current	10(100)A
Frequency	50/60 Hz (5% tolerances)
Temperature	-40 oC to +60 oC (operating range)
Humidity	0 to 95% (non-condensing)
Power consumption	Less than 2W
Accuracy	With full load and light load 1.0% for kWh
	With full load and light load 2.0% for kvarh
	With full load and light load 2.0% for kVAh
Starting current	Conforms to the IEC requirements (less than 0.004Ib)
Creep	No more than 1 pulse per measured quantity
Startup delay	Less than 5 seconds from power application to pulse accumulation
Clock	Built-in real time clock with a backup battery(3.6V/1,200mAh)
Communication	Remote communication up to 38,400 baud
Standards	IEC 62052-11 Electricity metering equipment (a.c.)-General requirements, tests and test conditions
	-Part 11: Metering equipment
	IEC 62053-21 Electricity metering equipment a.c.)-Particular requirements
	-Part 21: Static meters for active energy (classes 1 and 2)
	IEC 62053-23 Electricity metering equipment a.c.)-Particular requirements
	-Part 23: Static meters for reactive energy)classes 2 and 3)
	IEC 62056-21 Electricity metering-Data exchange for meter reading, tariff and load control
	-Part 21: Direct local exchange
	IEC 62056-42 Physical layer services and procedures for connection oriented asynchronous data exchange
	IEC 62056-46 Data Link Layer using HDLC-protocol
	IEC 62056-53 COSEM Application Layer
	IEC 62056-61 OBIS Object Identification System
	IEC 62056-62 Interface ObjectsSpecifications