



## Sensway DCM-120 series

DCM-120 series is a three phase multi-function smart meter with modular design.

It's used for the accurate metering of commercial and residential customers.

### Key Benefits

- Time-of-Use (TOU) Metering • RS-485 Daisy-Chain Port
- kWh/kvarh/kVAh Metering • DLMS Protocol
- Measurement Profiling • Power Quality Monitoring

### 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-tariff metering
- 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-defined kWh(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-volatile memory:

- 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, program update, TOU update, 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

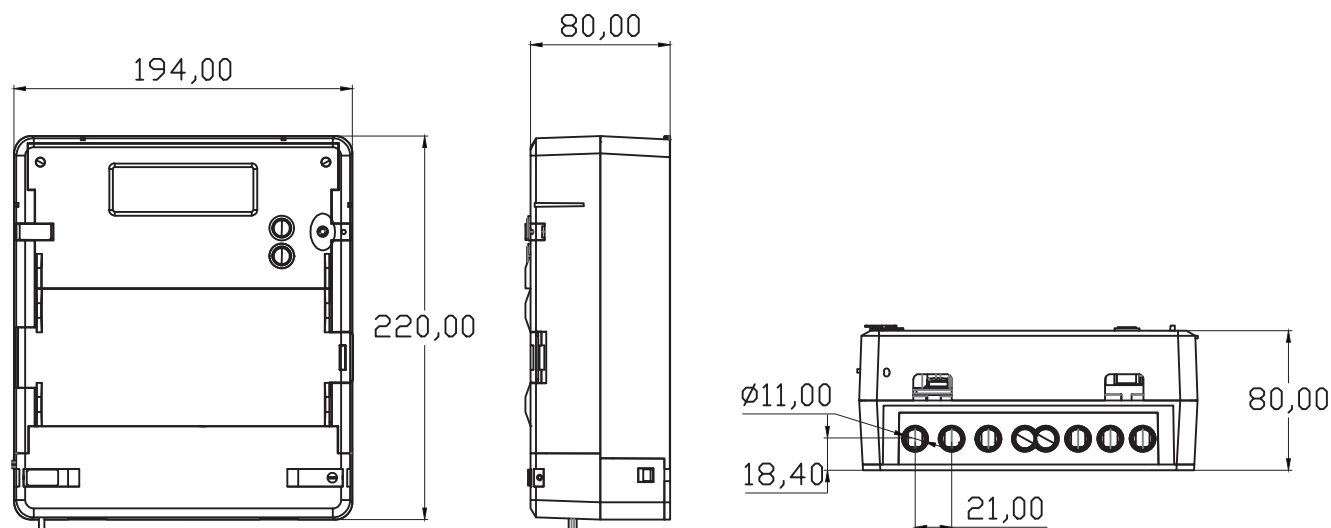
### External Output

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)



## Specifications and Technical Data: JND3410DR-005S

Voltage	3*220/380V (10% of nominal voltage)
Current	120(10)A
Frequency	50/60 Hz (5% tolerances)
Temperature	-25 oC to +75 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 1.0% for kvarh
	With full load and light load 1.0% for kVAh
Starting current	Conforms to the IEC requirements (less than 0.004Ib)
Constant	1,000 pulse/kWh 1,000 pulse/kvarh 1,000 pulse/kVAh
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