

Sensway SE5 series



The SE5 is an enhanced upgrade of the se5 meter, built with a higher class accuracy of 0.5S, catering to the high-end markets. The SE5 is a high-precision meter created for generation and transmission applications, as well as for revenue metering at high-end consumer facilities. Select and use the precision option of the solid-core current transformer and the split-type current transformer of the line card of the current transformer connection.

Key Benefits

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

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-self reads: 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
- : power fail, 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

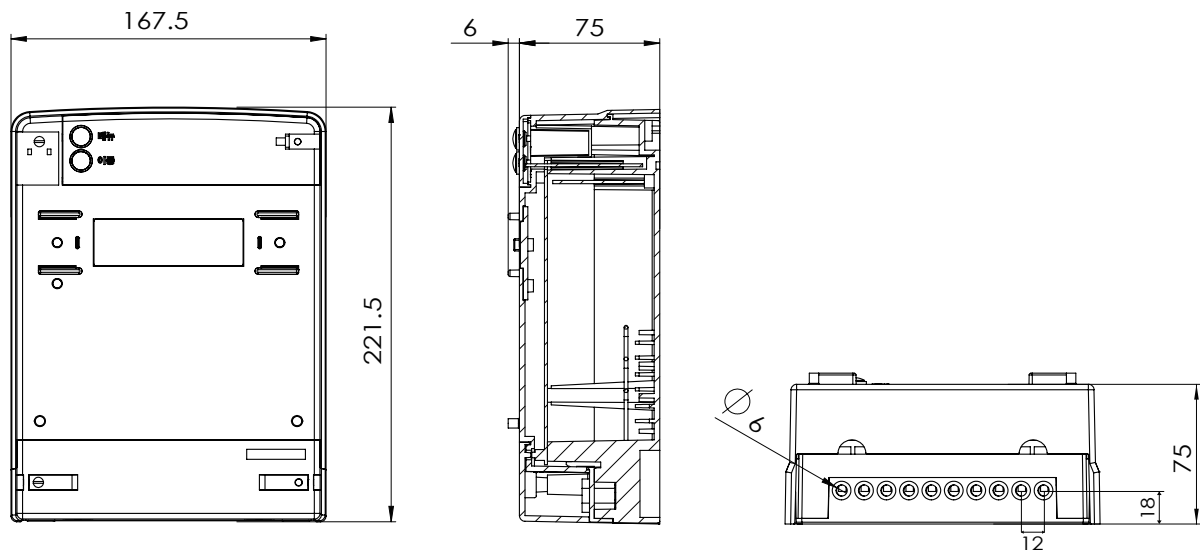
External Output

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

(Unit: mm)



Specifications and Technical Data: JND3405DR-05S

Voltage	3*220/380V (10% of nominal voltage)
Current	2.5(5)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 1.0% for kVAh
Starting current	Conforms to the IEC requirements (less than 0.002In)
Constant	10,000 pulse/kWh 10,000 pulse/kvarh 10,000 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 Objects Specifications