Advanced Meter for LV

NJ Advanced meter for low voltage

This meter can provide with the easy way to directly access & control for the residential & commercial AMI applications

Key Benefits

- **kWh/kvarh/kVAh Metering**
- **TOU/CPP/RTP Metering**
- **Load Profile**
- **Measurement Profile**
- **RS-485 Daisy-Chain Port**
- **DLMS/COSEM Protocol**
- **Power Quality Monitoring**
- **Remote Disconnect/Reconnect**
- **Outdoor application(IP54)**

Easy to Direct Access

With the adoption of IEC 62056 and DLMS/COSEM, the meter provides the easy way to directly access to metering data and control the power supply to customer for AMR & AMI applications

TOU/CPP/RTP Metering

Adopting an integrated solution, the meter can provide the optimal TOU / CPP / RTP metering capabilities for residential & commercial applications:
- 4 tariff metering & 4 self reads: energy, demand & PF
- Daily metering-data profile

Various & Versatile Measurement

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

Load Profile Capacity

For an interval metering, it measures and records an user-defined interval data into a non-volatile memory:
- Up to 8-channel for interval data metering
- Up to 6,240-records for 4-channel/15-minutes

Measurement Profile

The meter measure and calculate the average value of voltage, ampere, and THD:
- Up to 3-channel recording available
- Up to 288-records(3-days)

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
- DC 12V, 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:
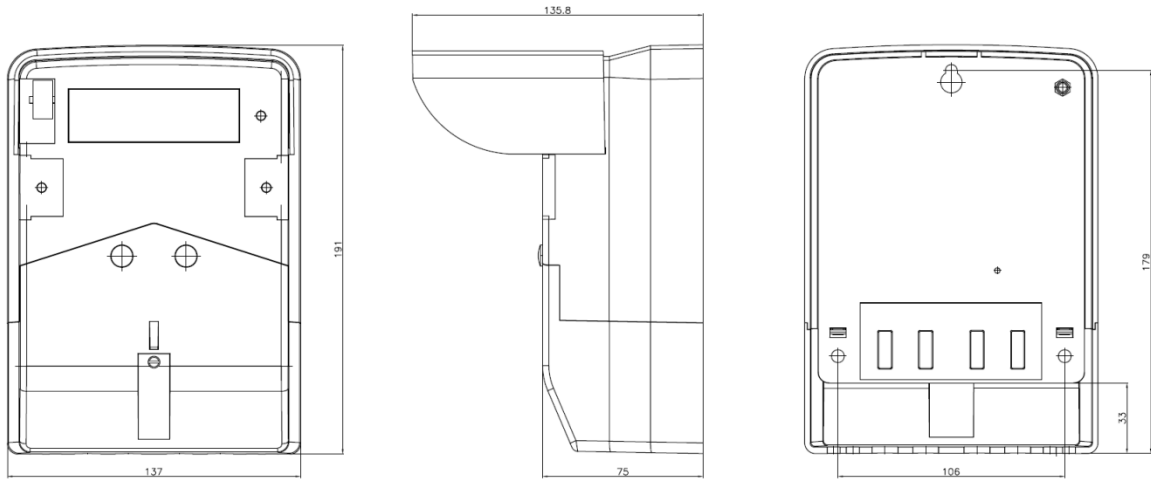- Voltage-THD, Sag & Swell

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

Remote Disconnect/Reconnect

The meter provides the remote disconnect/reconnect capability with the built-in relay:
- Internal Latch Relay : 50A (max. 90A)
- Electrical life : max. 5,500-OPS
The meter also provides the current-limiting capability for the demand control and overload control with the user-defined conditions.

Housing

- Non-flammable polycarbonate
- IP 54 protection against dust and water(outdoor type)

For Residential & Commercial Customers in the Smart Grid Market, the NJ Advanced meter for LV is waiting for your best choice...

● Dimensions :

● Specifications and Technical Data :

✦	**Voltage**	**220V (Dynamic operating range=100~264V)**
✦	**Current**	**5(50)A**
✦	**Frequency**	**50/60 Hz (±5% tolerances)**
✦	**Temperature**	**-40ºC to +60 ºC (operating range)**
✦	**Humidity**	**0 to 100% (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 0.004Ib)**
✦	**Creep**	**No more than 1 pulse per measured quantity**
✦	**Startup delay**	**Less than 3 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*