Standard Meter (1P2W)

NJ Standard meter for low voltage

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

Key Benefits

- **Time-of-Use Metering**
- **kWh and kvarh Metering**
- **Load Profile Capability**
- **Versatile Communication**
- **DLMS Protocol**

Easy to Direct Access

With the adoption of IEC 62056 and DLMS, this meter can provide the easy way to directly access to the metering data for AMR and AMI applications

Time-of-Use Meter

Adopting an integrated solution, this meter provides an optimal TOU metering alternatives for medium load customers of residential & commercial applications:
  - Up to 2-tariff metering
  - Up to 4-self reads : energy, demand & PF
  - Support daily/weekly/holiday profile
  - Support TOU pending program

Active and Reactive Measurement

With vector-summed metrology, this meter measures and records an accumulated energy consumption of active and reactive power:
  - Total delivered kWh, total lagging kvarh
  - Max. demand with time stamp
  - Cumulative demand
  - kW, kvar, & PF of the previous interval

Load Profile Capacity

For an interval metering, this meter measures and records an user-defined interval data into a non-volatile memory:
  - kWh and kvarh with date & time stamp
  - Up to 90-days for 2-channel/15-minutes
  - Status event of interval data : power fail, DR & etc.

Communications

With an IEC 62056-21 compatible optical port, the meter can be programmed and read at an installation site.
For a remote communication, the meters provides an optical communication interface with a detachable modem and also supplies an operating power for modem like PLC and RF:
  - IEC 62056 DLMS protocol
  - DC 12V, 2.5VA
Additionally, the meter provides an AC signal path of power line communication which has a characteristics of very low noise and loss:
  - Less than -70dBm (9kHz~30MHz)
  - Less than 5dB

Instrumentation

With the meter software, the technicians can test and verify the installation and operation of the meter:
  - Per-phase measurement : power, voltage, ampere, angle

Self Diagnosis

To ensure the reliable meter operation, the meter detects and indicates the faulty conditions:
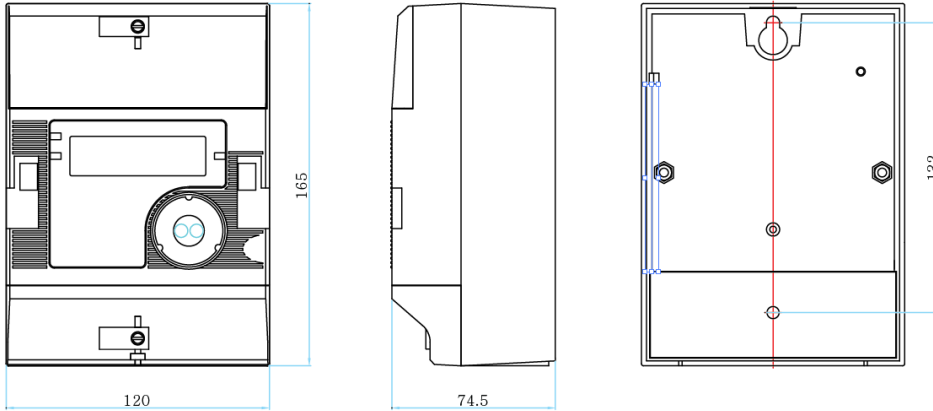 - Under voltage, reverse energy flow, memory failure, and battery error

External Output

The meter provides an external output which is an open-collector type and is programmable by user:
  - kWh pulse, kvarh pulse, time switch, & load control

For Residential & Commercial Customers in the Smart Grid Market, the NJ standard meters for LV are waiting for your best choice...

🔴 Dimensions :

🔴 Specifications and Technical Data :

✦	**Voltage**	**220V (±10% of nominal voltage)**
✦	**Current**	**2.5(5)A, 10(40)A, 30(120)A**
✦	**Frequency**	**50Hz/60 Hz (±5% tolerances)**
✦	**Temperature**	**-25ºC to +55 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
✦	**Starting current**	**Conforms to the IEC requirements (less than 0.004Ib & 0.002In)**
✦	**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 9600 baud (upgradeable)**
✦	**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*