G-Type Meter (1P2W)

NJ G-type meter for low voltage

This 1P2W 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, kvarh and kVAh Metering
- Measurement Profiling
- RS-485 Daisy-Chain Port
- DLMS Protocol
- Power Quality Monitoring

Easy to Direct Access

With the adoption of IEC 62056 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 kW(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 into 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
 - 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 measurement : power, voltage, ampere, and phase angle
The meter provides 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:
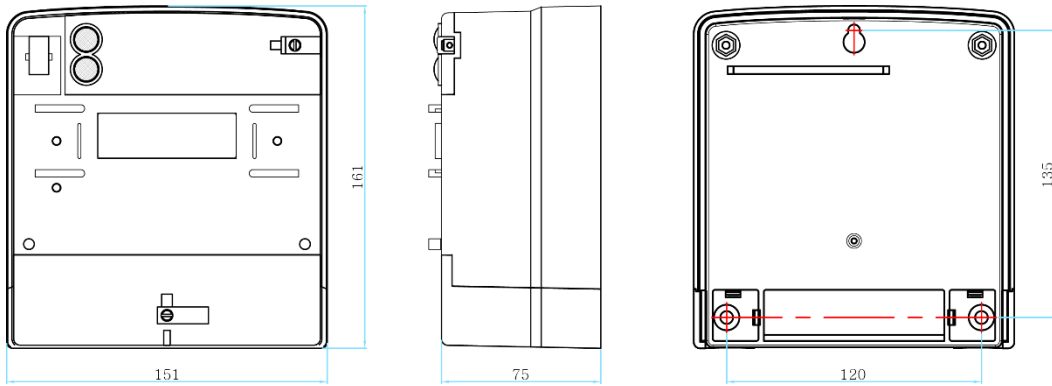 - Magnetic force, abnormal temperature, and cover-open

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

For Residential & Commercial Customers in the Smart Grid Market, the NJ G-Type meter Series are waiting for your best choice...

● Dimensions :

● Specifications and Technical Data :

- **Voltage** — 220V (Dynamic operating range = 100~264V)
- **Current** — 10(100)A, 2.5(5)A
- **Frequency** — 50/60 Hz ($\pm$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 $\pm$1.0% for kWh
  With full load and light load $\pm$2.0% for kvarh
  With full load and light load $\pm$2.0% for kVAh
- **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 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*