Advanced Meter for HV

NJ Advanced meter for high voltage

This meter can provide the advanced and versatile metering solutions for the commercial & industrial AMR & AMI

Key Benefits

- Quadrant Measurement
- Time-of-Use Metering
- Load Profile Capability
- Remote Communication
- External Output

Quadrant Measurement

With the user-configurable measurement, the meter can measure and record energy and demand based on the vector-sum
Also, the meter can provide with the unidirectional and bidirectional metering capabilities:
  - Up to 9-metering channel
  - Q1/2/3/4 kW(h), kvar(h), & kVA(h)
  - Unidirectional or bidirectional metering
  - User-defined calculation of PF (optional)

Time-of-Use Meter

By adopting a large-scale memory, this meters provides with the extended TOU metering alternatives for the heavy load customers such as commercial & industrial applications:
  - Up to 4-tariff metering
  - Up to 6-self reads(energy, demand, & PF)
  - Support daily/weekly/holiday profile
  - Support TOU pending program

Load Profile Capacity

For an interval metering, the meter measures and records the LP interval data into a non-volatile memory:
  - Up to 4-channel (max. 9-channel) with time stamp
  - Up to 90-days for 4-channel/15-minutes
  - Status event of an interval data
  : Power failure & restoration, manual demand-reset, time-adjustment, season-change, program-change, battery replacement, & potential error

Communications

With an IEC 62053-21 compatible optical port, the meter can be programmed and read at an installation site
  - Baud rate=1200 to 19200 can be selectable
For a remote communication, the meter provides a Duplex-SC interface with an external PSTN and CDMA modem
  - Baud rate=1200 to 19200 can be selectable
  - Modem initialization string can be configurable

Site-Watch

With the meter field software and the LCD display items in the diagnostic display mode, the technicians can test and verify the installation and operation of the meter:
  - Per phase measurement : kW, kvar, kVA, V_{rms}, I_{rms}, Angle
  - Graphical software tool : Vector diagram

Self Diagnosis & Event Log

To ensure the reliable meter operation, the meter detects and indicates the faulty conditions. Also, the meter records the event log into a non-volatile memory:
  - Up to 15-records per each event
  - Up to 6 events
  : Time-adjustment, DR, SR, MDR, error, & power failure & restoration, DR, SR, MDR, potential error per phase, reverse flow, wiring error
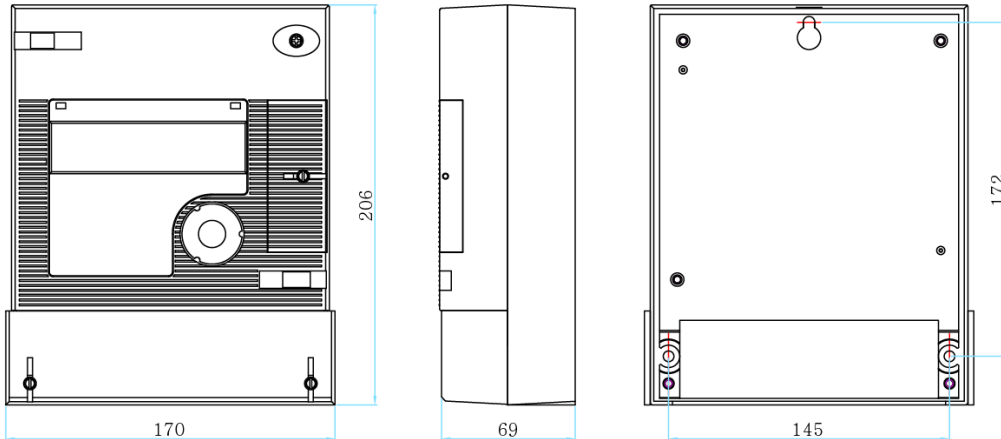
External Output

The meter provides with 3-programmable outputs for a user-specific application such as a load control and a time-switch:
  - Up to 3-output (open-collector)
  - User-configurable output
  : kWh/kvarh pulse, time-switch, load control

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

● Dimensions :

● Specifications and Technical Data :

✦	**Voltage**	**63.5/110V, 110/190V, 220/380V**
✦	**Current**	**5A**
✦	**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 ±0.5% for kWh**
		With full load and light load ±2.0% for kvarh
✦	**Starting current**	**Conforms to the IEC requirements (less than 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 62053-22 *Electricity metering equipment a.c.)-Particular requirements*
		-Part 22: Static meters for active energy)classes 0.2S and 0.5S)
		IEC 62053-23 *Electricity metering equipment a.c.)-Particular requirements*
		-Part 23: Static meters for reactive energy)classes 2 and 3)
		IEC 62053 *Electricity metering – Data exchange for meter reading, tariff and load control*