# Premier 520

## Transformer operated smart energy meter

Security     Upgradeable     AMI ready

Premier 520 is a new generation, three-phase transformer operated smart electricity meter. It's equipped with a bi-directional communication unit to interact with the Head-End System (HES) and plays a vital role in cost management.

It supports 4G communication that ensures network redundancy by having GPRS as a fall-back option to suppress the black spots in the AMI network.

It also works as a common assets in import-export or forwarded mode. The firmware can be upgraded remotely without affecting the usual meter operations.

This smart meter is combination of a reliable, secured metering platform and a smart 4G communication unit, making it ideal for a smart metering-connected solution. It provides billing energies, history values, interval data and event alerts to the utility for billing cycle optimisation, effective network planning and revenue protection.

## Application

- Industrial and commercial consumer segment
- Distribution transformer metering
- MV feeder and boundary metering
- Renewable farms / Net metering

## Benefits

- Periodic remote data availability from all smart endpoints improves billing efficiency
- On-demand data collection to serve critical utility use cases, e.g. vigilance etc.
- Network parameters monitoring helps to improve network assets planning
- Better utilisation of field crew by having power down information of specific node point
- Compatible for import-export or forwarded mode metering
- Reduced operational cost (low cost of ownership)

## Features

- Four quadrant energy measurement
- Intuitive, legible and user-friendly display
- Back-end alerts and event logging on tampers
- Actuators for display access
- Enable meter data collection through optical port for no-WAN nodes
- Analysis of interval data.
- Local reading provision in the absence of mains
- Parameters in line with IS 15959 part 3
- Supply quality parameters

## Highlights

- Reliable bi-directional communication unit
- Data delivery through smart push architecture
- Extensive firmware features to serve multiple applications of utility
- Better security features for utility
- Revenue protection measures for detection and analysis of tamper attempts

SECURE
energy together

# Premier 520

## Technical Specification

### Electrical

| | |
|---|---|
| Connection type | CT, CT / VT operated |
| Wiring configuration | 3P4W for LT and HT |
| Rated voltage & variation | LT: 240V P-N, -30% to +20% of Vref |
| | HT: 63.5 P-N, ±20% of Vref |
| Current range | -/5(10)A for LT and -/5(10)A or -/1(2)A  for HT |
| Accuracy | Class 0.5s for LT and Class 0.2s / Class 0.5s for HT |
| Frequency | 50 Hz ± 5% |
| Burden | As per IS 16444 Part 2 |

### Compliance

| | |
|---|---|
| Standards | IS 16444 Part 2, IS 15959 Part 3 |

### Mechanical

| | |
|---|---|
| Dimension H x W x D (approx.) | 285 mm x 179 mm x 70 mm, Tolerance ±5mm |
| Weight (approx.) | 1.35 ± 0.2 Kg |
| Enclosure | Engineering Plastic |
| Sealing | Break to open enclosure, Provision of sealing on meter cover, terminal cover, communication module cover and optical port |

### Environmental

| | |
|---|---|
| Ingress protection | IP 54 |
| Temperature | 0 °C to +55 °C (Operating) and -25 °C to +70 °C (Storage) |
| Humidity | 95% non-condensing RH |

### Features

| | |
|---|---|
| Energy channels | as per category D3 and D4 of IS 15959 part 3 |
| Maximum demand | as per category D3 and D4 of IS 15959 part 3 |
| Tariff rate registers | as per category D3 and D4 of IS 15959 part 3 |
| Load survey | Up to 120 days load profile for 15 parameters (configurable), with 30 minute integration period |
| Communication options | Optical port for local and WAN (Cellular) communication for remote data acquisition |
| Communication | 4G fallback to 2G |
| SIM Card | 4G enabled Nano SIM card |
| Antenna | Inbuilt antenna, optional high gain extended antenna |
| Supported frequencies | 850, 900, 1800, 2100 MHz |