

Sprint 200

AMI-ready Direct-connected Meter

Sprint 200 is an intelligent three-phase meter combining monitoring, data storage and load control facilities for advanced metering infrastructure (AMI) applications.

The provision of distribution line carrier (DLC), mesh radio and 3G/GPRS/GSM communications technologies makes Sprint 200 easy to integrate with remote reading infrastructures.

Communication is also available through ZigBee® to in-home displays (IHD) for Smart Metering installations.

Sprint 200 is equipped with supply disconnection and load control relays for demand-side management applications.



Application

- Domestic three-phase metering with remote billing and disconnect
- Metering for small commercial premises
- Metering for advanced metering infrastructure (AMI) deployment
- Metering for micro-generation installations

Benefits

- Remote reading and disconnection functions reduce the need for routine meter visits
- Can be easily integrated into an AMI system
- Easy diagnosis of installation faults via instantaneous electrical parameters
- Assists consumers in reducing energy consumption and associate CO₂ emissions
- Prolonged asset field life via remote firmware upgrades

Features

- True four-quadrant measurement with import/export registration
- Time-of-use tariffs and maximum demands
- Integrated three-phase mains disconnect switch and auxiliary load terminal with optional link
- Full AMI support, with ToU-based switch control, boost, supply capacity control and remote firmware upgrades
- Logging of multi-parameter load survey, billing data, events such as power outage and abnormalities
- Quality-of-supply (QoS) monitoring
- Automatic remote notification of user-selected events to back-office system
- Communications options including mesh radio, long-range radio, DLC and 3G/GPRS/GSM

Technical specifications

Electrical

| | |
|----------------------|---|
| Connection type | Direct connected |
| Wiring configuration | 3-phase 4-wire |
| Voltage range | 230 V (L-N), 400 V (L-L), $\pm 20\%$ |
| Current range | 20 - 100 A, MID 1-20 (100) A |
| Accuracy | Class 1.0, MID Class B |
| Mains frequency | 50 Hz $\pm 5\%$ |
| Burden | Voltage Circuit: < 1 W, 1.5 VA per phase Current Circuit: < 0.1 VA per phase |

Compliance

| | |
|-----------|----------------------------|
| Standards | MID Class B, EN 50470-1, 3 |
|-----------|----------------------------|

Mechanical

| | |
|------------------------|--|
| Dimensions (W x H x D) | 145 x 230 x 112 mm (with standard terminal cover) 145 x 245 x 112 mm (with extended terminal cover) |
| Weight | 2.4 kg (approx.) |
| Enclosure | Flame-retardant polycarbonate |
| Sealing | 2 seals each on main cover and terminal cover, 1 on rear panel, 1 seal each for internal terminal cover and left push-button |

Environmental

| | |
|--------------------|--|
| Ingress protection | IP 53 |
| Insulation class | Protective class II |
| Impulse withstand | 10 kV @ 0.5 J 4 kV AC for 1 minute (RJ-45 port) |
| Temperature | -40 °C to +70 °C (operating) -40 °C to +80 °C (storage) |
| Humidity | 95% non-condensing |

Features

| | |
|--------------------------|--|
| Tariff rates registers | Up to 4 rate registers for five energy channels |
| Maximum demand registers | Up to 2 types across 4 registers |
| Load survey | 600 parameter/days with 30 minute integration period |
| Communication options | LAN: Mesh radio, DLC WAN: 3G/GPRS/GSM long-range radio (via RJ-45 port) HAN: ZigBee® (2.4 GHz) Smart Energy Profile IEC 1107 hardware compatible port for local reads |
| Quality of supply | Maximum/minimum voltage, over-voltage, under-voltage, minimum power factor, maximum current, supply failure, exception logging |
| Load control options | Supply disconnect switch: 100A Auxiliary load control: 31.5 A |