

# sprint product range

Whole current metering has to bridge the gap between simple, easy to read single rate applications and complex datalogging and communication meters. PRI have encompassed the requirements of customers worldwide and developed a portfolio of whole current meters that cover basic applications, including a 160A variant, through to intelligent revenue protection metering.



SPRINT is a cost effective solution for basic whole current applications and offers time of use and maximum demand metering. Two communications ports are provided for meter reading and a volt free pulse output and input are included. SPRINT is available rated for 100A or 160A.

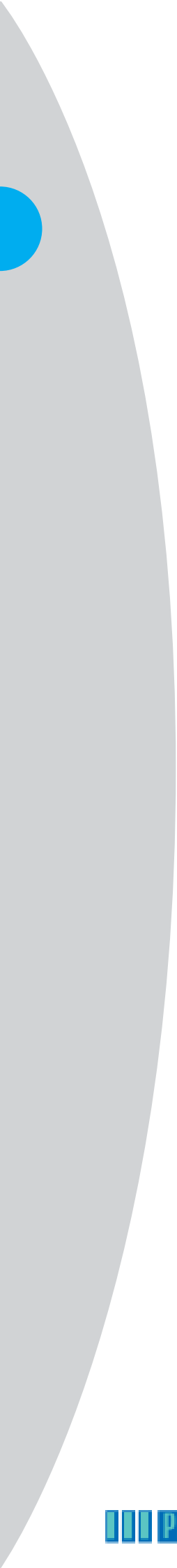
SPRINT+ features time of use and maximum demand metering and up to 220 days of load survey storage. Two communications ports are provided for metering reading and two volt free pulse output are included. SPRINT+ also includes a fast reading protocol to facilitate rapid transfer of data to minimise read times. SPRINT+ complies to IEC1036 and AS1284.5



SPRINT XP provides full multi-utility metering. Available with up to 4 outputs and 3 inputs, load survey storage of 160 days of 5 channels of data including 2 input counters, time of use and maximum demand recording. Two local communications ports are provided on the front of the meter with the option of an additional port or integrated PSTN modem in the top module. SPRINT XP is UK CoP5 approved.

SPRINT RP features sophisticated intelligent revenue protection facilities for installations where theft and fraud are prevalent. The meter will detect and log tamperers such as current reversal, current open and short circuit, voltage and current imbalance and magnetic influence. SPRINT RP also offers load survey, time of use and maximum demand recording and includes options for up to two communication ports. An optional inductive power up interface to allow reading when off power is also available.





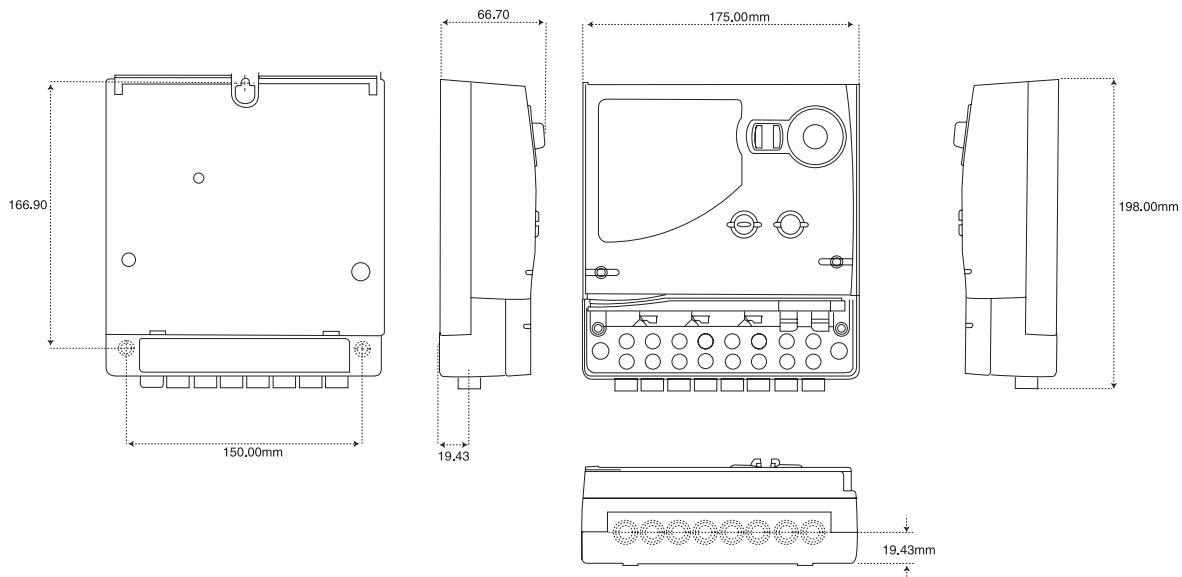
# sprint

The **Sprint** offers:

- Full four quadrant metering
- 5 main energy registers
- 8 time of use energy registers, user configurable for all 5 energy types
- 4 maximum demand registers, user configurable for all 5 energy types
- Maximum demand integration periods of 5, 15, 30 and 60 minutes
- 1 output and 1 input (Build option)
- 1200 baud IEC1107 compatible communication port
- 9600 baud sealable PACT communication port
- Type approved to IEC1036
- Ofgem approved



## Dimensions

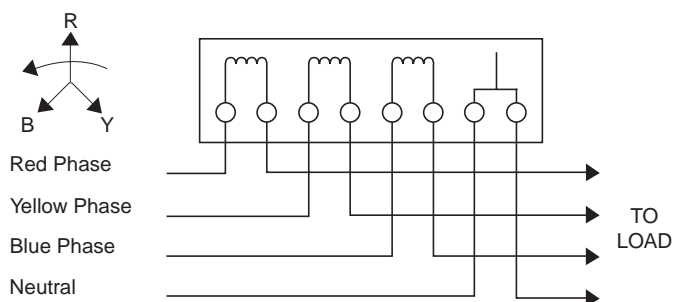


# sprint technical specification

## Sprint Technical Specification

|                       |   |   |   |
|-----------------------|---|---|---|
| <b>ELECTRICAL</b>     | 230V/240V Ø-N<br>3 phase 4 wire   | <b>ACTIVITY INDICATOR</b>               | High intensity red LED<br>Meter Constant<br>800 impulses per kWh  |
| <b>CURRENT</b>        | Ib            5    20    20    40    40<br>Imax        65   80   100   100   160<br>Additional configurations<br>available on request.  | <b>ENVIRONMENTAL*</b>                   | Operating Temperature    -10°C to +45°C<br>Storage Temperature       -25°C to +70°C<br>Operating Humidity        Up to 95% non-condensing<br>* requirements for specific<br>countries, on request |
| <b>METROLOGICAL</b>   | IEC 1036 Cl 1.0s or 2.0s<br>IEC 1268 Cl 2.0s  | <b>BURDEN</b>                           | Current circuit                <2.5VA<br>Voltage circuit                <2W/10VA  |
| <b>DISPLAY</b>        | LCD<br>Image Area                  75 x 17mm  | <b>TERMINALS</b>                        | Two screws per cable<br>Suitable for 35mm <sup>2</sup> cables<br>(100A) and 50mm <sup>2</sup> (optional)  |
| <b>MECHANICAL</b>     | Dimensions                  W.175 X H.250 X D.66.7 mm<br>Enclosure Material        ABS/Polycarbonate<br>Degree of Protection      IP51<br>Flame Retardation        UL 94 V0<br>Weight (approx.)          1.15 kg                        | <b>PULSED OUTPUT<br/>(Build option)</b> | Voltage rating 230V AC<br>max @ a typical resistance<br>of 39 Ohms (43 Ohms max)<br>Cable entry 2.5mm <sup>2</sup>  |
| <b>FREQUENCY</b>      | 45-65Hz   | <b>PULSED INPUT<br/>(Build option)</b>  | Voltage rating 230V AC,<br>24-240V DC max<br>Cable entry 2.5mm <sup>2</sup>   |
| <b>DATA RETENTION</b> | 10 years minimum  |   |   |
| <b>COMMUNICATIONS</b> | Local Interrogation Port IEC1107 compatible port<br>Remote Interrogation    PACT<br>Data transfer rates of up to<br>9600 baud on the PACT<br>port and 1200 baud on the<br>IEC1107 port<br>Protocol                      PACT<br>PACTLAN |   |   |

## Wiring Diagram



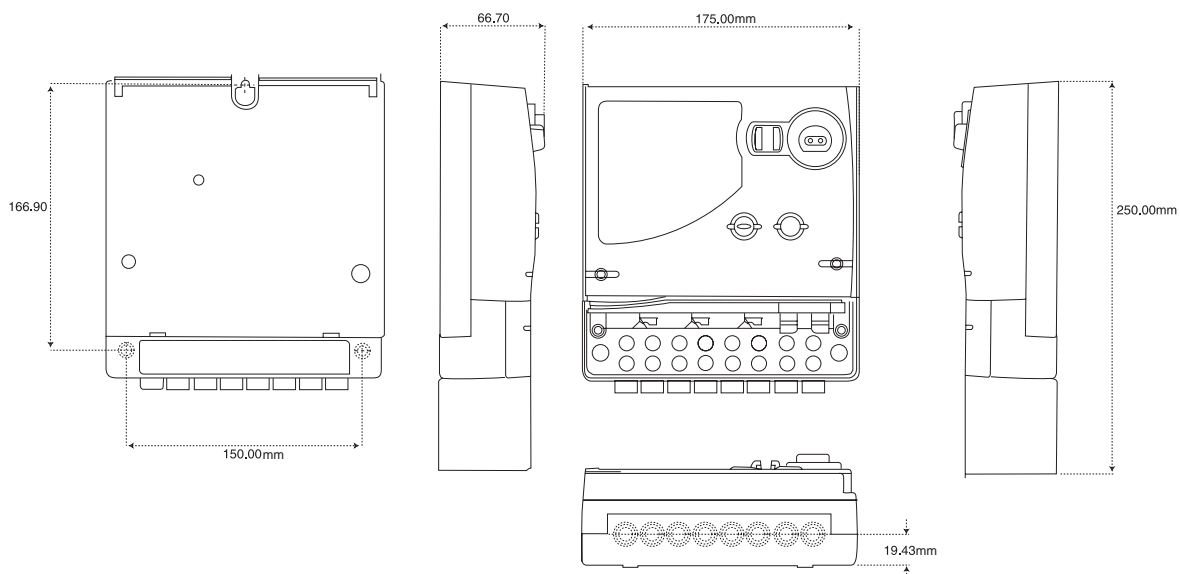
# sprint+ technical specification

The **Sprint+** offers:

- Full four quadrant metering
- 5 main energy registers
- Load survey recording of:
  - 220 days of 1 channel 30 minute data
  - 110 days of 2 channel 30 minute data
- Load survey integration periods of 15, 30 or 60 minutes
- 8 time of use energy registers, user configurable for all 5 energy types
- 4 maximum demand registers, user configurable for all 5 energy types
- Maximum demand integration periods of 5, 15, 30 and 60 minutes
- 2 user configurable pulse outputs
- 9600 baud ANSI communication port
- 9600 baud sealable PACT communication port
- Fast download of survey data - 90 days of 1 channel 30 minute data in less than 30 seconds
- IP53 Rated
- 10kV impulse withstand
- Type approved to IEC1036 and AS1284.5



## Dimensions

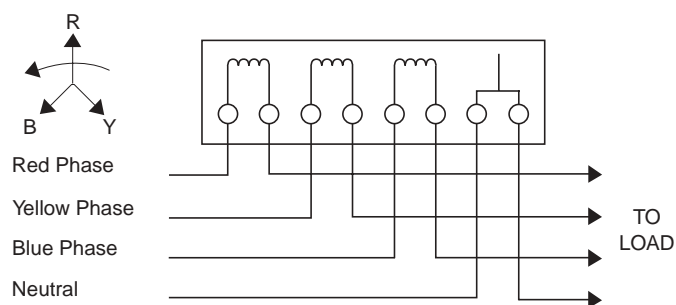


# sprint+ technical specification

## Sprint+ Technical Specification

|                                  |   |                           |   |
|----------------------------------|---|---------------------------|---|
| <b>ELECTRICAL</b>                | 240V Ø-N<br>3 phase 4 wire  | <b>ACTIVITY INDICATOR</b> | High intensity red LED<br>Meter Constant<br>800 impulses per kWh  |
| <b>CURRENT</b>                   | Ib 15 Additional configurations<br>Imax 100 available on request  | <b>ENVIRONMENTAL</b>      | Operating Temperature -10°C to +60°C<br>Storage Temperature -25°C to +80°C<br>Operating Humidity Up to 95% non-condensing   |
| <b>METROLOGICAL</b>              | AS 1284.5 Cl 1.0s<br>IEC 1036 Cl 1.0s or 2.0s<br>IEC 1268 Cl 2.0s   | <b>BURDEN</b>             | Current circuit <2.5VA<br>Voltage circuit <2W/10VA  |
| <b>DISPLAY</b>                   | LCD<br>Image Area 75 x 17mm   | <b>TERMINALS</b>          | Two screws per cable. Suitable for 35mm <sup>2</sup> cables (100A) and 50mm <sup>2</sup> (optional)   |
| <b>MECHANICAL</b>                | Dimensions W.175 X H.250 X D.66.7 mm<br>Enclosure Material ABS/Polycarbonate<br>Degree of Protection IP53<br>Flame Retardation UL 94 V0<br>Weight (approx.) 1.15 kg                                     | <b>PULSED OUTPUTS</b>     | Voltage rating 230V AC max @ a typical resistance of 39 Ohms (43 Ohms max)<br>Cable entry 2.5mm <sup>2</sup>  |
| <b>FREQUENCY</b>                 | 45-65 Hz  | <b>COMMUNICATIONS</b>     | Local Interrogation Port ANSI<br>Remote Interrogation PACT<br>Data transfer rates of up to 9600 available on both ports<br>PACT<br>PACTLAN, Fast reading protocol |
| <b>DATA RETENTION</b>            | 10 years minimum  | Protocol                  |   |
| <b>TIME CLOCK &amp; CALENDAR</b> | Normal Power Source Supply<br>RTC Backup Source Lithium battery or super cap<br>Battery Life (typical) 3 years (Lithium battery, Meter off load)<br>Min Shelf Life (typical) 10 years (Lithium battery) |                           |   |

## Wiring Diagram



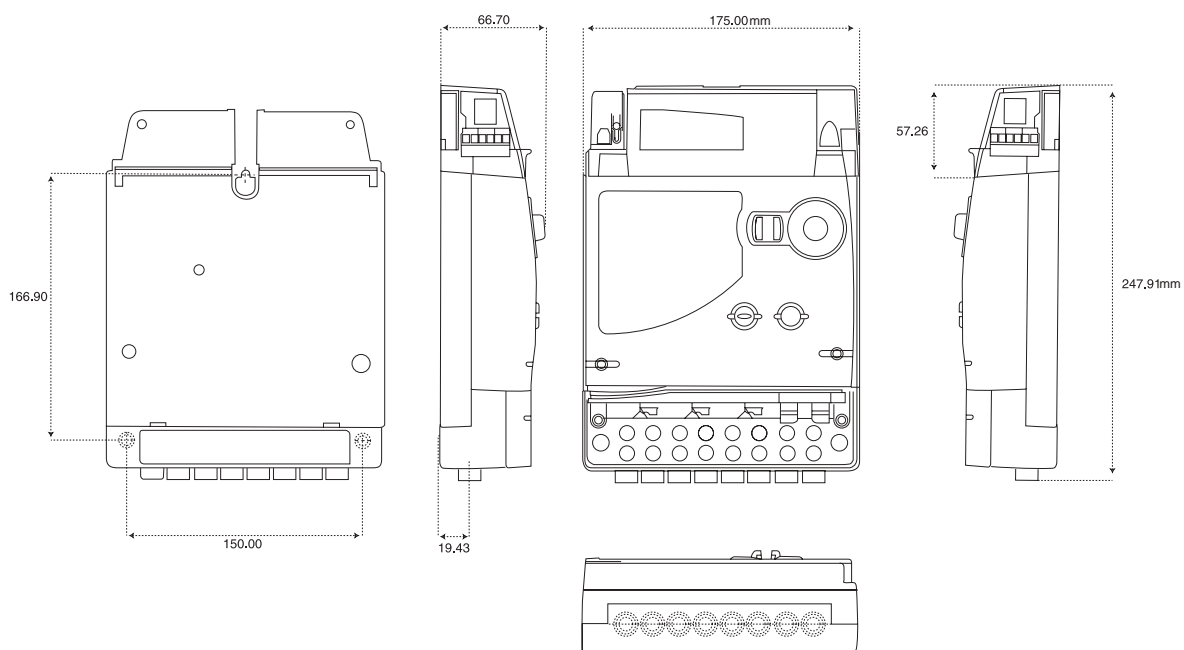
# sprint XP

The **Sprint XP** offers:

- Full four quadrant metering
- 5 main energy registers
- Load survey recording of:
  - 255 days of 1 channel 30 minute data
  - 255 days of 2 channel 30 minute data
  - 240 days of 3 channel 30 minute data
  - 192 days of 4 channel 30 minute data
  - 160 days of 5 channel 30 minute data
- 16 time of use energy registers, user configurable for seasonal control
- 8 maximum demand registers, user configurable for seasonal control
- Maximum demand integration period of 5, 15, 30 and 60 minutes
- 1 output and 1 input and 3 additional outputs 2 inputs via the optional module
- 9600 baud IEC1107 compatible communication port
- 9600 baud sealable PACT communication port
- Type approved to IEC1036
- Ofgem approved - CoP5 compliant
- Optional RS232 communication port or PSTN modem in the module



## Dimensions



# sprint XP technical specification

## Sprint XP Technical Specification

|                    |                |                |
|--------------------|----------------|----------------|
| <b>ELECTRICAL</b>  | 230V Ø-N       | 230V Ø-Ø       |
| Measuring Elements | 3              | 2              |
|                    | 3 phase 4 wire | 3 phase 3 wire |
|                    | 230/400V       | 230V           |

|                  |   |    |     |     |
|------------------|---|----|-----|-----|
| <b>CURRENT</b>   |   |    |     |     |
| Ib               | 5   | 20 | 20  | 40  |
| I <sub>max</sub> | 65  | 80 | 100 | 100 |
|                  | Additional configurations available on request. |    |     |     |

|                 |          |
|-----------------|----------|
| <b>BURDEN</b>   |          |
| Current circuit | <2.5VA   |
| Voltage circuit | <2W/10VA |

|                     |                          |
|---------------------|--------------------------|
| <b>METROLOGICAL</b> | IEC 1036 Cl 1.0s or 2.0s |
|                     | IEC 1268 Cl 2.0          |

|                      |                               |
|----------------------|-------------------------------|
| <b>MECHANICAL</b>    |                               |
| Dimensions           | W.175 X H.247.91 X D.66.7 mm  |
| Enclosure Material   | ABS/Polycarbonate             |
| Degree of Protection | IP51                          |
| Flame Retardation    | UL 94 V0                      |
| Weight (approx.)     | 1.15 kg (1.32 kg with module) |

|                  |         |
|------------------|---------|
| <b>FREQUENCY</b> | 45-65Hz |
|------------------|---------|

|                       |                  |
|-----------------------|------------------|
| <b>DATA RETENTION</b> |                  |
| Unpowered             | 10 years minimum |

|                |           |
|----------------|-----------|
| <b>DISPLAY</b> |           |
| Format         | LCD       |
| Image Area     | 75 x 17mm |

|                             |                               |
|-----------------------------|-------------------------------|
| <b>CLOCK &amp; CALENDAR</b> |                               |
| Normal Power Source         | Supply                        |
| RTC Backup Source           | Lithium battery or super cap. |
| Battery Life (typical)      | 3 years (Lithium battery)     |
| Min Shelf Life (typical)    | 10 years (Lithium battery)    |

|                           |                        |
|---------------------------|------------------------|
| <b>ACTIVITY INDICATOR</b> |                        |
| Format                    | High intensity red LED |
| Meter Constant            | 800 impulses per kWh   |

|                      |  |
|----------------------|--|
| <b>EU DIRECTIVES</b> | The product complies with 89/336/EEC Electromagnetic Compatibility Directive, amended by 92/31/EEC, by meeting BS EN 61036:1997. |
|----------------------|--|

|                       |   |
|-----------------------|---|
| <b>ENVIRONMENTAL*</b> |   |
| Operating Temperature | -10°C to +45°C  |
| Storage Temperature   | -25°C to +70°C  |
| Operating Humidity    | Up to 95% non-condensing                                    |
|                       | * requirements for specific countries, available on request |

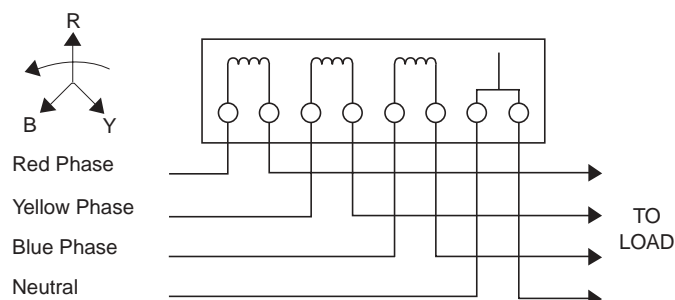
|                  |  |
|------------------|--|
| <b>TERMINALS</b> | Two screws per cable<br>Suitable for 35mm <sup>2</sup> cables (100A) or optional 50mm <sup>2</sup> |
|------------------|--|

|                      |   |
|----------------------|---|
| <b>PULSED OUTPUT</b> | Voltage rating 230V AC max @ a typical resistance of 39 Ohms (43 Ohms max)<br>Cable entry 2.5mm <sup>2</sup><br>4kV AC reinforced isolation with respect to meter and input<br>Maximum 100mA Current rating |
|----------------------|---|

|                     |  |
|---------------------|--|
| <b>PULSED INPUT</b> | Voltage rating 230V AC/24V-240V DC max<br>Cable entry 2.5mm <sup>2</sup><br>4kV AC reinforced isolation with respect to meter and output |
|---------------------|--|

|                          |   |
|--------------------------|---|
| <b>COMMUNICATIONS</b>    |   |
| Local Interrogation Port | Combined PACT/1107  |
| Remote Interrogation     | Optically isolated RS232 via module. Data transfer rates up to 9600 available |
| Protocol                 | PACT  |

## Wiring Diagram





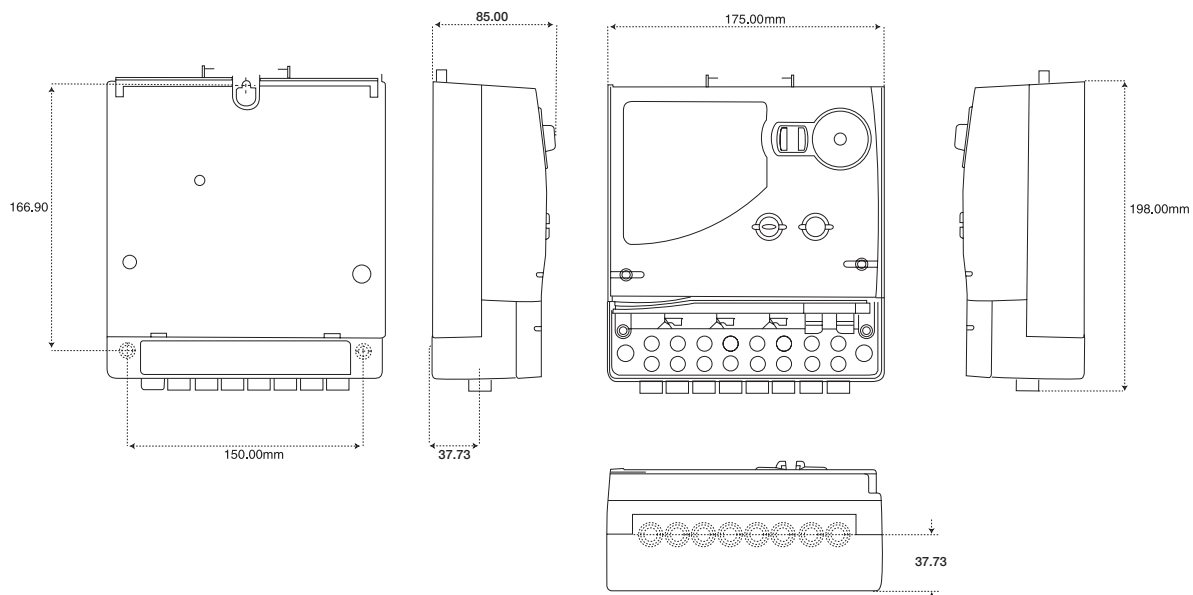
# sprint RP

The **Sprint RP** offers:

- Full four quadrant metering
- 5 main energy registers
- Advance tamper detection features including:
  - Missing voltage, invalid voltage, voltage unbalance, current reversal, current unbalance, current open circuit, current short circuit and abnormal magnetic influence
- Occurrence and restoration event logging with time and date stamp
- Snapshot taken of electrical values at time of occurrence and restoration including voltages, currents, powers factors
- Load Survey configurable for energy, frequency or power factor
- Load Survey integration periods of 15, 30 and 60 minutes
- 8 time of use and 2 maximum demand registers from the main energy registers, configurable for TOU and seasonal control
- Maximum demand integration periods of 15, 30 and 60 minutes
- 4800 baud sealable PACT communication port
- Optional IEC1107 compatible communication port
- Inductively coupled external power pack for meter reading in the absence of supply (Build option)
- Type approved to IEC1036



## Dimensions



# sprint RP technical specification

## Sprint RP Technical Specification

**ELECTRICAL**  
Measuring Elements 230V Ø-N  
3  
3 phase 4 wire  
230/400V

**CURRENT**  
I<sub>b</sub> 20 A  
I<sub>max</sub> 100 A  
Additional configurations available on request.

**BURDEN**  
Current circuit <2.5VA  
Voltage circuit <2W/10VA

**METROLOGICAL** IEC 1036 Cl 1.0s or 2.0s  
IEC 1268 Cl 2.0

**MECHANICAL**  
Dimensions W.175 X H.250 X D.85 mm  
Enclosure Material ABS/Polycarbonate  
Degree of Protection IP51  
Flame Retardation UL 94 V0  
Weight (approx.) 2.1 kg

**FREQUENCY** 45-65Hz

**DATA RETENTION**  
Unpowered 10 years minimum

**DISPLAY**  
Format LCD  
Image Area 75 x 17mm

**ACTIVITY INDICATOR**  
Format High intensity red LED  
Meter Constant 800 impulses per kWh

**EU DIRECTIVES** The product complies with 89/336/EEC Electromagnetic Compatibility Directive, amended by 92/31/EEC, by meeting BS EN 61036:1997.

**ENVIRONMENTAL\***  
Operating Temperature -10°C to +45°C  
Storage Temperature -25°C to +70°C  
Operating Humidity Up to 95% non-condensing  
\* requirements for specific countries, available on request

**TERMINALS** Two screws per cable  
Suitable for 35mm<sup>2</sup> cables (100A) or optional 50mm<sup>2</sup>

**CLOCK & CALENDAR**  
Normal Power Source Supply  
RTC Backup Source Lithium battery or super cap.  
Battery Life (typical) 10 years (Lithium battery)  
Min Shelf Life (typical) 3 years (Lithium battery)

**COMMUNICATIONS**  
Local Interrogation Port Optional IEC1107 port  
Remote Interrogation PACT

## Wiring Diagram

