

premier product range

PREMIER is a full four quadrant metering platform for use in deregulated markets where data storage, multi utility and AMR facilities are important. PREMIER provides solutions from basic tariff metering through to revenue protection applications.

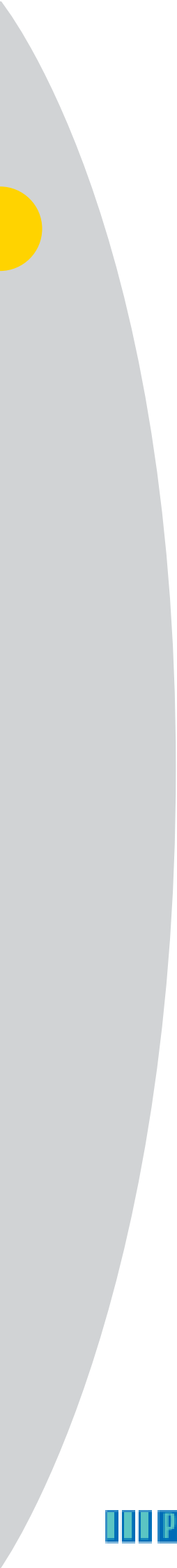


PREMIER is a cost effective solution for CT and CT/VT applications and provides a single metering platform for accuracy from class 1.0s through to class 0.2s. Available with up to 4 outputs and 3 inputs, load survey storage options of up to 440 parameter days of data including 2 input counters, time of use and maximum demand recording. Two local communications ports are provided on the front of the meter with additional RS232 port under the terminal cover for AMR. PREMIER is UK CoP5 approved.

PREMIER+ features time of use and maximum demand metering and up to 350 days of load survey storage with a fast reading protocol to facilitate rapid transfer of data to minimise read times. Two communications ports are provided for local meter reading and an additional RS232 port under the terminal cover for AMR. PREMIER+ also includes up to 4 outputs and 3 inputs. PREMIER+ complies to IEC1036 and AS1284.5.



PREMIER RP features sophisticated intelligent revenue protection facilities for installations where theft and fraud are prevalent. The meter will detect and log tampers such as current reversal, CT open and short circuit, voltage and current imbalance and magnetic influence. PREMIER 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.



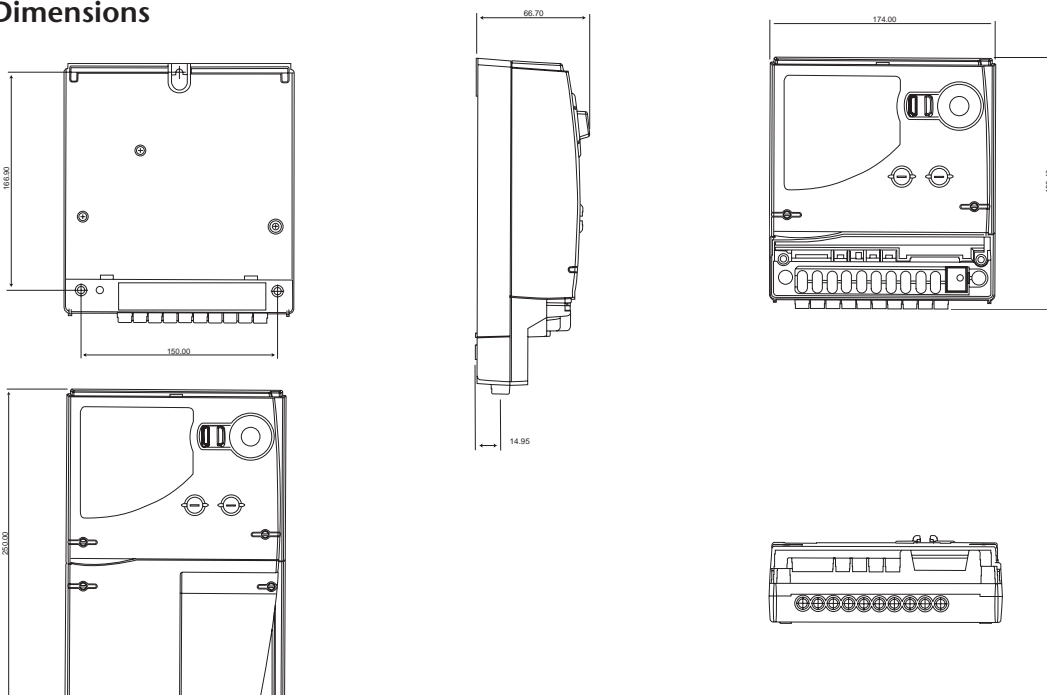
premier

The Premier offers:

- Full four quadrant metering
- 5 main energy registers
- Load survey recording of:
 - 160 days of 1 channel 30 minute data
 - 80 days of 2 channel 30 minute data
 - 53 days of 3 channel 30 minute data
 - 40 days of 4 channel 30 minute data
 - 32 days of 5 channel 30 minute dataN.B Optional 64k memory increases the data storage typically by a factor of three
- Load survey integration periods of 5, 15, 30 or 60 minutes
- 16 time of use and 8 maximum demand registers, user configurable for seasonal control over all 5 energy types
- Maximum demand integration periods of 5, 15, 30 or 60 minutes
- Up to 4 user configurable outputs
- Up to 3 user configurable inputs
- 9600 baud PACT communication port
- 9600 baud modem port under the terminal cover
- 1200 baud IEC1107 communication port
- Ofgem approved to IEC1036 and IEC687



Dimensions



premier technical specification

Premier Technical Specification

ELECTRICAL

Build options available for:
CT Connected 230V phase to neutral, 3 element 3 phase 4 wire.

CT/VT connected 100/110V phase to phase, 2 element 3 phase 3 wire.

CT /VT connected 57.7/63.5V phase to neutral, 3 element 3 phase 4 wire, 2 phase 3 phase 4 wire, 1 phase 3 wire, 1 phase 2 wire. Additional configurations available on request.

CURRENT

In	5A	1A
Imax	6A	1.2A

Additional configurations available on request.

BURDEN

Current circuit	ALL MODEL TYPES
Voltage circuit	<0.5VA

METROLOGICAL

Class	IEC 1036/687
	Class 2.0S, 1.0S, 0.5S, 0.2S

MECHANICAL

Dimensions	ALL MODEL TYPES
Enclosure Material	W.176 X H.250 X D.67 mm
Degree of Protection	ABS/Polycarbonate
Flame Retardation	IP51
Weight (approx.)	UL 94 V0
	1 kg

MAINS FREQUENCY

45-65Hz

DATA RETENTION

10 years minimum (unpowered)

DISPLAY

Format	LCD
Image Area	75 x 17mm

CLOCK & CALENDAR

Normal Power Source	Mains supply
RTC Backup Source	Lithium battery or super cap.
Battery Life (typical)	10 years
Min Shelf Life (typical)	3 years

ACTIVITY INDICATOR

Format	High intensity red LED, kWh consumed.
Meter Constant	800 flashed per kWh for 230V 3 phase 4 wire CT connected 100A (scaled for other ratios and voltages).

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 conductor. Suitable for cable sizes from 2.5mm² to 5.0mm²

PULSED INPUTS AND OUTPUTS

Premier can be supplied in various hardware builds with up to 7 input/output channels, for example:
4 outputs, 0 inputs
4 outputs, 3 inputs

The CLEM and tariff files determine the exact functionality of inputs and outputs. The hardware-build determines which inputs and outputs are physically provided.

PULSED INPUTS

Up to two external parameters can be counted, with the capability to store values as load survey parameters. Up to two external signals can be used to synchronise time-base or switch time-of-use registers. Inputs are rated for 9-40 Vdc operation.

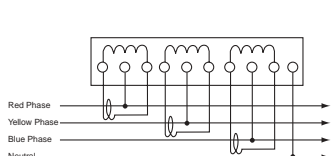
PULSED OUTPUTS

Up to four outputs can be used to indicate energy consumption, active rate, change of rate, end of demand period, or to indicate that a particular rate is active.

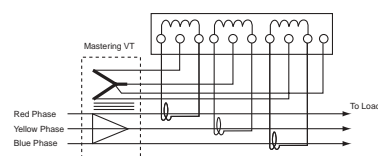
COMMUNICATIONS

Local Interrogation ports	PACT and 1107 ports
Remote Interrogation port	Optically isolated RS232 port under the terminal cover
Protocol	PACT at speeds from 1200-9600 baud

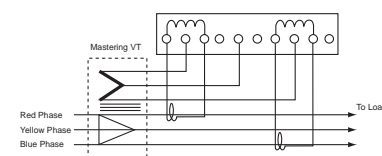
Wiring Diagram



Wiring Configuration for P3T 3 Phase 4 Wire CT connected 230V



Wiring Configuration for P3M 3 Phase 4 Wire CT/VT connected 63.5V



Wiring Configuration for P3V 3 Phase 3 Wire CT/VT connected 110V



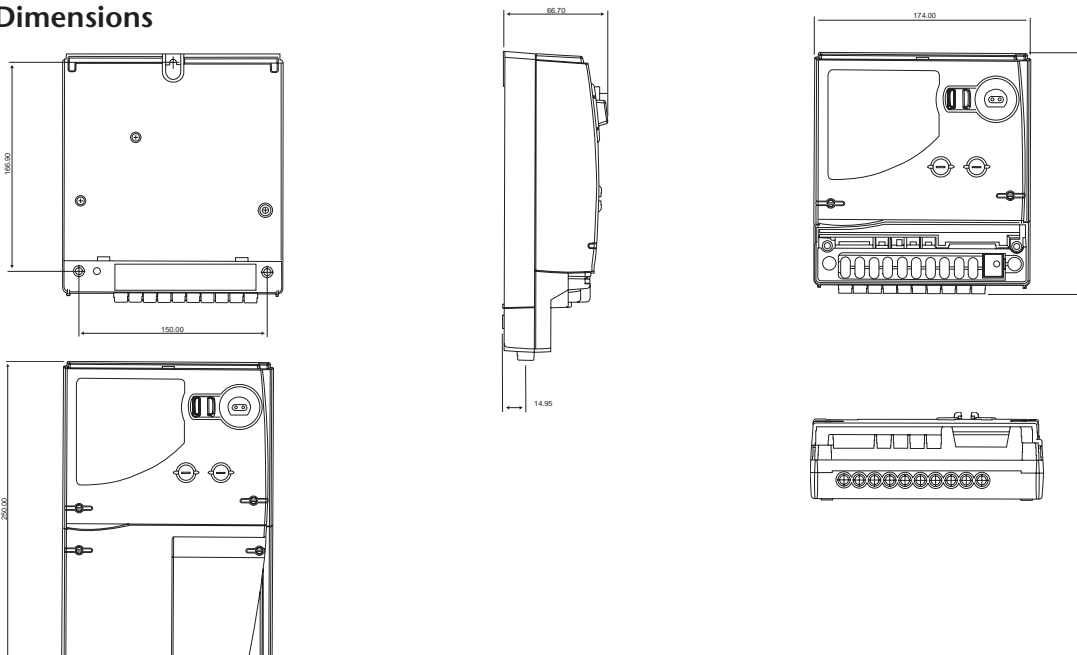
premier+

The Premier+ offers:

- Full four quadrant metering
- 5 main energy registers
- Load survey recording of:
 - 350 days of 1 channel 30 minute data
 - 175 days of 2 channel 30 minute data
 - 116 days of 3 channel 30 minute data
 - 87 days of 4 channel 30 minute data
 - 70 days of 5 channel 30 minute data
- Load survey integration periods of 15, 30 or 60 minutes
- 8 time of use and 4 maximum demand registers, user configurable for seasonal control over all 5 energy types
- Maximum demand integration periods of 5, 15, 30 or 60 minutes
- Up to 4 user configurable outputs
- Up to 3 user configurable inputs
- 9600 baud ANSI communication port
- 9600 baud modem port under the terminal cover
- 1200 baud sealable PACT 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, IEC687 and AS1284 parts 5 and 9



Dimensions



premier+ technical specification

Premier+ Technical Specification

ELECTRICAL

Wiring configurations
CT Connected 240V or 230V
phase to neutral, 3 element
3 phase 4 wire.

CT/VT connected 100/110V
phase to phase, 2 element
3 phase 3 wire.

CT /VT connected
57.7/63.5V phase to neutral,
3 element 3 phase 4 wire,
2 phase 3 phase 4 wire,
1 phase 3 wire, 1 phase 2 wire.
Additional configurations
available on request.

CURRENT

In	5A	1A	5A
Imax	20A	1.2A	6A

Additional configurations
available on request.

BURDEN

Current circuits	ALL MODEL TYPES
Voltage circuits	<0.5VA

METROLOGICAL

IEC 1036/687, AS1284.5, AS1284.9
Class 2.0S, 1.0S, 0.5S

MECHANICAL

Dimensions (approx.)	ALL MODEL TYPES
Enclosure Material	W.176 X H.250 X D.67 mm
Degree of Protection	ABS/Polycarbonate
Flame Retardation	IP53
Weight (approx.)	UL 94 V0
	1 kg

MAINS FREQUENCY 45-65Hz

DATA RETENTION 10 years minimum
(unpowered)

DISPLAY

Format	LCD
Image Area	75 x 17mm

CLOCK & CALENDAR

Normal Power Source	Mains supply
RTC Backup Source	Lithium battery or super cap.
Battery Life (typical)	10 years
Min. Shelf Life (typical)	3 years

ACTIVITY INDICATOR

Format	High intensity red LED, kwh consumed.
Meter Constant	800 flashes per kWh for 240V 3 phase 4 wire CT connected 100A (scaled for other ratios and voltages).

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 +60°C
Storage Temperature	-25°C to +80°C
Operating Humidity	Up to 95% non-condensing

TERMINALS

Two screws per conductor.
Suitable for cable sizes from
2.5mm² to 5.0mm²

PULSED INPUTS AND OUTPUTS

Premier can be supplied in various hardware builds with
up to 7 input/output channels, for example:
4 outputs, 0 inputs
4 outputs, 3 inputs

The CLEM and tariff files determine the exact functionality
of inputs and outputs. The hardware-build determines
which inputs and outputs are physically provided.

PULSED INPUTS

Up to two external parameters can be counted, with
the capability to store values as load survey parameters.
Up to two external signals can be used to synchronise
time-base or switch time-of-use registers. Inputs are
rated for 9-40Vdc operation.

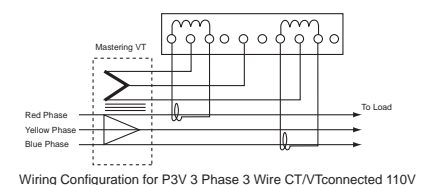
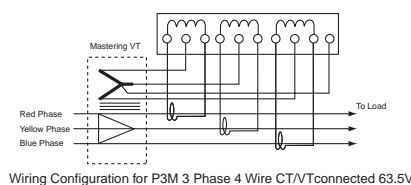
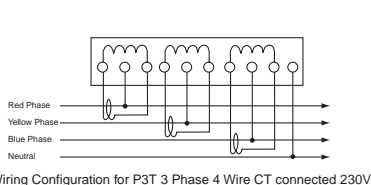
PULSED OUTPUTS

Up to four outputs can be used to indicate energy
consumption, active rate, change of rate, end of demand
period, or to indicate that a particular rate is active.

COMMUNICATIONS

Local Interrogation ports	PACT and ANSI ports
Remote Interrogation port	Optically isolated RS232 port under the terminal cover
Protocol	PACT at speeds from 1200-9600 baud

Wiring Diagram



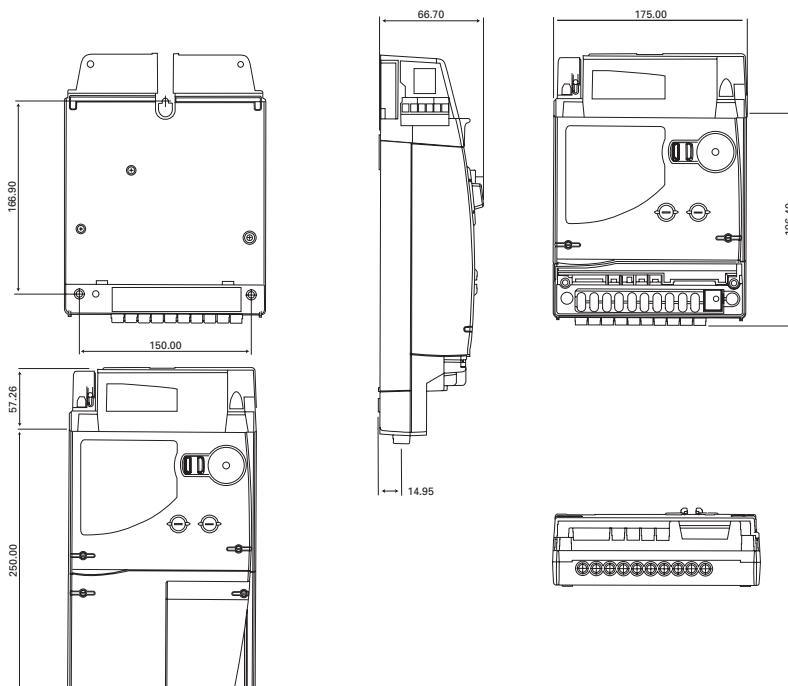
premier RP

The **Premier RP** offers:

- Full four quadrant metering
- 5 main energy registers and 8 main registers for true import/export metering
- 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
- *only available of 3p-4w meters
- 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
- 8 time of use and 2 maximum demand registers from the main energy registers, configurable for TOU and seasonal control
- Load Survey configurable for energy, voltages, currents, frequency or power factor
- Load Survey integration periods of 15, 30 and 60 minutes
- 1200 baud sealable PACT port
- Optional IEC1107 compatible communication port
- Inductively coupled external power pack for meter reading in the absence of supply (Build option)
- Up to 4 user configurable outputs via the optional top module
- Up to 2 user configurable inputs via the optional top module
- Type approved to IEC1036 and IEC687



Dimensions



premier RP technical specification

Premier RP Technical Specification

ELECTRICAL

Wiring configurations
CT Connected 240V phase to neutral, 3 element
3 phase 4 wire.

CT/VT connected 100/110V phase to phase, 2 element
3 phase 3 wire.

CT /VT connected
57.7/63.5V phase to neutral, 3 element 3 phase
4 wire.
Additional configurations available on request.

CURRENT

In 5A 1A
Imax 10A 2A
Additional configurations available on request.

BURDEN

Current circuits ALL MODEL TYPES
<0.5VA
Voltage circuits <2VA/Watt per phase

METROLOGICAL

IEC 1036/687
Class 2.0S, 1.0S, 0.5S

MECHANICAL

ALL MODEL TYPES
Dimensions (approx.) W.176 X H.250 X D.67 mm
Enclosure Material ABS/Polycarbonate
Degree of Protection IP51
Flame Retardation UL 94 V0
Weight (approx.) 1.65 kg (with optional top module)

MAINS FREQUENCY 45-55Hz

Top Module Technical Specification

COMMUNICATIONS

Remote Interrogation port Optically isolated
RS232/RS485 port
Protocol PACT at speeds from
1200-9600 baud

INPUTS AND OUTPUTS

Options available 4 outputs and 1 input
3 outputs and 2 inputs

ACTIVITY INDICATOR

Format High intensity red LED,
kWh/kvarh/kVah
Meter Constant Meter constant depends on meter
scaling values (i.e. CT and VT ratios)

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 cable sizes from
2.5mm² to 5.0mm²

CLOCK & CALENDAR

Normal Power Source Mains supply
RTC Backup Source Lithium battery or super cap.
Battery Life (typical) 10 years
Min. Shelf Life (typical) 3 years

DISPLAY

Format LCD
Image Area 75 x 17mm

DATA RETENTION

10 years minimum
(unpowered)

COMMUNICATIONS

Local Interrogation ports PACT and ANSI or 1107 ports

PULSED OUTPUTS

Up to four outputs can be used to indicate energy
consumption, active rate, change of rate, end of demand
period, or to indicate that a particular rate is active.

PULSED INPUTS

Up to two inputs can either be counted and stored as
register, survey data, used to synchronise the meter
time-base or switch time-of-use registers. Inputs are
rated for 9-40Vdc operation. Optional 230 VAC available.

Wiring Diagram

