



## Specifications

- Maximum 3 input device
- 220VAC powered
- Radio frequency: 868MHz
- Distance: 30m through walls and floors; 100m line-of-sight
- Accuracy: 1% depending on resolution of CT chosen.
- Measurements: 90mm (L) x 35mm (W) x 60mm (H)
- Measures AC only: single and 3-phase
- Checks in every 15 minutes (can be set to 1 minute on request)
- Average calculations:

$$(1 \text{ minute}) \frac{60 \text{ samples}}{60 \text{ seconds}} = \text{AVG}$$

$$(15 \text{ minutes}) \frac{900 \text{ samples}}{900 \text{ seconds}} = \text{AVG}$$

## Load Specifications

- Contact us for a list of current transformer (CT) sizes
- CT's available in both clamp-on or standard fittings
- Please note: we do not carry all sizes in stock and in some cases we may need to order.

## Notes

- Indoor unit
- Not all inputs need to be used - unused inputs must be cancelled using supplied plug (see diagram above).
- Please ensure the diameter of the cable to be measured before contacting us as this information is vital to us
- Please note the maximum and minimum current to be measured as this can affect the resolution
- This unit should not be considered for use in billing applications
- Note the address on the unit starting with @, as this will be required for setup
- This product is intended for use in conjunction with the EW-GSM-CLOUD (Ecowatt Cloud Hub) for monitoring and management.
- Do not alter the length of the CT wires as this will affect reading calibration.
- Do not run CT wires parallel to HV/LV cables as it will affect the reading.

## Setup

- Once the CT is powered up and connected to the load to be measured, follow the EW-GSM-CLOUD instructions for online setup.

### Important:

When specifying a CT range for clients please bear the following in mind regarding the rating we give CT's. For example, the 0-30A CT can measure up to 30A, which is true, but this is 30A peak current. When a client needs a CT they refer to the RMS (root mean square) current. So if they want a 30Amp CT they actually need one to measure 30A X square root 2 to give you the peak value, in this case 42,426406871A. In this case they need to go for the 60A CT version.

To determine what size CT to specify for the client, take the current that they require to be monitored and multiply this by 1,414213562 (square root of 2). Then pick the range of CT's we have and make sure the selected one is greater than this value.

This applies to all CT's. If a client wants to use their own X:5A CT then this is fine, but they must be informed that 5A is the peak current. For example if the client wants to use their own 600:5 CT, in reality this means we can only measure (600/square root 2) = 424A max RMS, so if their maximum is more than this then they need to use a larger CT.

If anything is unclear please do not hesitate to contact Ecowatt for further assistance.