



P 8137 Digital Wireless Mains Energy Consumption Meter

P 8138 Channel 2 Sender/Transmitter

P 8139 Channel 3 Sender/Transmitter

Please read the following instructions carefully before connecting this meter to electrical appliances.

OVERVIEW

Monitor the running costs of up to three electrical appliances with this mains power meter. Consists of a master base station which receives RF signals from up to three remote mains socket senders. The senders simply plug inline between your appliance and the standard GPO. The master unit is programmed with the local price per unit of electricity which then automatically displays running costs. The in-built memory stores a cumulative running cost total. Includes clock with alarm function.
P 8137 Includes base station and one GPO transmitter, 2 additional transmitters may be added if required (P 8138 & P 8139). Requires 3 x AA batteries (for receiver).

MAIN FUNCTIONS

The base station is battery operated and can be mounted to the wall or placed on a desktop. The following screen readouts are available:

- Clock.
- Temperature and humidity.
- Line voltage (V).
- Line current (A).
- Line power (W).
- Each channel accumulative kWh (current & recorded values).
- Greenhouse gas emissions (current & recorded values).
- Accumulative total kWh (current & recorded values).
- Total on time & total electric charge (current & recorded values).
- Price 1 total on time & total electric charge (current & recorded values).
- Price 2 total on time & total electric charge (current & recorded values).

TRANSMITTER SETUP

The transmitter measures voltage, current, power and transmits data back to the base station. Plug each transmitter into power socket, then plug your appliance into the transmitter. The transmitter can send data up to 30m without outside interference.

OPERATING INSTRUCTION

1. Choice of display mode:

- Press MODE key to cycle through the display modes. These are line voltage, line current, line power, kWh & greenhouse gas emission.
- Press PRICE key to cycle through accumulative total kWh, total on time & total electric charge of price 1; total on time & total electric charge of price 2.

2. Setting the clock:

- Ensure clock is on screen (ie: voltage, current or power display mode).
- Press SET key for 3 seconds. The day of the week will flash. Press UP key to select the current day. Press SET again and the hour will flash, press UP to select the current hour. Press SET again and the minute digits will flash. Press UP to set the current minutes. Press SET again to exit clock setting mode.

3. Clock alarm set

- Ensure clock is on screen (ie: voltage, current or power display mode).
- Press CLK/ARM to enter alarm display mode. Press SET and the hour will flash, press UP to select the current hour. Press SET again and the minute digits will flash. Press UP to set the current minutes. Press SET again to exit alarm setting mode.

- Press CLK/ALM to return to clock display mode. The bell icon flash if alarm is set. A beeping alarm will sound for 60 seconds at the set time. Pressing any key within the 60 seconds will stop the alarm.

- To clear alarm setting press CLR while in alarm setting mode.

4. Setting Electricity Price & Running Periods

- For this step you will require the price per kWh for electricity from your provider. You can find this information on your bill or via your provider. If your provider operates with peak and off peak rates you can set up activation times for each price value.
- Press PRICE key for 5 seconds while the unit is in total kWh, price 1 or price 2 display modes.
- To set price 1 value & running time:
 - Press SET key once and release. The first digit will flash. Press UP to select the first digit of your electricity price.
 - Press SET key once again and release. The second digit will flash. Press UP to set.
 - Press SET key once again and release. The third digit will flash. Press UP to set.
 - Press SET key once again and release. The fourth digit will flash. Press UP to set.
 - Press SET key once again and release, the decimal point will flash. Press UP to adjust its position.
 - Press SET key once again and release, the day will flash, press UP button to set it. This will determine the days on which price 1 will be applied ie: on or off peak.
 - Press SET key once again and release, the hour of ON TIME flash, press UP button to set it.
 - Press SET key once again and release, the minute of ON TIME flash, press UP button to set it. This will determine the time on which price 1 will be applied ie: on or off peak.
- Setting price 2:

Press PRICE key once and release after finish setting price 1. To set price 2, repeat above steps.

5. Maximum load alarm setting (per channel)

- Press CODE to select transmitter channel
- Press MODE for 3 seconds whilst unit is set to current (AMP) display mode. Press SET, the first digit of the maximum load will flash. Press UP to select. Repeat for the remaining 3 digits.
- Repeat for additional channels (transmitters).
- When maximum load is reached a buzzer will emit a beeping sound and "MAX LOAD" will flash on the display. This condition will continue until the load is reduced.

6. Kilograms of emissions per kWh setting

- Press MODE for 3 seconds whilst unit is set to emissions (KG/GAS) display mode. Press SET, the first digit will flash. Press UP to select. Repeat for the remaining 3 digits.

The determine your scale of kilograms of emissions per kWh, contact your energy provider.

7. Channel selection

Conduct channel-selection for 1, 2 or 3 remote transmitters before plugging into any appliances.

• Press CODE on the base station for 3 seconds. The display will show 1 and flash “- - -”. Plug the first remote transmitter into a power outlet. The red LED in the transmitter will flash six times before remaining illuminated. Wait for the flashes to stop and press SET on the transmitter for 3 seconds.

• To test that the transmitter signal is working, select voltage display mode. It should read around 240 volts.

• You can now connect an appliance to transmitter 1.

• Press the CODE key again to switch to channel 2. Repeat the steps above for the second and third channels as required.

• You may now locate the base station into its final position, keeping in mind that it should not be more than 30m from any transmitter. Should a transmitter drop its signal the display will show “000”. This can occur for the following reasons:

- (a). The base station has been placed outside of the effective transmission range (more than 30 meters). Try moving it closer to the transmitter.
- (b). The remote may have outside interference that is preventing transmission. Sources of the interference may be metal surfaces, high power electrical devices. The transmitter may need to be relocated if interference remains.
- (c). Low battery. Change the batteries in the base station. When this is performed channel selection steps will need to be repeated.

PRODUCT CARE

Wipe off any dirt using a soft cloth, dipped in mild detergents, wipe off any dirt using a soft dry cloth. Avoid placing the units in prolonged direct sun, wind, rain or high humidity. Avoid dropping-excessive force which may cause permanent damage. Do not tamper with the internal components. Failure to follow these care guidelines will invalidate the warranty.

SPECIFICATIONS

Operating temperature:-10°C to +40°C
 Operating humidity:30%RH ~ 95%RH
 Clock precision: +/-1minute/month
 Wireless transmission and reception frequency:.....RF433.92MHz
 Effective distance:30M in open space
 Base station power:.....4.5V(3 pieces AA/UM3/LR6 size 1.5V battery)
 Remote transmitter power:240V/50Hz
 Measure voltage range:190-276V AC
 Measure voltage accuracy: +/-1%
 Measure current range:0.02-10A
 Measure current accuracy: +/-1% or +/-0.01 A
 Measure power range:0.5-2760W
 Measure power accuracy: +/-1% or +/-0.5W
 Accumulative electric quantity range:0-9999.9Kwh
 Greenhouse gas emission range:0-9999.9KG

WARNING!

Do not plug two or more meters together

Do not plug in an appliance where the load exceeds 10 Amp.

For indoor use only.

Always ensure the plug of any appliance is fully inserted into the meter outlet.

Always position the energy meter so that it can easily be removed from the supply.

This adaptor is primarily designed for domestic use.

It is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure they do not play with the appliance.