

**POWERTECH**

MS6108

# Mains Power Meter with External LCD Display



## Instruction Manual

Please read and save all instructions to ensure safe and effective use of this product.



## PACKAGE CONTENTS

Thank you for purchasing this product. To ensure you get the most from your purchased device, please read the following instructions carefully.

## TECHNICAL SPECIFICATIONS

Input Voltage:	240VAC, 50Hz
Max. Load:	10A, 2400W
Measurable Voltage:	200~276VAC
Measurable Current:	0.005~10A
Measurable Power:	0.1~2760W
Measurable Power Cost:	0.00~9,999
Measurable Frequency Range:	45~65Hz
Measurable Power Accuracy:	±1.5%
Battery:	3.6V Ni-MH Rechargeable
Power Meter Power Consumption:	0.3W max
Clock Display:	± 1 minute per month
Cable Length:	1.5m
Dimensions:	
Screen:	80(H) x 70(W) x 21(D)mm
Power Plug:	117(H) x 60(W) x 48(D) (Excluding mains plugs)
Weight:	75g

## START

First remove the product from the packaging, and discarding packaging material.

Then plug the energy cost meter into a properly installed earthed socket.

The device should now be ready for operation.

Detailed information regarding the operation and setting options can be found in the following sections in this manual.

## DISPLAYS & CONTROLS



## DISPLAY

**Consumption Indicator:** The display shows information on consumption, the total cost since the start of measurement, to the mains voltage, to the current consumption of the load, and to the CO2 values of the current day.

**Cost Display:** This represents the approximate weekly, monthly or yearly Costs and CO2 values, if these are configured.

**Time Display:** Display shows the current time.

## KEY FUNCTIONS

**Mode:** With this button you can switch between the different modes.

**Up:** During normal operation, this key allows you to switch between the 12 and 24 hour display. In the settings menu you may increase the time value by pressing this button, to increase the value faster hold the button a little longer.

**Total:** Display consumption costs between week, month and year.

In the settings menu the value can be lowered with this key, press and hold the button a little longer to speed it up.

**Set:** A short press to enter the date settings. You confirm the inputs by briefly pressing the SET button. A long press to get into the tariff and CO2 settings. You confirm the entries by briefly pressing the SET button.

**RESET:** Press and hold the RESET button with a pointed object to clear all settings and restart the device.

### **Date / Time Settings:**

*Note: We recommend the device for about 2-3 hours before startup into a properly plugged power outlet to the internal Charge the battery.*

Briefly press the "SET" button to enter the setting mode. If the value to be set starts to flash. To adjust the respective value, press the "UP" key or the "TOTAL" key until the desired value is shown in the display. By a short press on the "SET" key confirm your entry and move on to the next position.

The adjustment order is as follows: Year -> Format of the date (month / day or day / month) > Month > Day > Hour > Minute

Note: If no action is taken within 30 seconds, the device automatically switches off the setting mode.

Cost settings: You have the option of two different electricity cost tariffs for different set time periods. If price 1 and price 2 are set to "0.00", the cost function is switched off.

Normally it is sufficient to set only tariff 1 (price 1). Price 1 is the basic rate.

If this is not set, entry for price 2 is not possible.

Press and hold the "SET" button for about 2 seconds to enter the setting mode to start for the cost.

The currency unit will now flash in the display.

Use the "UP" or "TOTAL" buttons to set the desired currency.

Confirm your entry with the "SET" key.

After the display "Price 1" flashes. Press the "SET" button again. The Days of the week start to flash. Use the buttons "UP" and "TOTAL" the desired period for which the first tariff (price 1) should apply.

After you have set the days of the week, confirm with the "SET" button. You can then change the hour display for the beginning of the set billing period. Confirm the entry with the "SET" button and repeat the process with the minute display. To confirm Again with "SET"

After that, set the costs. The first digit of the cost display begins to flash. Set these with the buttons "UP" and "TOTAL" and confirm with "SET". Then repeat this with the second and third digits. Confirm each setting with the "SET" button.

The decimal point then flashes. If you want to adjust this, press The “UP” or “TOTAL” button. If the point stays that way, press the “SET” button to confirm the setting.

To set price 2, you need “Price 2” instead of “Price 1” at the beginning select and set. Make sure that there are no time overlaps both rates are. The time settings should not be identical!

Example: For a kWh price of 0.24 \$ / kwh you have to enter 0.24. If you only want to set a tariff, set the period to all 7 days of the week and the beginning at 0.00 o'clock.

CO2 Settings: After you have set the prices and confirmed them, you will get into the CO2 settings (CO2 equivalent). At best, you can get that value from your Get energy suppliers know.

The display will show “SET CO2”. Use the “UP” and “TOTAL” buttons to set the Unit of measurement (kg / kWh or lb / kWh). Then press the “SET” button, to confirm the setting.

Subsequently, the first digit of the CO2 setting flashes. Put these with the Press “UP” and “TOTAL” and repeat this procedure with the second one and third place. Confirm the setting with the “SET” button.

Then press the “SET” button again to return to the normal display to return.

## DISPLAY & MODES

In the normal display mode, you can use the “MODE” key between the following:

Change modes in the first line: Display of the costs since the beginning of the measurement; Power display; Voltage display, current consumption of the load and CO2 mode.

The second line shows the accumulated data for costs, consumption or CO2 emissions. This data can be accessed by pressing the “TOTAL” key between weekly, monthly and yearly totals.

## RESET THE DEVICE

Press the “RESET” button on the front of the unit with a pointed tip Item to clear all settings and restart the device.

**Attention! Make sure you do not hurt yourself with the item!**

To reset only the accumulated data, press and hold the Buttons “TOTAL” and “UP” simultaneously for 2 seconds. Following are the accumulated data reset to zero.

## ATTENTION!

- Do not plug in a row!
- Voltage-free only with pulled plug!
- For indoor use only!
- No maintenance required!
- Do not connect a device that has the load 10A exceeds.
- Always make sure that the plug is completely closed and inserted correctly.
- Only clean the device with one dry cloth.
- Do not immerse the device in water!

## SYMBOL



Ground terminal block.



Alternating Current.



For indoor use only.

CAT II

Over-voltage category II

## SAFETY INSTRUCTIONS AND DISCLAIMER

- Never attempt to open the device for repairs or conversions.
- Avoid contact with the mains voltages. Close that Product not short. The device is not waterproof, please use it only in the Dry. Protect it from high humidity, water and snow. Hold Keep the device away from high temperatures.
- Do not subject the device to sudden temperature changes or strong vibrations because it could damage the electronics.
- Before use check the device for damage. The device should not be used if it has received a shock or has been damaged in any other way. Please observe the national regulations and restrictions.
- Do not use the device for purposes other than those described in the manual.
- This product is not a toy. Keep it out of the reach of Children.
- Any repair or modification to the device not from the original supplier is carried out, will void the warranty.
- The device should only be used by persons who use it Have read and understood instructions. The device specifications may vary change without prior notice.

## DISPOSAL

Dispose of electrical components and batteries in accordance with your local state laws.

## WARRANTY INFORMATION

Our product is guaranteed to be free from manufacturing defects for a period of 12 Months. If your product becomes defective during this period, Electus Distribution will repair, replace, or refund where a product is faulty; or not fit for intended purpose.

This warranty will not cover modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim warranty, please contact the place of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by:

Electus Distribution

Address 46 Eastern Creek Drive, Eastern Creek NSW 2766

Ph. 1300 738 555