

# OLGEN PM58 PLUG-IN POWER MONITOR

## Operation Manual

Congratulations on your purchase, and welcome to OLGEN PM58 Plug-in power monitor. This operation manual will guide you step by step for the various functions of the Power Monitor.

### Warning:

- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- The operating voltage is limited to AC 180 ~250V 50/60 Hz, Don't use it in other voltage ratings.
- Indoor use only.
- The maximum output current is 15A. The buzzer whistles and the reading on the LCD display flashes when over current.
- To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.



### 1. Installation: (refer to figure 3)

PM58 include 7 precision digital Meter. Plug the PM58 to wall outlet, then connects the appliance or equipment to its receptacle, the LCD display will be lit after power up.

- The LCD shows all meter readings which includes Volt, Current, Watt, Frequency, Power Factor, and VA, it starts to accumulate KWH and its duration time (hour) after power ON.
- Press **Volt** Key for true RMS Voltage display.
- Press **Amp** Key for true RMS output current display.
- Press **Watt** display Watt meter, then press key to display VA meter, and active power for 1 second each automatically.

**Watt/VA** Key is a toggle function Key, the LCD will show Watt is the active power, and VA is the apparent Power. (VA = Vrms Arms)

- HZ/PF** is a toggle function key, the LCD will show the sequence of HZ → PF → HZ → HZ is the Frequency of output Voltage, where PF is the Power Factor (ie PF=W/Vrms Arms).

- Press **KWH** shows the energy consumption, then press key to display the time (hour) and active power for 1 second each automatically.

**KWH/Hour** is a toggle function key, the LCD will show the sequence of KWH → Hour → KWH. Kilo-Watt-Hour (from 0.01 KWH to 999 KWH) is electronic energy. Hour is the duration time after Power On (ie from 1 minute ~ 9999 Hour).

## 8.MAINTENANCE

Protect the meter from adverse weather conditions. The meter is not waterproof. Do not expose the LCD display to direct sunlight for long periods of time.

**CAUTION:** To avoid damage to the meter, do not expose it to sprays, liquids, or solvents.

Clean the exterior of the meter by removing dust with a lint-free cloth.

Use care to avoid scratching the clear plastic display filter.

For further cleaning, use a soft cloth or paper towel dampened with water. You can use a 75% isopropyl alcohol solution for more efficient cleaning.

**CAUTION:** To avoid damage to the surface of the meter, do not use abrasive or chemical cleaning agents.

### Model PM58 Specifications:

| ITEM            | RANGE            |        |
|-----------------|------------------|--------|
| RMS voltage     | 180.0~250.0 Vrms |        |
| RMS current     | 0.00~15.00 Arms  |        |
| Active power    | 0~3750 Watts     |        |
| Apparent power  | 0~3750 VA        |        |
| Line Frequency  | 47.0~63.0 Hz     |        |
| Power Factor    | 0.00~1.00        |        |
| Energy Quantity | 0.00~9999 KWH    |        |
| KWH Hour        | 00:00~9999       |        |
| Items           | Accuracy         |        |
|                 | Max.             | Typ.   |
| RMS voltage     | 1%               | 0.2%   |
| RMS current     | 1%               | 0.3%   |
| Active power    | 2%               | 0.5%   |
| Apparent power  | 2%               | 0.5%   |
| Line Frequency  | 2%               | ±0.1Hz |
| Power Factor    | 0.03             | 0.01   |
| Energy Quantity | 2%               | 0.5%   |
| KWH Hour        | 30 ppm           |        |
| Fuse Rating     | 0.2A/250V 3x11mm |        |

**Note:** The typical accuracy for voltage is in the range of 190V~250V ; and for current is in the range of 0.2A~15A.

### Environment Condition:

- Altitude up to 2000m
- Operation temperature 5°C ~40°C
- Max. R.H. 80%
- CAT II
- Pollution degree 2

**CAT II:** Measurement category II is for measurements performed on circuits directly connected to the low voltage installation.

### Dimension :

130.0mm(H) x 60.0mm(W) x 36.7mm(D)

**Weight :** 145 g (one piece.)

**Power consumption :** 20 Vmax

## Funcion Configuration Table

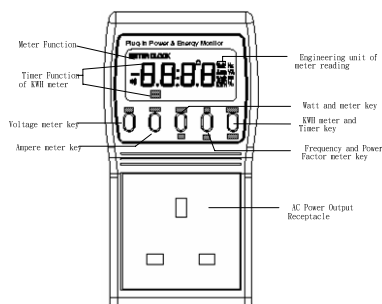
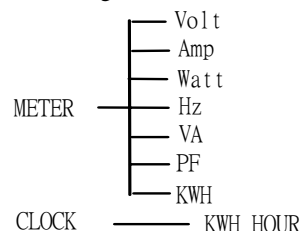


Figure 1 PM58 Front Panel

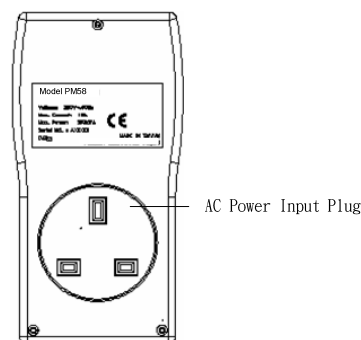


Figure 2 PM58 Rear Panel

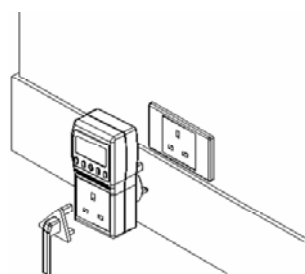


Figure 3 PM58 Installation Diagram