Reading the Class 1000 and 2000 Meter's LCD Display

The Class 1000 and 2000 meter display auto-scrolls between kWh and LOAD kW every eight seconds. Class 1000 and 2000 kWh **meter display requires no multiplier*** and shows kilowatt-hours consumed. See section 2 for information on calculating cost based on kWh usage.
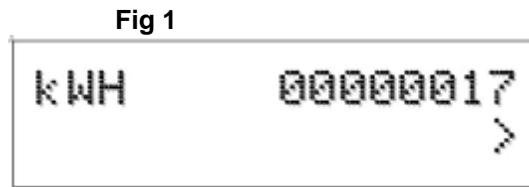
Fig. 1. Kilowatt-hour (kWH) Reading.

Fig 1

Fig. 2. LOAD kW Present Real Time Load in Kilowatts.

Fig 2

The LOAD kW display shows the present load in kilowatts. This information can assist customers to turn off equipment to reduce the kilowatt load and lower costs.

Section 2 How to Read the kWh Meter

Fig. 3. The kWh meter displays readings is in whole numbers, there are no decimals.

Fig 3
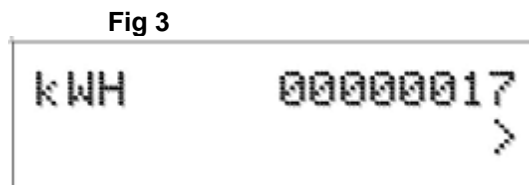
To find the dollar cost for the power used by the load(s) being monitored, you must first find out what the cost per kWh is in your area (this cost can be found on your utility electric bill, or call your local utility and ask for their cost per kilowatt hour.) Simply multiply the cost per kWh by the kWh reading from the E-Mon D-Mon meter. The resultant figure is the dollar cost for power used by the load(s) being monitored by this meter.

Example:
8-digit display reading 00000017
Cost per kWh from utility $0.12100
17 x $0.121 = $2.06

NOTE: THE FOLLOWING ONLY APPLIES TO METERS USING MORE THAN ONE SET OF CURRENT SENSORS. A SET OF SENSORS MAY CONSIST OF ONE, (MODEL NUMBER BEGINS WITH E10-2120, OR E10-2277) TWO, (MODEL NUMBER BEGINS WITH E10-3208) OR THREE PIECES (MODEL NUMBER BEGINS WITH E20-208, OR E20-480). FOR MOST APPLICATIONS, YOU DO NOT NEED A MULTIPLIER.

If you are unsure check with your electrical contractor/installer to find out if, the meter is using parallel sets of current sensors. *With parallel sets of current sensors, you must multiply the kWh display reading by the number of sets of current sensors installed.

Example: 250 (meter display reading) x 2 (sets of sensors in parallel) = 500 kWh 500 kWh x $0.121 (utility cost per kWh) = $60.50

It is not necessary to reset the meter readings on a monthly basis. Allow the meter display to accumulate month after month. Keep a spreadsheet of the kWh reading and the date of the read. Each month take the prior reading and subtract it from the new reading. The difference is the kWh used for this period. Note: most electric utilities read their meters this way as well.

Example:

Clipboard		Font		Alignment		Number	

F5 f_x =SUM(E5-F4)

	A	B	C	D	E	F
1	Meter Model #	Serial Number	Tenant	Date Read	kWh Reading	kWh To Be Billed
2	E10-3208100-JKIT	1410TMAJ0099	Acme Widget	12/1/2014	0	0
3				12/31/2014	5691	5691
4				1/31/2014	12501	6810
5				2/28/2014	25400	18590
6						
7						

FAQ

Question: What is a Kilowatt-Hour? (Abbreviation is kWh.)

Answer: Kilowatt-hours are the typical way energy is measured. One-kilowatt hour refers to the use of a device or set of devices that uses 1,000 watts for an hour. For example, ten 100-watt light bulbs running for one hour would use 1 kilowatt-hour (kWh).

Question: What is a Kilowatt? (Abbreviation is kW.)

Answer: A measure of 1,000 watts of electrical power. Example: Ten 100-watt light bulbs on at the same time is a 1,000 watt load.

Resetting the kWh LCD display to zero when a tenant moves out.

The kWh reset button is located inside the meter enclosure and labeled RST (see Fig. 4 red arrow). Use a small wooden dowel to gently press and release the button once to reset the meter to zero.
Fig. 4 RST Reset Button
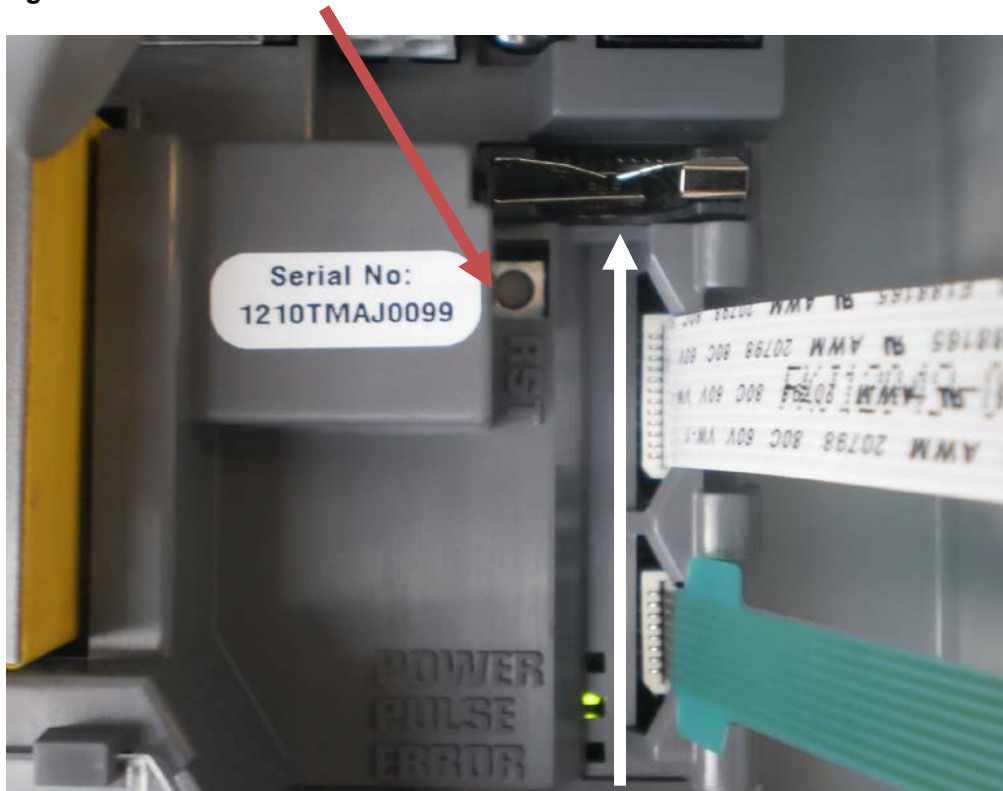
 Fig. 5 the white arrow above shows the empty battery slot.

No battery needed! All E-Mon meters feature Non-Volatile memories that store the kWh reading in the event of a power outage.

A single coin style battery part number CR2032 is supplied and installed in the battery holder above when the Class 2000 meters is ordered with the kW Demand option –D. For example, model number E20-208200-J-**D**-KIT. The battery keeps the date and time clock of meters with the -D demand feature.

Fig. 6 Keypads are not always included with the Class 1000 and Class 2000 non-kW demand meters. The keypad buttons program the date and time setup Class 2000 kW Demand (option –D) for example E20-208200-J-**D**-KIT.

Fig. 6

Meters without demand option -D sometimes do come with the keypad buttons based on the availability of these parts from factory.