



Energy Audit Kit

Instrument
Division

(EMS-9000) Portable

PRODUCT PERSPECTIVE

As per new guideline issued by 'Bureau of Energy Efficiency' It has become important to carry out Energy audit for electrical consuming establishment. "AE – EMS 9000" Energy Audit Kit is designed to measure, display and/or record the most important parameters of an electrical network. With the analysis of the electrical parameters, the user can find out the power consumption of the installation or detect problems within it.

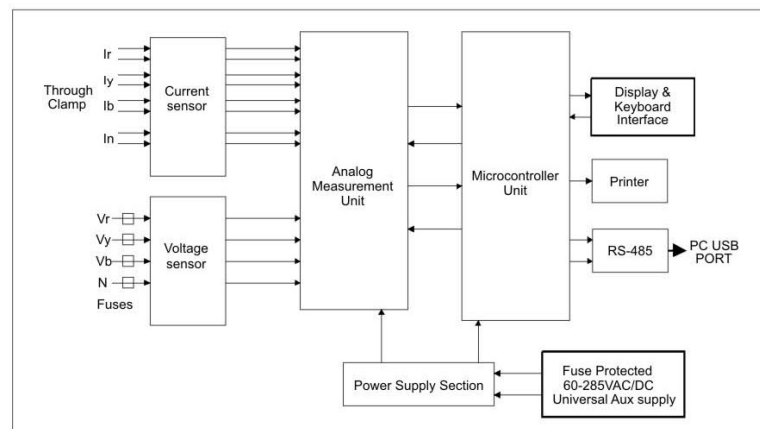
The new EMS 9000 portable Audit Kit can use in variety of industrial and commercial applications where Power / Energy analysis are required. It can be useful at various technical Institutes & Electrical Consultants for testing and study purpose. It is a useful tool for preventive and predictive electrical system maintenance. This Portable type Audit kit is designed for easy transportation, temporary and simple installation; the simple user friendly software is capable for measuring & display different electrical parameters. Software help user to store & analyze their data on PC.



PRODUCT FEATURES

- User friendly, fully featured unique measuring, monitoring and analysis software.
- True RMS voltage and current measurements.
- Total Voltage or Current %THD measurement, Up to 21st Harmonic.
- Real Time Clock
- Import / Export Energy measurement.
- Active, Reactive & Apparent Energies & Power measurement.
- Demand measurement KW / KVA. Different Demand interval can be set.
- Phase and Phasor angle measurement.
- Neutral current measurement.
- Measurement of Minimum/Maximum Voltage and Current Values.
- Inbuilt printer for measured parameters printing i.e. for Audit proof.
- RS-485 Standard Modbus protocol via USB port. (Optional 'RF' Protocol)
- 4 clamps for current measurements up to 1000A.
- 1 inch bright LED display for better visibility.
- Simultaneously three parameters can be viewed.
- Universal Mains power supply 85-285 V AC/DC.
- Light weight with easy carrying case.
- State of the art Aluminum enclosure as per DIN- 41494 standard.
- Accessories provided with Kit: Retractable sockets & sheathed plugs, Insulated Crocodile clips & flexible Silicon Test leads 2 meters long.
- On software's, single screen Display all parameters.
- Refresh / Read data from meter after every 2 second.
- Facility to save the parameter values in database after specific time period.
- Facility to take weekly or monthly backup database.
- Facility to export database values into Excel file for further use.
- Facility to plot graphs among various stored parameters values.

FUNCTIONAL BLOCK DIAGRAM :





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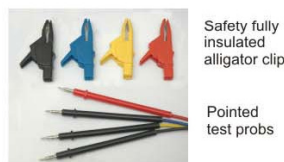
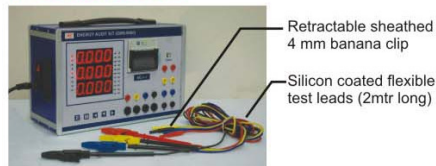
TYPICAL APPLICATION:

- Energy Audit of Building management System.
- Measures and audit power consumption of devices.
- Evaluate load performance under varying line condition.
- Characterize device AC power requirement.

SPECIFICATIONS:

Type	1 / 3-Phase-3-wire/ 4wire, (Programmable through front panel Switches).
Input Voltage	63.5 ---440 V AC.
Voltage Overload	1.5 time for 10 sec
Input Current	---/ 5A AC
Current Clamp (Standard)	1000/5 Amp, (Any other type - on customer demand).
Frequency	45 Hz - 55Hz
Main supply Input	AC / DC : 85 V - 285 V.
Accuracy Class	Voltage/ Current- 0.2 of full scale; Frequency - 0.2 of center frequency. P.F. - $\pm 2^\circ$; Power - 0.5 of full scale, Energy - 0.5.
Resolution	8 Digits for Energies.
Keypad	5 Functional Keys
Communication	RS485: Two wire half duplex ; Baud rates - 4800, 9600, 19200, 38400. (Optional - RF Module based on free band Frequency of 2.45 GHZ).
Display	Ultra Bright 3 Line, 4 Digit LED Display. 31 individual LED's for parameters Information
Environmental	Operating Temp. -10 to +70°C. Storage temp.-20 to +85°C, Humidity 0%-95% non Condensing.
Mechanical Size	Audit Kit EMS 9000 - Length: 342.00mm Width: 150.00 mm Height: 221.50 mm Outer Enclosure - Length: 520.00mm Width: 430.00 mm Height: 250.00 mm
Casing	Aluminum Enclosure as per DIN 41494

ACCESSORIES:



Outer Aluminum Enclosure for EMS 9000 kit.



Note: Product specifications are property of AEL & can be changed without notice.

AE Automatic Electric Ltd.

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