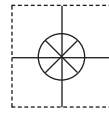


1 YEAR
WARRANTY



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HHM-MG300 Wireless TRMS Multimeter and Insulation Tester



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The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, human applications.

HHM-MG300

Wireless TRMS Multimeter and Insulation Tester

Software Introduction

The MultiMeter software is a program for collecting data from the meter when it is connected to a Desktop or Notebook PC (Personal Computer). The data may be displayed graphically within this software application or may be export to spreadsheet software programs. The software's functions are presented in the main window.

The maximum number of data points that can be captured is 20,000.

Supported Operating Systems:

Windows 2000 /Windows XP /Vista/Windows 7

Minimum Hardware Required:

- Desktop or Notebook PC with a minimum clock speed of 90MHz
- 32 MB RAM
- 7 MB hard disk space
- Monitor display resolution of 1280 x 1024 with High Color (32 bit)

Main Menu



- **File**
 - Save** Save the recorded data to the PC
 - Open** Open a file previously saved on the PC
 - Print Setup** Modify the print options
 - Print Preview** Preview the data graph or the data list
 - Print** Print the data graph or the data list
- **View**
 - Toolbar** Show or hide the Toolbar
 - Status Bar** Show or hide the Status Bar
 - Instrument** Show or hide the instrument window
- **Instrument**
 - Real Time Chart Recording** Start collecting real time data
 - Stop Recording** Stop collecting real time data
- **Window**
 - Cascade** Arrange windows in an overlapping style
 - Tile** Arrange windows in a non-overlapping tile style
- **Help**
 - About** Show the software version information
 - Help Topics** Show the software help utility

Operation

Enabling Communication

1. Switch the meter ON
2. Put the meter in the “USB” mode by pressing and holding the meter’s USB button for two seconds (meter will beep when USB mode is accessed)
3. Connect the receiver to the PC’s USB port using the supplied cable
4. Run the MultiMeter software program
5. Double click the small meter icon on the software screen (shown in the diagram below). The larger meter image will appear



6. If communication is successful, the larger virtual meter image will accurately reflect the current state of the meter (shown in diagram below)




Downloading Datalogged Information from Unit

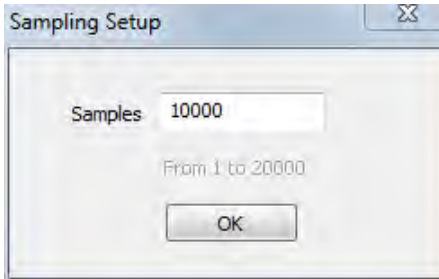
Downloading data from the Unit to the PC takes a few steps:

Do not establish communication prior to downloading data. If there is communication between the unit and the PC unwanted data may be included in the List/Graph of the datalogged information.

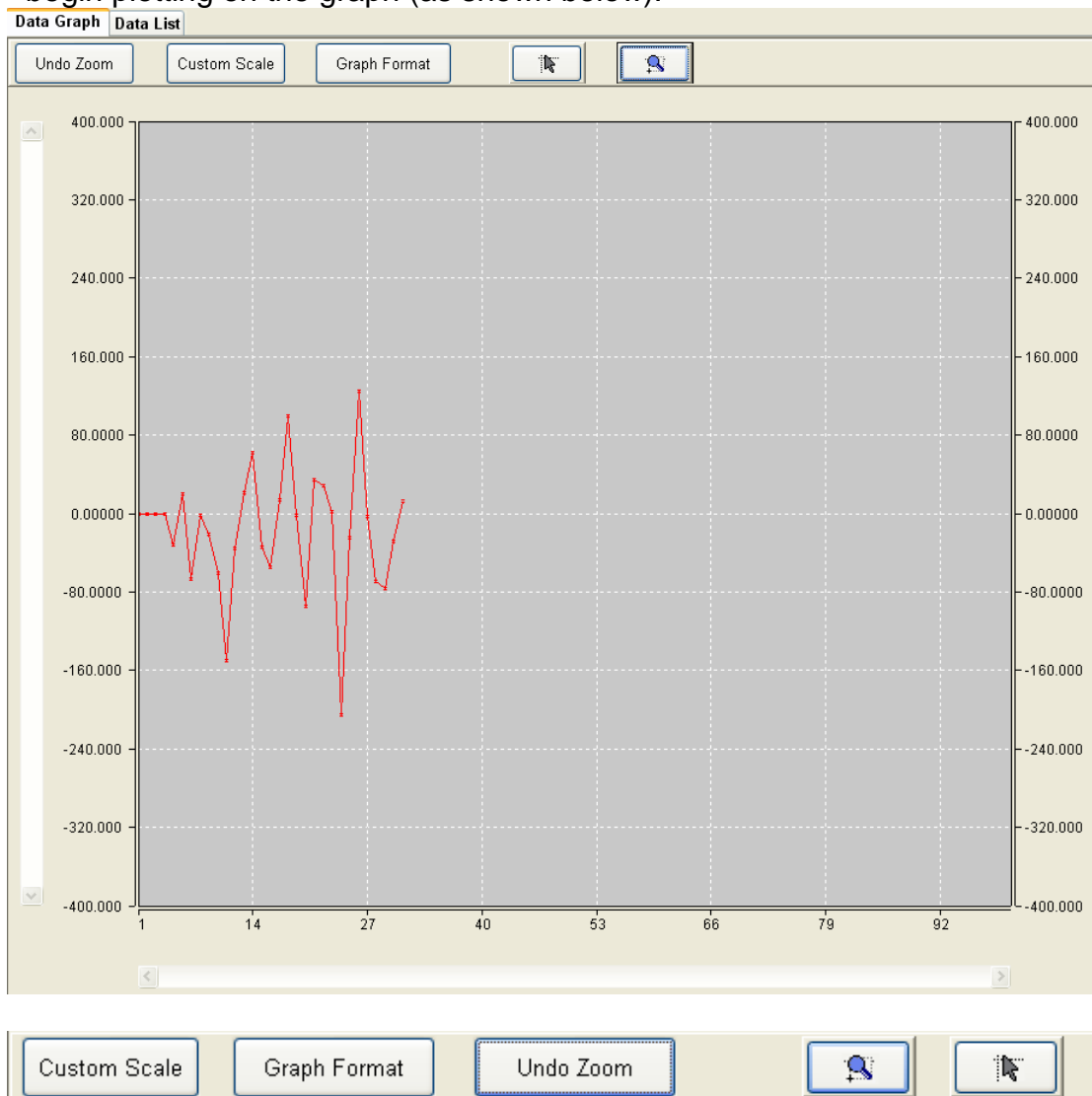
1. After the software has been started, Press and HOLD the **STORE** button for two seconds to enter the **RECALL** function. “**RCL**” will appear on the bottom left of the display
2. A real time recording must be initiated before data can be downloaded.
*Refer to the **Real Time Chart Recording** section for assistance—recommended maximum data points for a real time recording is 8000.*
3. Press and Hold the **HOLD** button for two seconds and the data will be transferred to the PC.
4. The data will form a graph and a data list in the software’s main window.

Real Time Chart Recording

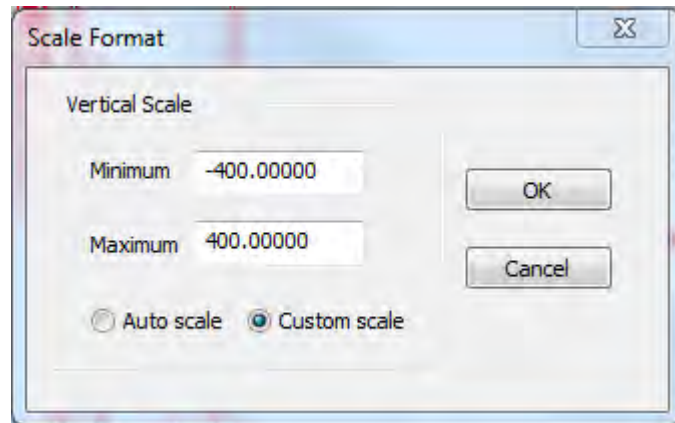
1. Click  to open the Sampling Setup dialog box as shown below.



2. Enter the desired number of samples to record and then click "OK". The data will begin plotting on the graph (as shown below).



Custom Scale: Configure the vertical scale.

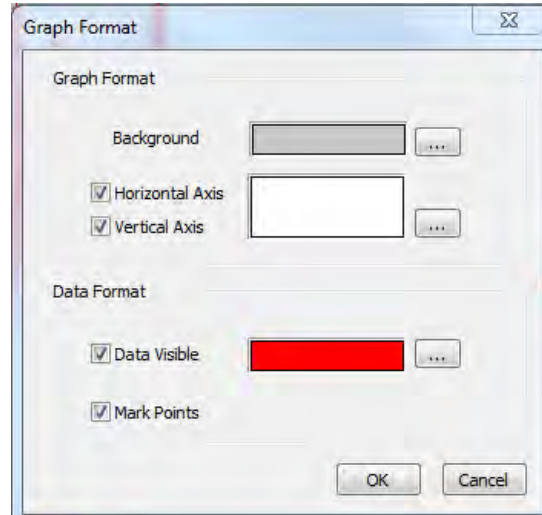


- Enter the minimum scale value in the minimum edit box (as shown above).
- Enter the maximum scale value in the maximum edit box.

Auto scale: Select Auto Scale to allow the vertical scale to be automatically configured based on the data plot.

Custom scale: Select Custom Scale to configure the vertical scale as described above.

Graph Format: Configure the graph and data format.




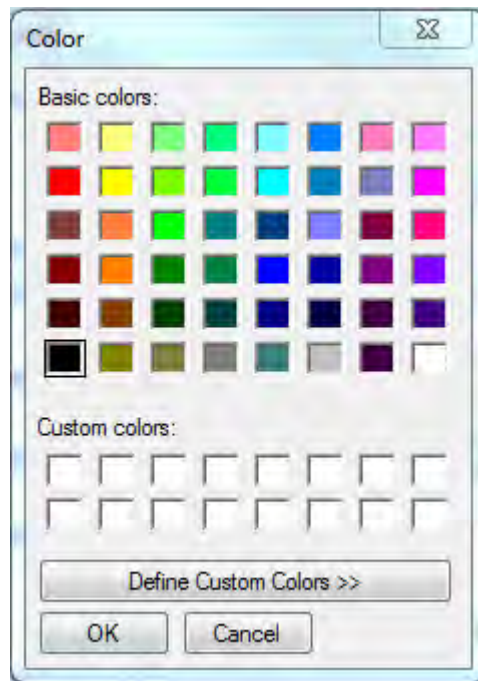
The “Data Visible” check box allows the user to show/hide the data on the graph.

The HORIZONTAL and VERTICAL check boxes allow the user to add/remove grid lines from horizontal and vertical axis.

The “Mark Points” feature shows the individual data points on the graph.

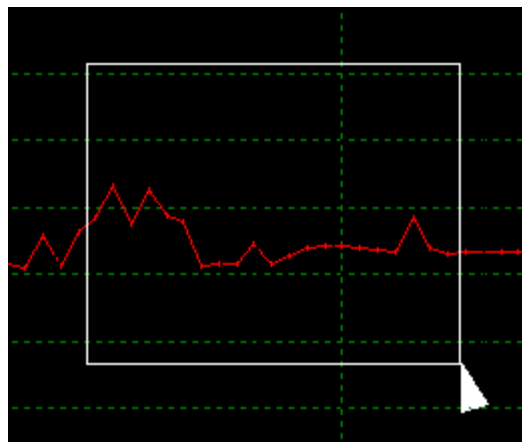
“Save the setting” allows the user to save the settings with the document.

Click these buttons  in the Graph Format window to open the color selector chart for the related feature (the color chart is shown below).




Zoom in: When the ZOOM IN icon  is selected, the icon will highlight 

1. Press the left mouse button and drag a rectangle around the area to be expanded.
2. Release the mouse button.
3. Use the scrollbar to scroll through the data.



Zoom out: Zoom out to the full view by clicking .

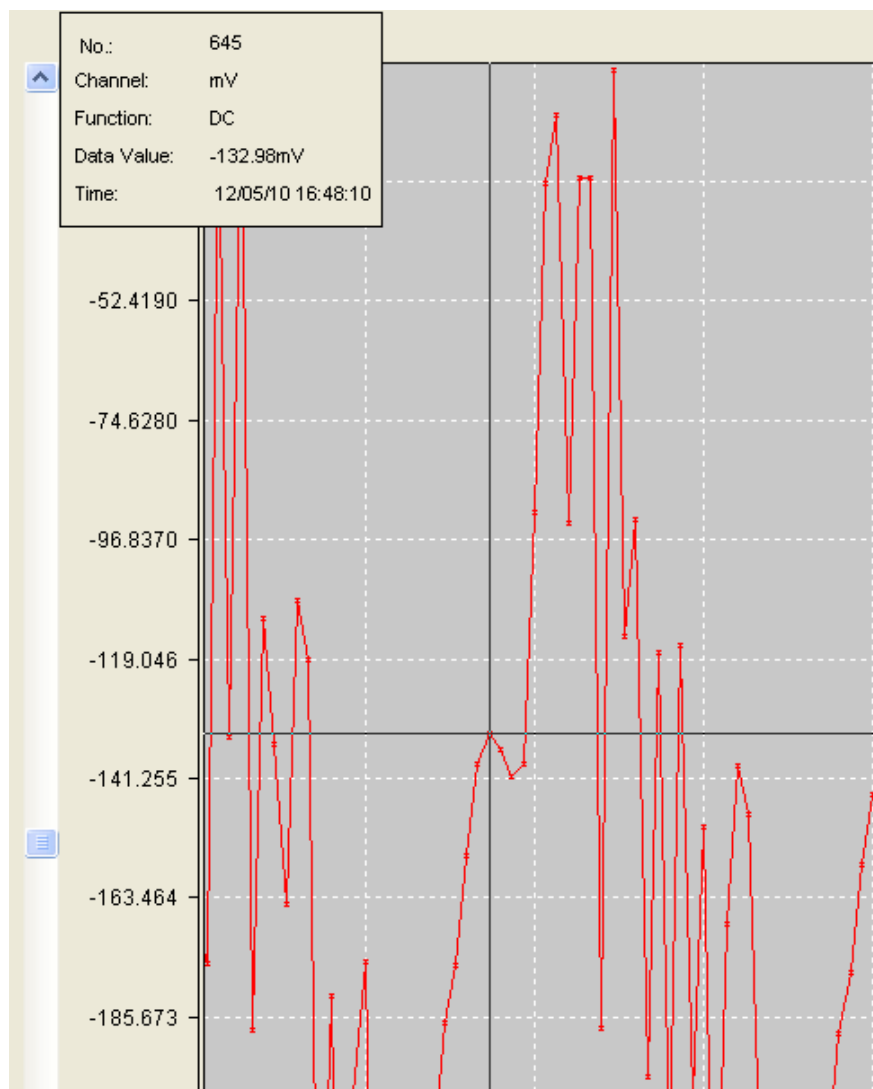
Cursor: When the cursor icon  is selected, the icon will highlight 

When the cursor mode is selected:

- Click a data point on the graph to indicate its value.
- Click on or near a data point to indicate the value of the data point.

The data point selected can be changed by navigating the cursor or by:

- Using the clicking method.
- Clicking and dragging the mouse horizontally in the graph.

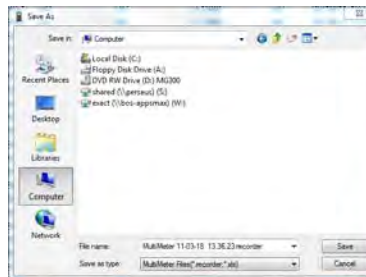



Click the “Data List” Tab to open the Data List window (as shown below).

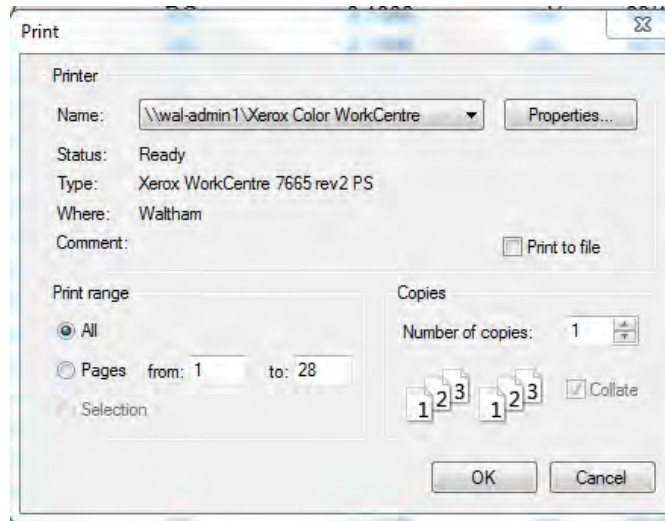
No.	Channel	Function	Data Value	Unit	Time
2045	mV	DC	0.1300	mV	03/18/11 13:34:30
2046	mV	DC	0.1300	mV	03/18/11 13:34:31
2047	mV	DC	0.1300	mV	03/18/11 13:34:31
2048	mV	DC	0.1300	mV	03/18/11 13:34:32
2049	mV	DC	0.1300	mV	03/18/11 13:34:32
2050	mV	DC	0.1300	mV	03/18/11 13:34:32
2051	mV	DC	0.1300	mV	03/18/11 13:34:33
2052	mV	DC	0.1300	mV	03/18/11 13:34:33
2053	mV	DC	0.1300	mV	03/18/11 13:34:33
2054	mV	DC	0.1300	mV	03/18/11 13:34:34
2055	mV	DC	0.1300	mV	03/18/11 13:34:34

File Save and File Open

1. Click the  icon to open the file save dialog box.



2. Name the file and save it using the default extension. The file will be saved with the “.recorder” extension to be reopened in the Multimeter software program and also as a “.xls” file to be opened in a spreadsheet program.
3. To open an existing data file for viewing on the data graph window, click on the  icon and select a “. recorder” document.



Print graph and list

Print Setup:

Print Preview: Preview the data graph or the data list.

Print: Print the graph or the list.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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