

# Ohm Metrics CM2800-D Series

Digital Display for the CM2800 Dual Wire Resistance Monitor

CM2800-D is a digital display device to be used with a CM2800 monitor. It shows the digital values of the results that CM2800 measures in a real-time and consistent mode so that the users can observe the accurate measurements of the monitoring status. Besides the digital measurement values, the device can also show the current limit options and other external interface control settings selected by the user. Using these external control interfaces, the user can connect the warning of each operator to an external siren.

The Ohm Metrics' CM2800 Series dual conductor workstation monitor provides continuous, uninterrupted monitoring of most grounding parameters on a workbench or in a tool, in compliance with ANSI 6.1 and ANSI/ESDA S.20.20 requirements



**CM2800-D**  
Monitor Digital Display  
used the CM2800 Series

## Product Specifications

Power source: DC Power Supply: 5VDC, 150mA  
LCD Display: 20 x 2 characters  
Calibration Interval: Once a year  
Dimensions: 4" x 3"x 1"  
Monitor Case: Stainless Steel

LCD Display Format: 5-digit real-time display for operator resistance, operator voltage, mat resistance, and tool resistance.

Parameters Status: Display ID# and S/N#, current high/low limits, monitored item options selected, and current monitoring result for operator resistance, operator voltage, mat resistance, tool resistance

Tool Control Status: Display current status of external interface control settings of G1 and G2

OPC Status: Display current status and control limits

Display Control: Mini Enable/Disable push button

## Product Number

CM2800-D Digital Display

This document is prepared for our customers as a service, and is to the best of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing before determining that products mentioned are suitable.



Transforming Technologies, LLC

3719 King Road.  
Toledo, OH 43617

Phone: 1.419.841.9552  
Fax: 1.419.841.3241

[www.transforming-technologies.com](http://www.transforming-technologies.com)

*Outstanding Alternatives in Static Control*

## Transforming Technologies

### **CM2800-D Digital Display for the CM2800 Dual Wire Resistance Monitor**

Push the red "Menu" button to enter the 1st page of the on-screen menu. There are totally 8 pages in the menu to display: Note that the display module will go back to main screen if the menu screen is idle for more than 30 seconds.

(CM2800-D Screens Menu)



**Main Screen:** Display the real-time measurement value of the resistance and voltage.

**PAGE 1:** Display CM2800's ID number, S/N#, current limit option and status for V1 and V2.

**PAGE 2:** Display the current High/Low limit option and status for OP1 and OP2.

**PAGE 3:** Display the current limit option and status for M1, M2, G1 and G2.

**PAGE 4:** Display the real-time measurement results in "OK" or "Err" for all monitored items of CM2800.

**PAGE 5:** Display the current limit option and status of OPC1.

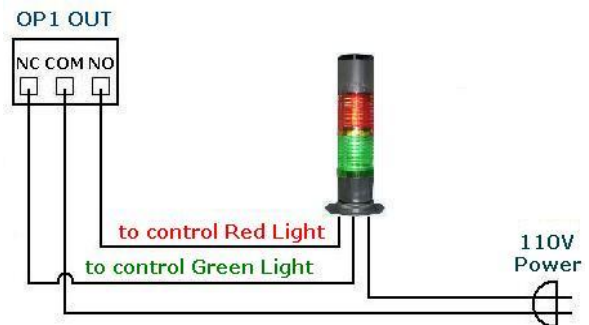
**PAGE 6:** Display the current limit option and status of OPC2.

**PAGE 7:** Display the current control status of G1 Input and G2 Input.

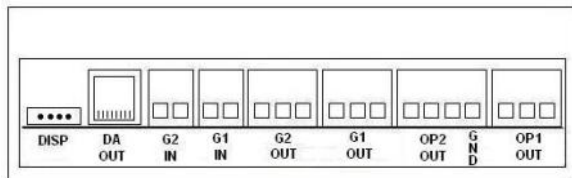
**PAGE 8:** Display the hardware version of CM2800 and CM2800-D.

Note: Displays "O" for the monitored items, "X" for disabled items.

External Alert Set Up



All of the connections to the CM2800-D are made on the back panel as shown in the diagram below:



Phoenix connectors are used for external connections:

- "OP1 OUT": Dry-Contact relay output for OP1 alarm.
- "OP2 OUT": Dry-Contact relay output for OP2 alarm.
- "GND": DC power ground.
- "G1 OUT": Dry-Contact relay output for G1 alarm.
- "G2 OUT": Dry-Contact relay output for G2 alarm.
- "G1 IN": Open/Short input control from external device for G1
- "G2 IN": Open/Short input control from external device for G2.
- "DA OUT": Digital/Analog Output. These signals are optional.

The "OP1 OUT" dry-contact relay is activated along with the monitoring status of OP1's resistance and voltage. When OP1's resistance or voltage exceeds the preset limits, the corresponding built-in dry contact relay will switch from NC to NO. Every relay has 3 contacts with the center contact as common contact, the left contact as NC (Normally Close) and the right contact as NO (Normally Open). Each of these relays has contact rating of 1A at 30VDC, 2A at 120VAC, and 3A at 24VDC.

The "OP2 OUT", "G1 OUT" and "G2 OUT" can be activated in a way similar to "OP1 OUT". These relay contacts can be used to control the external devices such as a tower siren or other access control devices. In the connection diagram below, we illustrate how to utilize "OP1 OUT" to control an external 110V Green/Red tower alarm.

This document is prepared for our customers as a service, and is to the best of our knowledge true and accurate. However, it is understood and agreed by the users of this document that we will accept no liability for the conclusions reached. Users of this document may therefore wish to perform additional testing before determining that products mentioned are suitable.