

CWR-CS CURRENT SENSOR

Introduction

The CWR-CS is an optional accessory that can be used with any MICRO-AIDE CWR series Event Recorder. It is equipped with four general purpose current sensing inputs. Any of the first four Analog Inputs (i.e., A1 - A4) of the CWR-22XL can be individually configured to measure either AC or DC current. Refer to the section entitled “Analog Configuration (A)” on page 23. The CWR-CS provides the hardware by which the voltage sensing Analog Inputs of the recorder are converted to current operation. Figure 8 on page 92 provides an illustration of the CWR-CS.

Key Features

There are several important features concerning the CWR-CS the user may wish to consider.

- Either AC or DC currents in the range from 0 to 25.5 A can be measured.
- Each input is completely isolated from the current carrying conductor. The conductor is simply inserted through one of four holes in the unit.
- Hall-Effect circuitry is used to provide a wide operating range and stable performance.
- No adjustments or calibration steps are required prior to operation.
- No external power connections are required. The Event Recorder provides the power.
- The CWR-CS can be located up to 15' away from the recorder.
- Each insertion hole will accommodate a conductor terminated with a .5" ring lug.

Installation and Setup

Figure 8 on page 92 illustrates a typical CWR-CS installation. The unit may be mounted in any orientation (e.g., vertical or horizontal). It is not sensitive to the earth's magnetic field. The base of the unit provides four mounting holes. A shelf or back board makes an ideal mounting platform.

The current carrying conductors to be measured must be inserted through the holes in the unit. Turn the power off to the CWR-22XL. Enable the required Analog Input circuits in the CWR-22XL by turning on the appropriate switches located on the main PCB of the recorder. The correct procedure is described in the section entitled “Analog Input Switches (SW1)” on page 74.

Each CWR-CS is shipped with a 15' cable. Connect the cable from the CWR-CS to the connector labeled "Current Sensor" located along the left end panel of the CWR-22XL. Apply power to the recorder. The recorder is now ready to report current measurements.

Caution Never connect a Current Sensor input to an Analog Input that has a voltage source connected. Damage to the Current Sensor or improper operation of the voltage source may result.

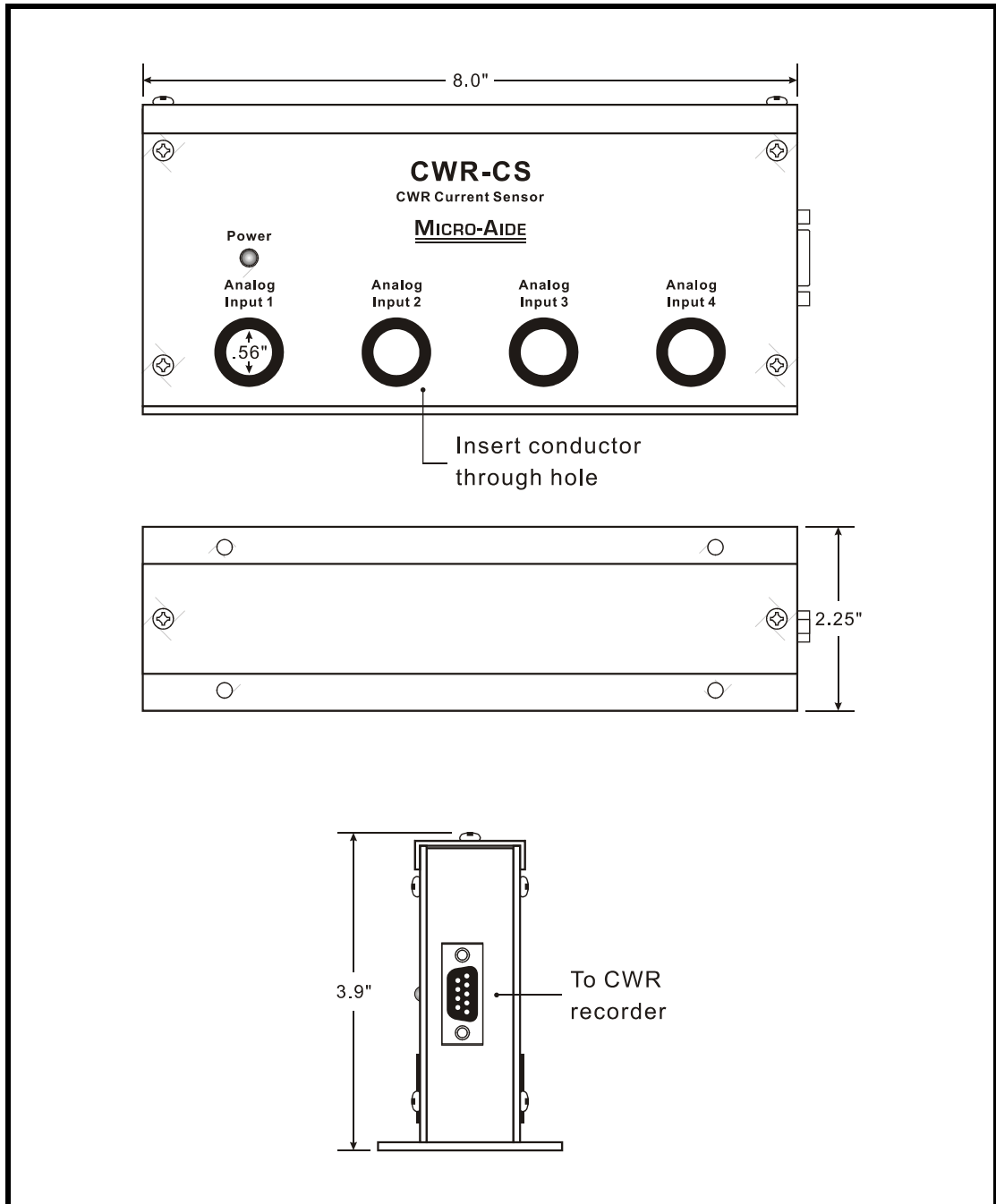


Figure 8 - CWR-CS Front, Top and Side Views