MODEL 8001

8000 SERIES™ MAINFRAMES

The Model 8001MF Mainframe is a component of the IED 8000 Series™, a computer controlled, modular, four bus audio system all in one mainframe. By the selection of function cards, it can provide multi-channel equalization, multi-channel audio zone mapping, multi-channel noise sensing and compensation, multi-channel monitoring and testing, logic sensing, logic outputs, form C relay closures, variable voltage sensing, variable voltage outputs, signal generation, and analysis.

The Model 8001MF Mainframe provides a housing for and connections to and between the mother board, the power supplies, and the 8000 Series™ function cards. It has slots for a total of 24 function cards. Slots 1 through 22 can be used for any function card except the 8001CPU or the 8001SA. Slots 25 and 26 are dedicated to the 8001SA System Signal Analysis Card and the 8001CPU Central Processing Unit, respectively.

Slots 1 through 22 are arranged vertically and are numbered from left to right. Slots 23 and 24 are oriented horizontally and are located on the right side of the mainframe below slots 1 through 22. Slots 25 and 26 are located similarly, but on the left side of the mainframe. See figure 1.

Input and output connection is easy through the use of plug-in rear panel compression-type screw terminal connectors. The system can be powered from a 120 VAC or 240 VAC line, with any line frequency from 50 to 400 Hz.

The 8001MF Mainframe mounts in a standard 19" equipment rack. It occupies 4 EIA rack spaces (7" of vertical space).

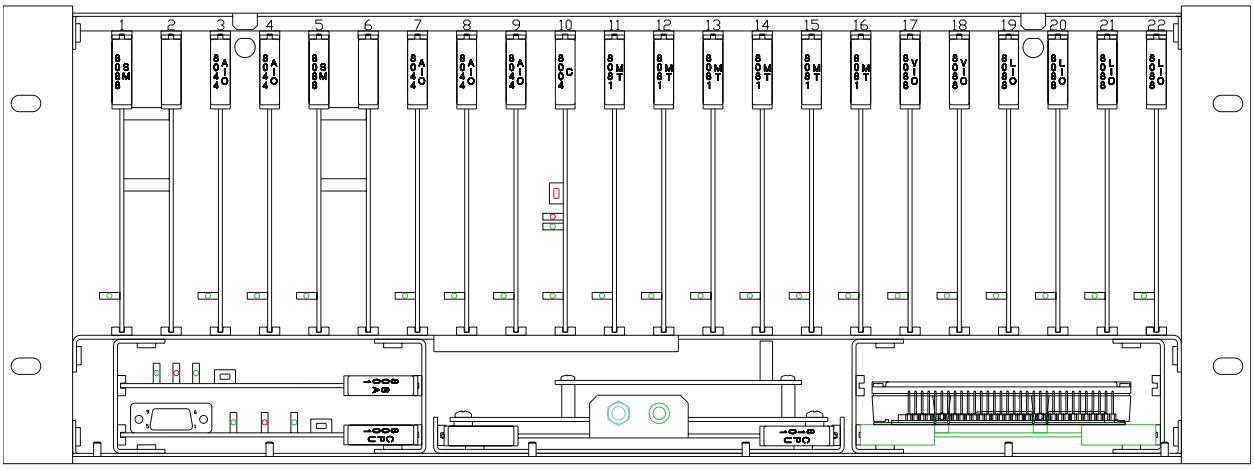

Figure 1 - 8001MF with Typical Card Complement
Front view, door not shown

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OPTIONS

REAR CONNECTOR PLATE OPTIONS

There are 4 rear connector plate options available. Refer to Figure 2 for details. Two of the plates are for the rear serial connections to the 8001CPU plus the Monitor/Test signal connections via a 12 position screw terminal connector, and one of the plates is for the 100 Mbps Ethernet connection. Also located on the screw terminal connector is the system fault relay from the 8001CPU. The 8232RP is used to remote the serial port from the front when no serial port option is purchased for the second serial port. The 8000RP is used as a blank when no other rear connector plate options are used.

INTERMEDIATE CONNECTIONS

In order to allow for flexibility in grouping of functions on the rear panel according to the needs of the application, the function card connectors are routed to the input/output connectors via ribbon cables. There are two ribbon cables per function card. The cards are designed so that the connections to each cable will be grouped by function, such as inputs, outputs, control signal, sense signal, or whatever is applicable to the particular card. The ribbon cables can also be looped between cards when it is necessary to route signals from card to card. The removable rear portion of the top panel facilitates cable installation and removal, and power supply access.

REAR INPUT/OUTPUT CONNECTORS

There are 8 types of rear input/output modules which are used for wiring to/from the function cards. Each module is labeled to show its input/output functions and connections. See figure 3 for part numbers and layouts. The IED8048TB is a generic module used when rear panel space runs out and it becomes necessary to use one module for several functions.

SPECIFICATIONS

ELECTRICAL

1. Input Voltage Range
   - 120 VAC Version . . . . . 90 VAC - 130 VAC
   - 240 VAC Version . . . . . 200 VAC - 240 VAC
2. Input Frequency . . . . . 50 Hz - 400 Hz
3. Fuse . . . . .
   - 120 VAC Version . . . . . 5 mm X 20 mm, 5 A slow blow
   - 240 VAC Version . . . . . 5 mm X 20 mm, 2.5 A slow blow

CONNECTORS

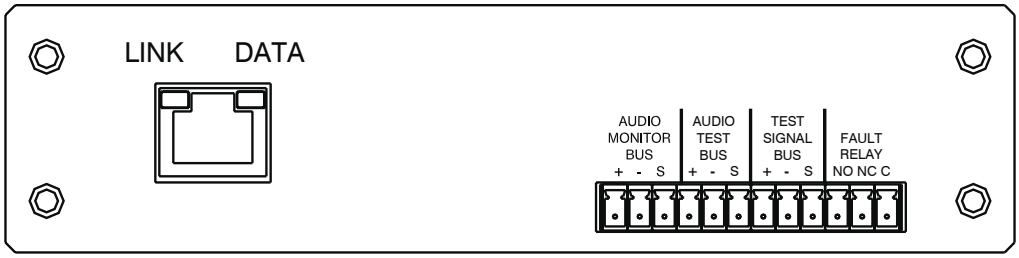
1. RS232 . . . . . DB9 PC Mount Female
   AMP 205734-1, or equivalent
2. 8010RPTB RJ-45
3. Input/Output Terminal Block, Female . . . . . Phoenix 1803374
4. Mating Compression-type Screw Terminal Connector, Male . . . Phoenix 1803375
5. Power Cord . . . . . Belden 17250, or equivalent

MECHANICAL

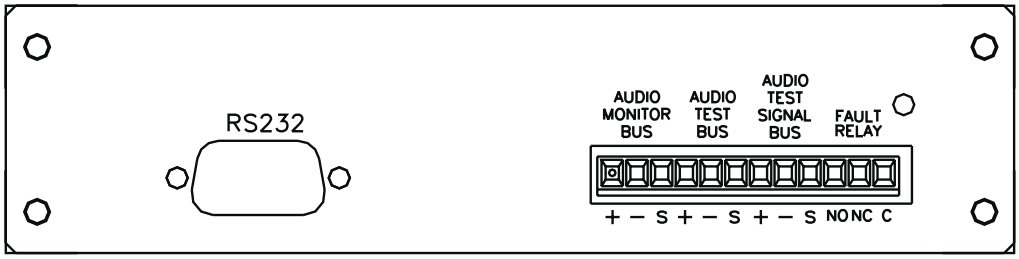
1. Size (maximum overall dimensions as viewed from the front)
   - Height . . . . . (17.8 cm) 7.00"
   - Width . . . . . (48.3 cm) 19.0"
   - Depth
     - Without Power Cord . . . . . (41.7 cm) 16.4"
     - Additional depth allowance for Power Cord . . . . . (5.1 cm) 2.5"
2. Weight . . . . . (9344 gm)20.6 lb
   Function cards and power supplies not included

ENVIRONMENTAL

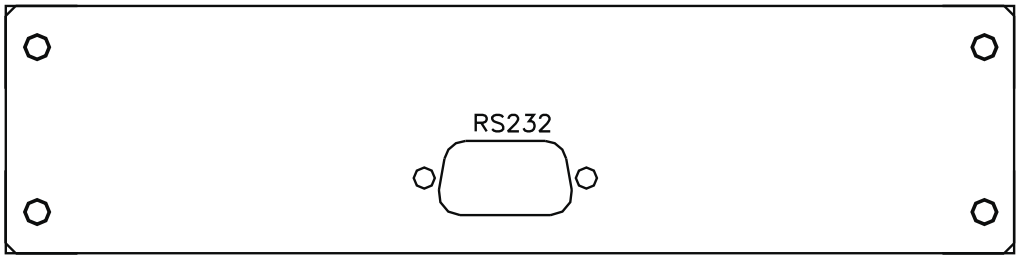
1. Operating Temperature Range . . . . . (+32 °F - +104 °F) 0 °C - +40 °C
2. Storage Temperature Range . . . . . (–40 °F - +158 °F) –40 °C - +70 °C



IED8010RPTB



IED8232RPTB



IED8232RP

IED8000RP

Figure 2 - 8001MF Mainframe Rear Connector Plate Options

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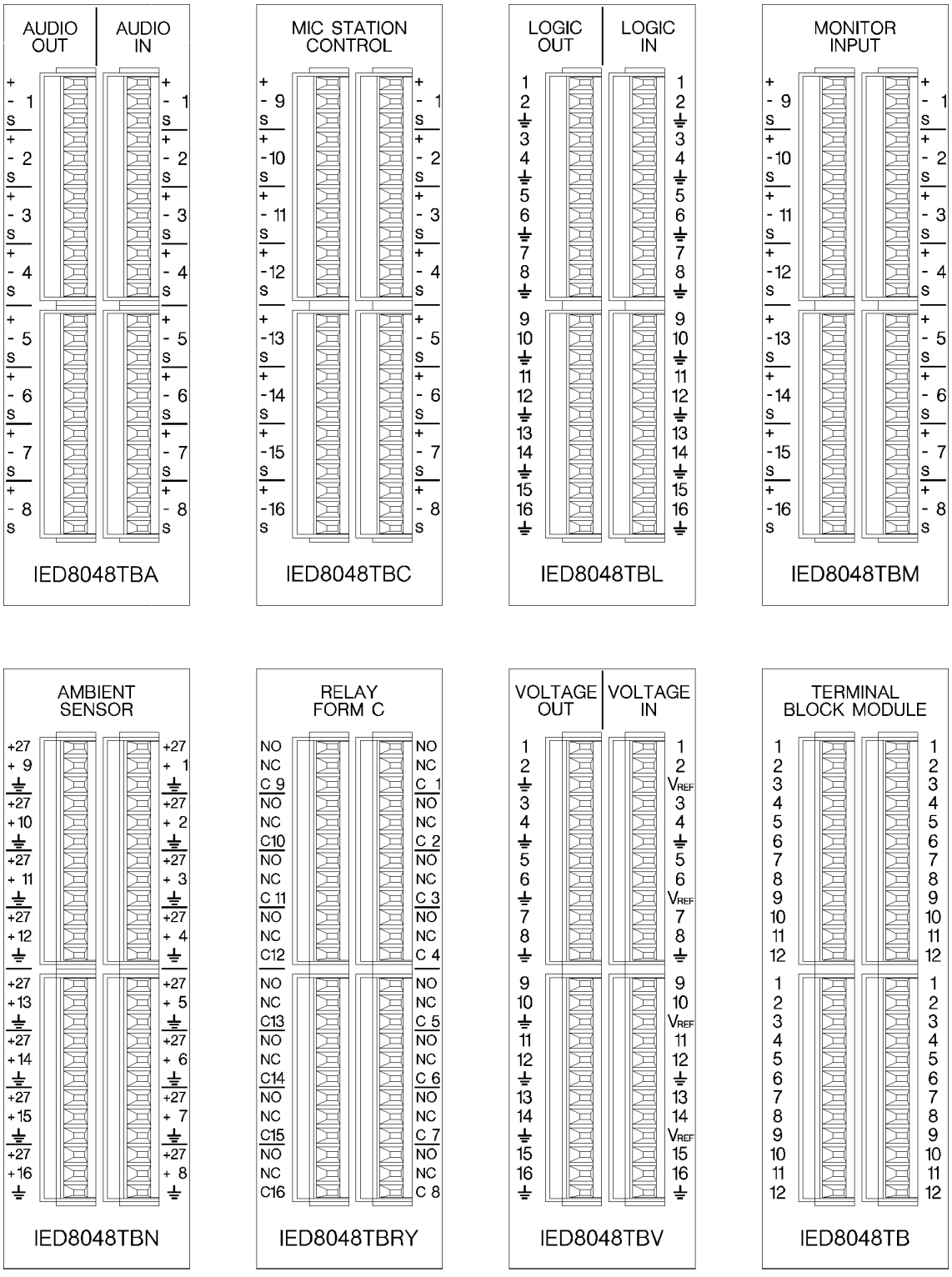

Figure 3 - Rear Terminal Block Connector Options

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