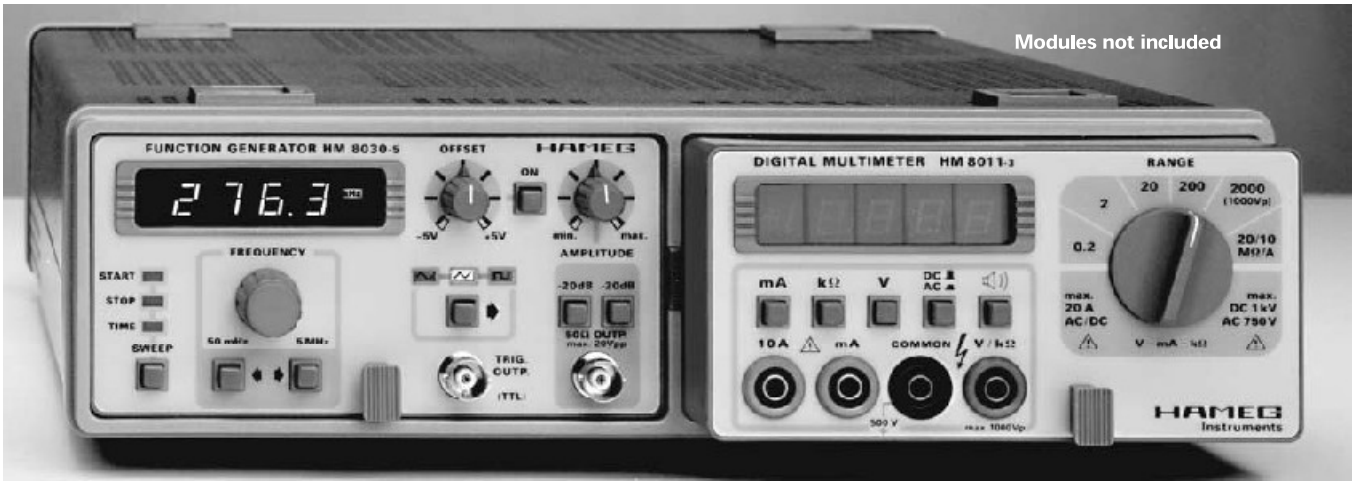
The HAMEG **Modular System 8000** is a suite of instruments that consists of the **HM8001-2 mainframe** and a group of modular inserts. The mainframe holds two modules at a time and provides a source of regulated power and on/off control for the modules and acts as a stackable rack/enclosure station for groups of two modules. Over **100,000** units of this series have been sold.

Significant **space savings** and a **high degree of flexibility** are achieved through the use of the System 8000. An assortment of varied measurement instruments are available within the series. An outstanding benefit of the use of the System 8000 is its ability to adapt to changing test station requirements through the use of **plug-in instruments**. Since the plug-ins do not contain any power supplies, they are small, lightweight and convenient to store, when not being used. For special applications, **blank modules** are available for customer designed plug-ins.

A typical example of a compact arrangement for the Modular System would utilize an **HM8001-2 mainframe** with an **HM8040 Triple Power Supply** and an **HM8030-5 Function Generator** stacked with an **HM407 Digital Oscilloscope**. The stacked combination would be able to supply power to all circuits under test, generate an input stimulus waveform and the circuit could be observed with the oscilloscope. All the test equipment would only take up a small amount of lab bench space.

Also designed to be used with an oscilloscope is the **HM8042 Curve Tracer**. It measures characteristics of semiconductors. The **microprocessor-controlled** plug-in instrument displays and measures with **on-screen cursors** dynamic parameters that can be stored for accurate comparison of devices.



Mainframe HM 8001-2

General

Mainframe with power supply and compartments for 2 modules

Module Supply Voltages

2x8V$_{AC}$ capable of sourcing 0.5A each
2x5V$_{DC}$ capable of sourcing 1A each
2x20V$_{DC}$ capable of sourcing 0.5A each
Voltage values between 5V and 20V programmable via plug in module (either polarity)
Power Source Specifications:
Total Power (2 modules): 36W max.
DC Voltages: are electronically regulated, floating, short-circuit-proof
Isolation (Test Voltage to Ground): 500V

Miscellaneous

Option HO801: 4 BNC signal terminals in back of instrument
Power ON/Off control: Center of front panel
Power Input: 115 / 230V$_{AC}$ ± 10% @ 50 / 60Hz
Power Consumption: 110VA, maximum
Overload Protection: Thermal
Safety: Class I (IEC 348).
Dimensions: **W** 285, **H** 75, **D** 365mm (11 x 3 x 14", nom.)
Weight: 4kg (8.8#)
Color: Techno-Brown

The **HM8001-2** mainframe and its internal power supplies are the basis for the **HAMEG Modular System 8000**. It can accommodate any two System 8000 modules. All 8000 series module types can be individually powered from the mainframe's independent, floating output voltages. The maximum total power output for each mainframe is **36Watts**. If a load draws excessive power, the transformer's safety shut-down protection will activate until the load is removed. The 8000 series modules draw less than **12** Watts each except for the **HM8040-2 Power Supply module**, which requires up to 30 Watts. Only one HM8040-2 should be used per mainframe. Four BNC connectors (option HO801), at the rear of the mainframe, allow signals to or from the modules to be interfaced to the outside.

The mechanical strength of the mainframe allows stacking of a maximum of **5 units**, allowing for minimal lab bench footprint space. Stacking is facilitated by **removable foot rests** on top of each unit that prevents sliding when stacked. Since the largest dimension is depth, a large number of modules/mainframes can be stacked and combined to form a test setup with minimal front panel space. The mainframe of the **Modular System 8000** can also be stacked with any other **HAMEG** instrument, such as oscilloscopes and **System 8100** series instruments.