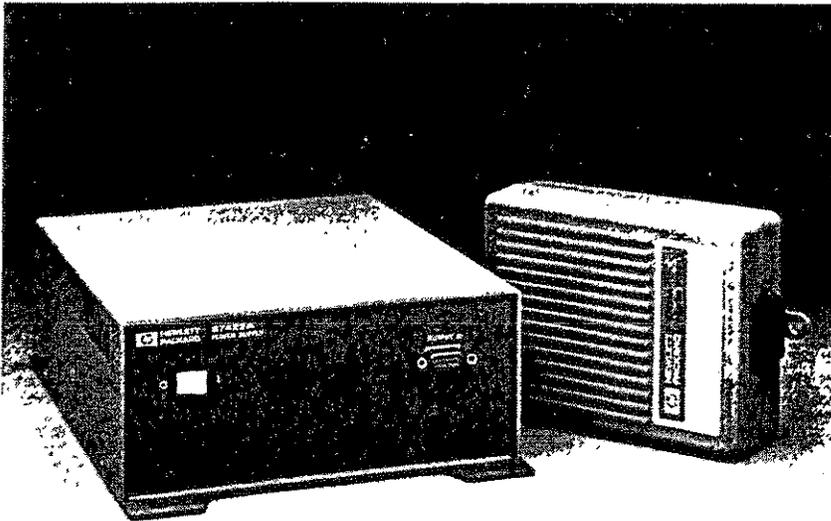


# HP 87421A HP 87422A Power Supply

## Technical Data



- Designed specifically for HP Microwave System Amplifiers
- Bias cable permits remote placement
- Compact size for easy system integration

The HP 87421A and 87422A Power Supplies are universal input, dc switching power supplies designed to provide the bias voltages needed to operate HP Microwave System Amplifiers.

These compact power supplies are ideal for integration into a system or for use on a benchtop. The 2 meter dc bias cable permits the amplifier to be remotely located, allowing it to be placed out of the way or where space is not critical.

The HP 87421A is a 25 watt,  $\pm 12V$  dc power supply designed to power the HP 83006A, 83017A, 83018A, and 87415A Microwave System Amplifiers. A 2 meter cable is included for direct connection to the amplifier.

The HP 87422A is a 90 watt,  $\pm 15V$  dc power supply designed to power the HP 83020A Microwave System Power Amplifier. One additional  $\pm 12V$  dc output is provided to power a preamp such as the HP 83006A or 83017A.

Included with the power supply are the necessary 2 meter cables to connect to the amplifier.

The HP 87421A may also be used to provide bias voltages for the HP 83440C High Speed Lightwave Converter. Using the HP 83440-60009 Lightwave Converter Power Supply Adapter, the HP 87421A becomes a compact, convenient power supply for use with the Lightwave Converter.

### Hewlett-Packard to Agilent Technologies Transition

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### Umbenennung Hewlett-Packard in Agilent Technologies

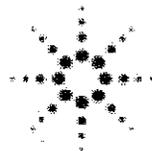
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### Transición de Hewlett-Packard a Agilent Technologies

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**Agilent Technologies**

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此文档支持先前以惠普公司 (Hewlett-Packard) 商标名称交付的产品。此商标名称现已更名为安捷伦科技公司 (Agilent Technologies)。两个商标名称的产品在功能上完全相同，只是更改了名称。文档中仍然会提到惠普产品，但其中一些产品名称已改为安捷伦科技公司。

### 關於惠普公司更名爲安捷倫科技事宜

本資料支持先前以惠普公司 (Hewlett-Packard) 品牌交付的產品，而該品牌現已改名爲安捷倫科技 (Agilent Technologies)。兩個品牌的產品功能相同，僅名稱更換而已。本資料仍含有惠普公司產品參數，但其中的一些產品名稱已改爲安捷倫科技。

## Product Specifications

| Model Number                           | HP 87421A   | HP 87422A   |
|--|---|---|
| Output Voltage/Current                 | +12V at 2 A<br>-12V at 200 mA   | +15V at 4.0 A<br>-15V at 200 mA<br>+12V at 2 A<br>-12V at 200 mA  |
| Output Power                           | 25 W  | 90 W  |
| Line Regulation                        | 0.1 %   | 0.1 %   |
| Load Regulation<br>(20 % to full load) | 2.0 %   | 1.0 %   |
| Output Ripple                          | 25 mV RMS max   | 25 mV RMS max   |
| Output Noise                           | 2 % peak to peak max  | 2 % peak to peak max  |
| Overvoltage Limit Protected            | Yes   | Yes   |
| Short Circuit Protection               | Current limited for overload and short circuit protection. Normal operation returns upon removal of overload. | Current limited for overload and short circuit protection. Normal operation returns upon removal of overload. |

## General Specifications

|                  |                      |                      |
|------------------|----------------------|----------------------|
| AC Input Voltage | 90–250 VAC, 50/60 Hz | 90–240 VAC, 50/60 Hz |
| Fuse             | 1 A, slow blow       | T 3.15 A             |
| Weight           | 0.9 kg (2.0 lb)      | 2.1 kg (4.6 lb)      |
| Shipping Weight  | 1.8 kg (4.0 lb)      | 3.2 kg (7.0 lb)      |

## Environmental Specifications

|                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| Operating Temperature | 0° to +55°C full load | 0° to +55°C full load |
| Storage Temperature   | -40° to +70°C         | -40° to +70°C         |

## Product Safety

CAN/CSA 234  
IEC 1010  
UL 1950

CAN/CSA 234  
IEC 1010  
UL 1950

## Other Product and Operating Information

Operation of the power supplies involves connecting the power supplies output to the amplifier dc input with the cable provided. The power supplies include a power cord with protective ground for connection to 90–240 VAC.

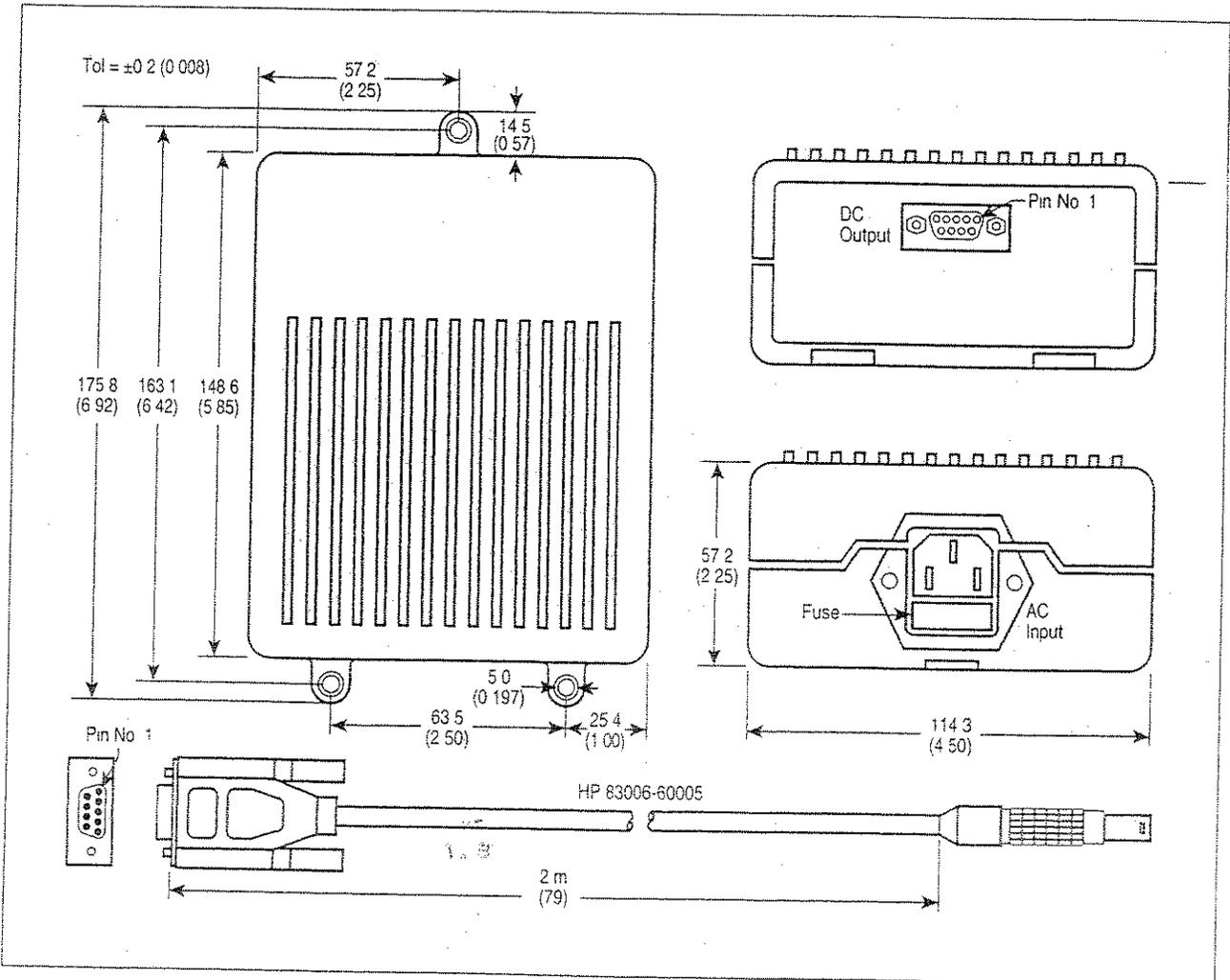
Mounting holes are provided as shown in the outline drawings. The power supplies may be mounted in any orientation with user supplied hardware.

To ensure continued compliance to product safety and EMC specifications, connect the power supplies to an amplifier only with the cable provided. Do not attempt to modify or extend the dc output cable. Contact your local Hewlett-Packard Sales Office for help with special applications requiring longer cables.

The power supplies have a fuse located next to the IEC appliance inlet. If it is necessary to replace

the fuse, disconnect the power supply from both AC power and the amplifier. Using a slotted screw driver, open the fuse cover and replace the fuse.

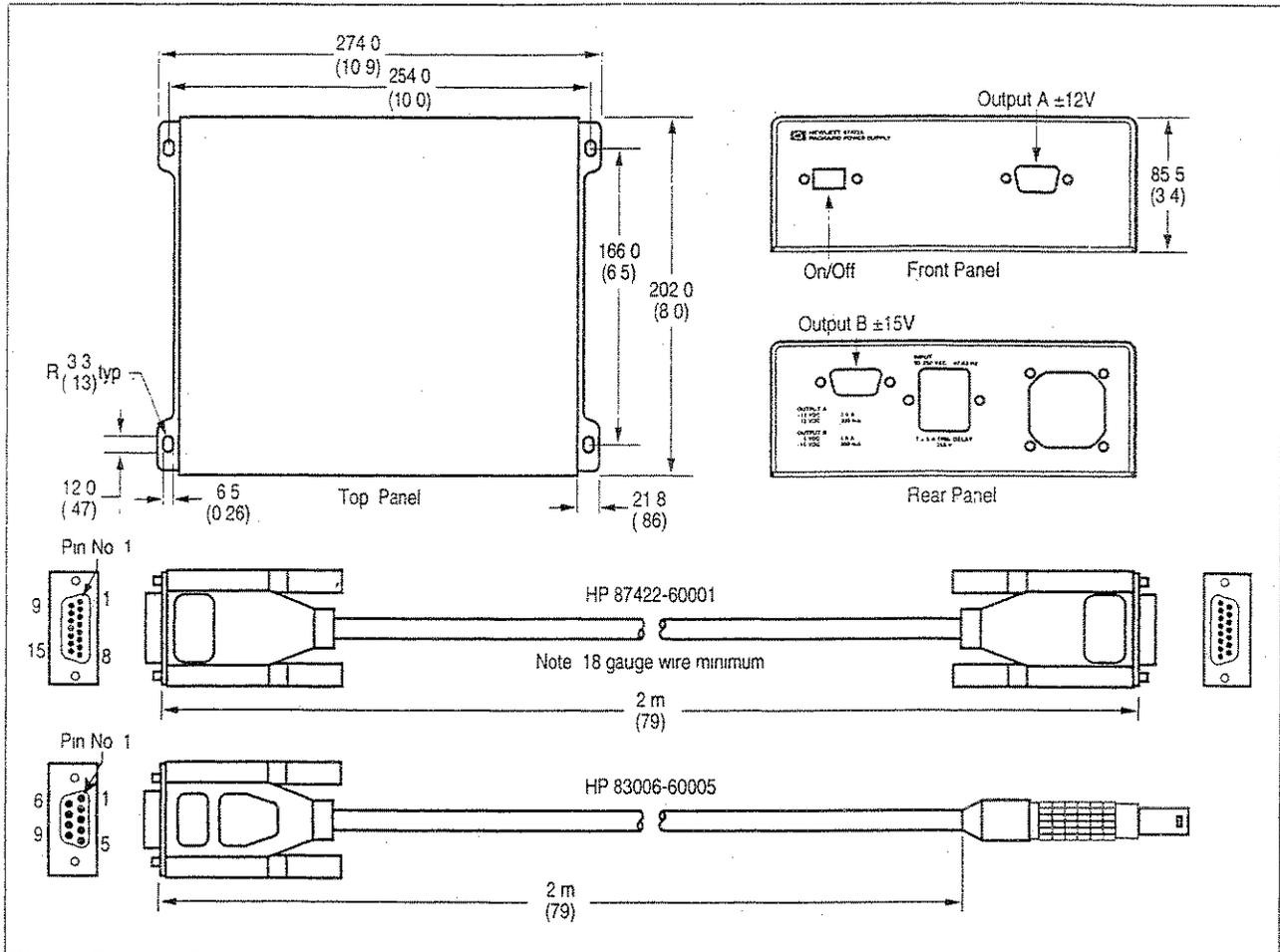
The power supplies contain no user serviceable parts (with the exception of the fuse). If service is required, please contact your Hewlett-Packard Sales Office or nearest Hewlett-Packard Service Center.



The HP 87491A Power Supply pro-

HP 83006A, 83017A, and 83018A. The power supply comes with a 2 meter long cable to allow easy connection between the amplifier and the power supply. Dimensions in millimeters and (inches).

# Ordering Information



## HP 87421A Power Supply

Includes power supply, AC power cord, and HP part number 83006-60005, which is a 2 meter cable with a 3-pin connector on one end and a D-subminiature connector on the other end for direct connection to the HP 83006A, 83017A, 83018A, and 87415A Microwave System Amplifiers.

## HP 87422A Power Supply

Includes power supply and HP part number 83020-60001, which is a 2 meter cable with 15-pin connectors for direct connection to the HP 83020A amplifier. An additional dc output is provided to supply power to a preamplifier such as the HP 83006A or 83017A.

## Other Instruments and Accessories

HP 83006A Microwave System Amplifier 0.01-26.5 GHz

HP 83017A Microwave System Amplifier 0.5-26.5 GHz

HP 83018A Microwave System Amplifier 2-26.5 GHz

HP 83020A Microwave System Power Amplifier 2-26.5 GHz

HP 87415A Microwave System Amplifier 2-8 GHz

HP 83440C High Speed

dc-20 GHz, 1000-1600 nm

HP 83440-60009 Lightwave Converter Power Supply Adapter

The HP 87422A Power Supply provides the dc power needed to bias the HP 83020A. DC cables shown above shipped with power supply. Dimensions in millimeters and (inches).

For more information, call your local HP sales office listed in your telephone directory.

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