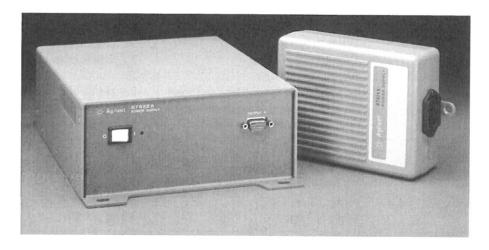
EQPHP-89421A



Agilent 87421A/87422A Power Supply

Product Overview

- Designed specifically for Agilent Technologies microwave system amplifiers
- · Bias cable permits remote placement
- · Compact size for easy system integration



The Agilent 87421A and 87422A power supplies are universal input, dc switching power supplies designed to provide the bias voltages needed to operate Agilent 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 87421A is a 25 watt, ±12V dc power supply designed to power the Agilent 83006A, 83017A, 83018A, and 87415A microwave system amplifiers. A 2 meter cable is included for direct connection to the amplifier.

The 87422A is a 90 watt, ±15V dc power supply designed to power the Agilent 83020A microwave system power amplifier. One additional ±12V dc output is provided to power a preamp such as the 83006A or 83017A.

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

The 87421A may also be used to provide bias voltages for the Agilent 83440C high speed lightwave converter. Using the 83440-60009 lightwave converter power supply adapter, the 87421A becomes a compact, convenient power supply for use with the lightwave converter.

Product specifications

	Agilent 87421A	Agilent 87422A
Output voltage/current	+12V at 2 A	+15V at 4.0 A
	-12V at 200 mA	-15V at 200 mA
		+12V at 2 A
		-12V at 200 mA
Output power	25 W	90 W
Line regulation	0.1%	0.1%
Load regulation (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 shod	Current limited for overload and short
	circuit protection. Normal operation	circuit protection. Normal operation
	returns upon removal of overload.	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

Other product and operating information

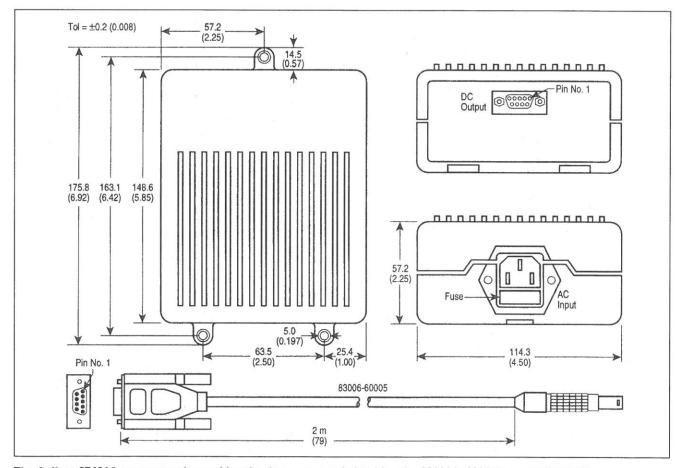
Operation of the power supplies involves connecting the power supplies output to the amplifier dc input with the cable provided. The power supplies include a power cord with protective ground for connection to 90–240 VAC.

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. For help with special applications requiring longer cables contact your Agilent call center listed on the back page.

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 screwdriver, 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 Agilent sales office or nearest Agilent Service Center.



The Agilent 87421A power supply provides the dc power needed to bias the 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 Agilent 87421A power supply

Includes power supply, AC power cord, and 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 Agilent 83006A, 83017A, 83018A, and 87415A microwave system amplifiers.

Agilent 87422A power supply

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

Other instruments and accessories

83006A Microwave System Amplifier, 0.01 to $26.5~\mathrm{GHz}$

83017A Microwave System Amplifier, 0.5 to $26.5~\mathrm{GHz}$

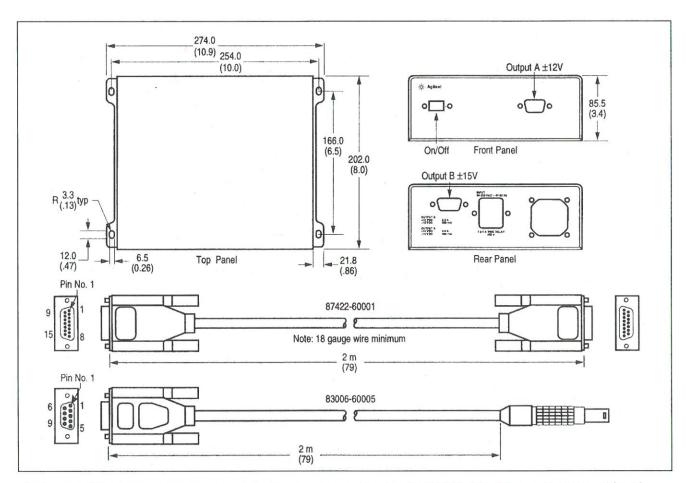
83018A Microwave System Amplifier, 2 to 26.5 GHz

83020A Microwave System Power Amplifier, 2 to $26.5~\mathrm{GHz}$

87415A Microwave System Amplifier, 2 to 8 GHz

83440C High Speed Lightwave Converter, dc to 20 GHz, 1000 to 1600 mm

83440-60009 Lightwave Converter Power Supply Adapter



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