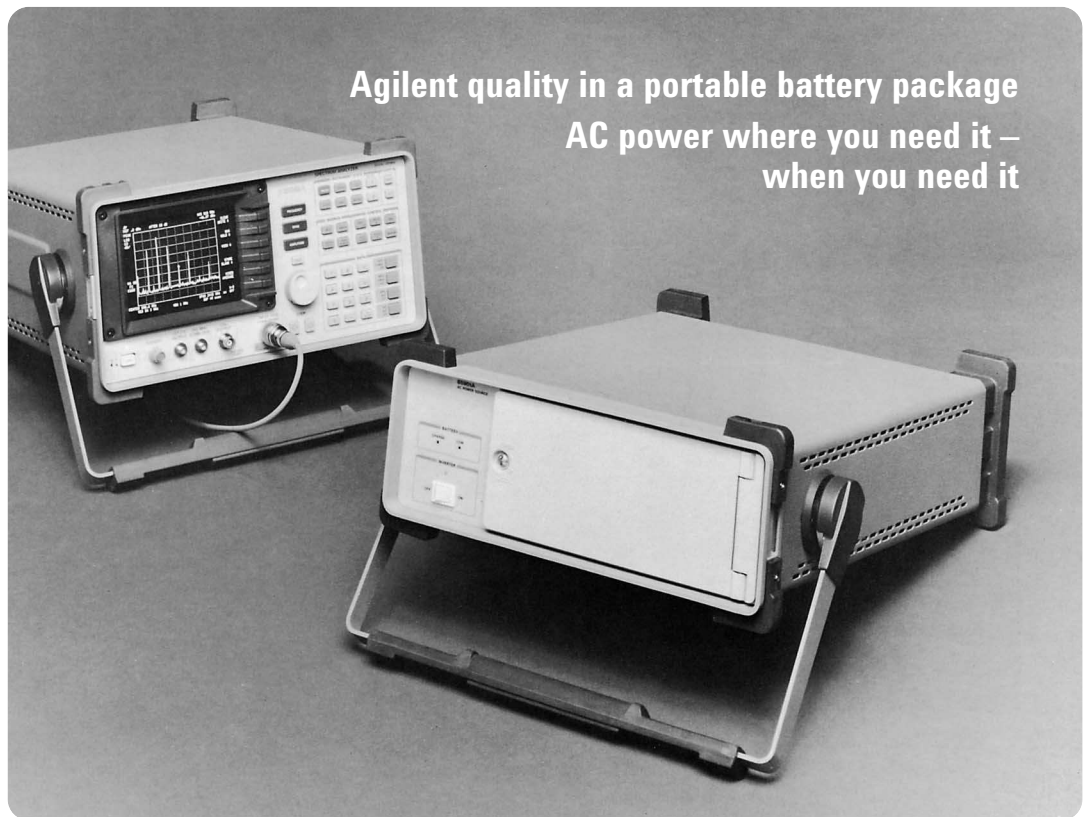


Agilent 85901A AC Power Source

Technical Overview



Agilent Technologies

Portable Power that Meets Your Needs

- **200 Watts continuous output**
- **115 Vrms or 230 Vrms output**
- **Internal battery or external 12 Vdc source**
- **Built-in charger**
- **Up to 2 hour operation of 8590A spectrum analyzer**
- **Easy to carry**

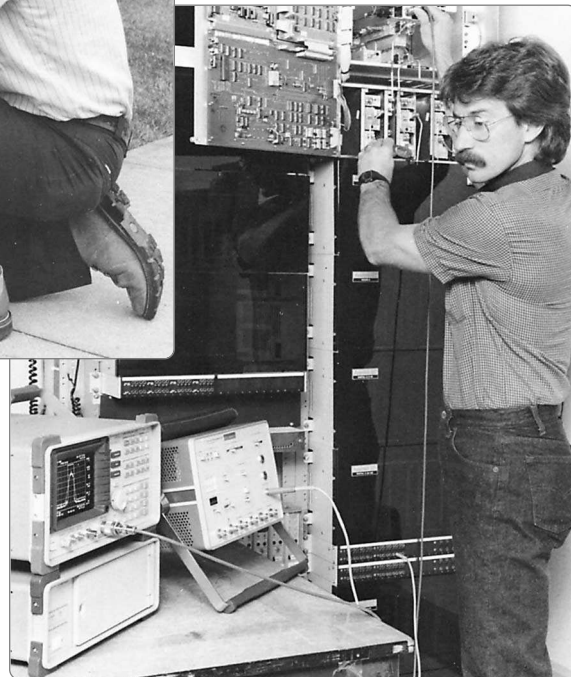
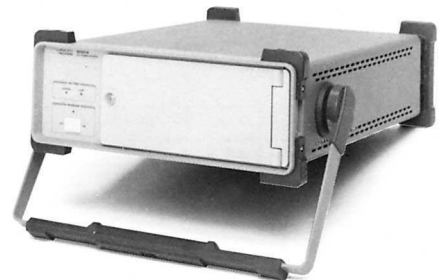
Remote power where you need it

Take the guesswork out of field measurements! The 85901A portable AC power source works with your test equipment to provide the power you need, where you need it. The power source is small, with a briefcase handle that makes it easy to carry and it fits into tight spots, even under an airline seat. You can use the built-in battery of the power source or connect it to an external 12 Vdc source for even longer operation.

Easy to use

Just plug your test equipment into the 85901A AC power source and turn the instrument on. You'll get more than an hour of operation at 100 Watts continuous load.

When the battery charge gets low, the power source automatically shuts off. This prevents any deep discharge degradation. You can recharge the battery in six hours or less from the point of full discharge.



Built-in protection

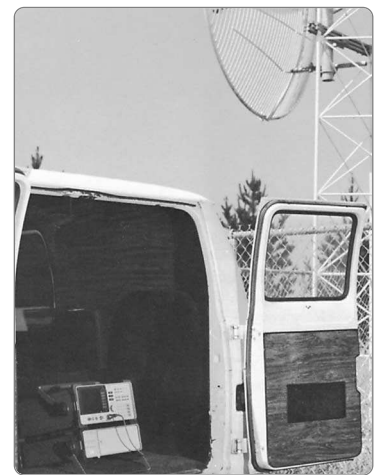
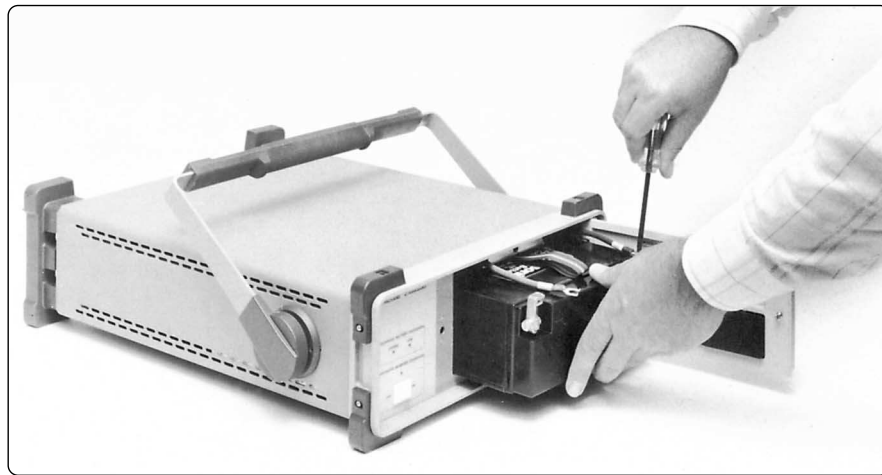
The 85901A AC power source protects itself and your test equipment. It has over-voltage, short-circuit, and over-load protection on the inverter output. The power source also has over-voltage protection on the inverter input and over-charge and over-discharge protection for the internal battery.

Designed for reliability

No compromises were made in designing the 85901A portable AC power source. Its gel-cell battery, control circuitry, and charger all fit into a briefcase-sized package similar to the 8590A portable spectrum analyzer. The internal battery of the power source, in its own rugged box, is accessible through a front-panel door and can be replaced by removing just two screws.

High quality goes anywhere

So now you can make measurements anywhere. An 85901A will provide power for your portable 8590A/8592A/8562A spectrum analyzers; for your oscilloscopes, voltmeters, and data acquisition test sets; or for whatever needs power. Make your tests where they are needed – when they are needed!



SPECIFICATIONS

The following specifications apply to the 85901A AC power source. Specifications describe the instrument's warranted performance over the 0 °C - 55 °C temperature range, except where noted. All specifications apply after the instrument's temperature has stabilized (typically 30 min. from turn-on). For complete specifications and characteristics refer to the *Operation and Service Manual* (85901-90001).

Input

Inverter

Voltage 10.8 to 14.5 Vdc

Charger¹

Voltage 90 to 250 Vac auto selected

Frequency 47 to 66 Hz

Power consumption 122 VA maximum

Output

Inverter

Voltage 135 or 270 peak \pm 5% rectangular waveform with 25% dead zone (115 or 230 Vrms \pm 5%)

Frequency 60 Hz \pm 0.1%, crystal REF

Maximum power 200 watts continuous

1. Turning the charger on automatically turns the inverter off.

SPECIFICATIONS (continued)

Battery shelf life (typical)

Storage temperature	Recharge interval
< 20 °C	18 months
20 ° to 30 °C	12 months
30 ° to 40 °C	6 months

General

Environmental temperature²

Operating	0° to 55° C
Storage ¹	
with battery	-20° to 40° C
w/o battery	-40° to 70° C

EMI

Conducted	VDE0871 level B
Radiated	VDE 0871 level B

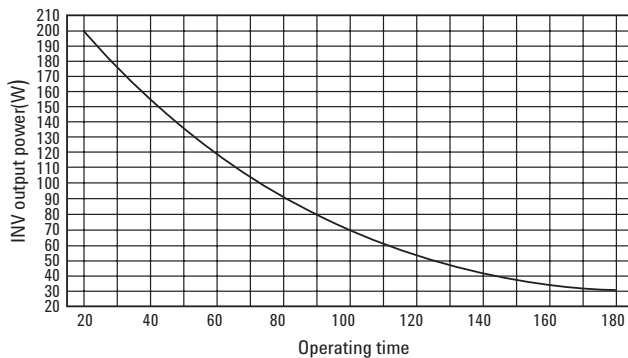
Battery^{2,3}

Type	Sealed lead acid
Voltage	12 Vdc (nominal)
Capacity	17 AMP-Hour (nominal)

Mechanical (nominal)

Dimensions	337(w) x 125(h) x 461(d) mm
Weight (with battery)	14.2 kg (31.3 lbs)
Weight (w/o battery)	8.0 kg (17.7 lbs)
Shipping weight	16.3 kg (36.0 lbs)

Typical operation times versus load – 85901A



Parts Information

85901A AC power source

(Includes 17 Amp-hour battery and one power cord adapter for use with Agilent Instruments, the 8120-5220 interconnect)

Power cord adapter

(The power cord adapter is used for connecting Agilent instruments to one of two female CEE22-V output connectors on the 85901A AC power source.)
8120-5220 extra interconnect

General Purpose Power Cord Adapters

(These allow country specific line cords to be plugged into the 85901A AC power source.)

8120-5210 European

8120-5211 U.S.A.

8120-5212 United Kingdom

1. Shelf life of battery decreases with either extended operation or storage at higher than 40 °C.
2. Battery cyclic life (charge-discharge) is nominally rated at more than 200 cycles.
3. Battery is a Matsushita Electric LCR12V17P lead acid gel-cell. Battery is also available from Agilent Technologies as part number 1420-0373.

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