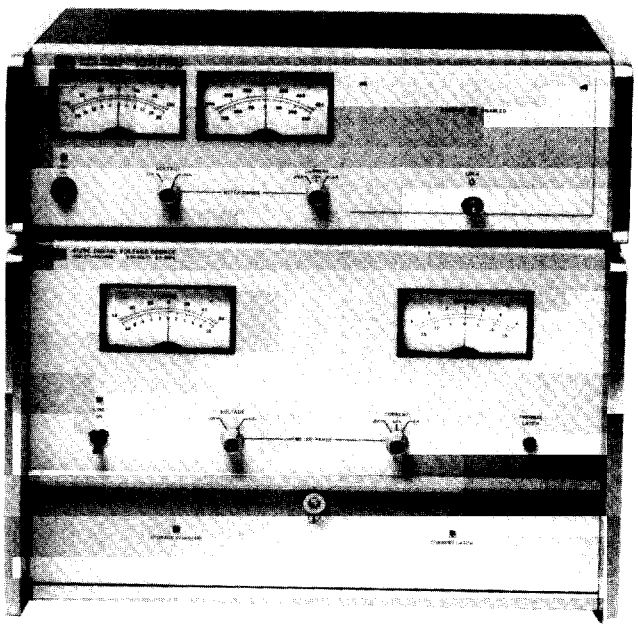
POWER SUPPLIES
Precision Bipolar System Supplies
Models 6129C–6131C & 6140A

- Fast, accurate, high resolution programming
- Bipolar output
- Current sink or source
- Programmable current latch (on voltage sources) or voltage limit (on current sources)
- Isolated output



HP 6131C (top) & 6129C

Description

The family of Precision Bipolar System Supplies consists of three voltage sources (HP 6129C, 6130C and 6131C) and one current source (HP 6140A). They provide easy, fast and accurate programming of their dc outputs, with many features oriented specifically towards efficient integration in automatic systems.

Isolation

All digital inputs are completely isolated from the analog outputs.

Programmable Current Limit (Voltage Source)

Valuable loads can be protected by a user programmable current latch. Output power goes to zero when the latch circuit is tripped. The reaction time to the latch can be adjusted, if desired, to avoid tripping when reprogramming with a capacitive load. There is also a fixed current limit at 110% of rated current output.

Current Monitoring Terminals (Voltage Sources)

A voltage is available at the rear barrier strip which is proportional to the output current.

Analog Input

An ac signal may be injected into the output amplifier to simulate various noise and ripple conditions.

Precision Bipolar System Current Source

The HP 6140A Current Source has features which correspond to the voltage sources. It has a programmable voltage limit, voltage monitoring terminal, as well as isolation, and analog input capabilities.

Accessories Furnished

HP 1251-0086 50-contact rear plug.
HP 5060-7948 Plug-in extender board for voltage source.
HP 5060-7948/5060-7982. Two plug-in extender boards for current source.

Specifications

	Binary Instruments Option J20 & P05		BCD Instruments Option J99	
	X1 Range	X10 Range	X1 Range	X10 Range
HP 6129C				
Output	±16.384 V, 5 A	±50.00 V, 5 A	±9.999 V, 5 A	±50.00 V, 5 A
Accuracy	1.5 mV	15 mV	1.5 mV	15 mV
Resolution	0.5 mV	5 mV	1 mV	10 mV
HP 6130C				
Output	±16.384 V, 1 A	±50.00 V, 1 A	±9.999 V, 1 A	±50.00 V, 1A
Accuracy	1.5 mV	10 mV	1 mV	10 mV
Resolution	0.5 mV	5 mV	1 mV	10 mV
HP 6131C				
Output	±16.384 V, 0.5 A	±100.00 V, 0.5 A	±9.999 V, 0.5 A	±99.99 V, 0.5 A
Accuracy	1.5 mV	10 mV	1 mV	10 mV
Resolution	0.5 mV	5 mV	1 mV	10 mV
HP 6140A				
Output	±16.384 mA, 100 V	±163.84 mA, 100 V	±9.999 mA, 100 V	±99.99 mA, 100 V
Accuracy	1 μA ±0.01%	10 μA, ±0.01%	10 μA, ±0.01%	10 μA, ±0.01%
Resolution	0.5 μA	5 μA	1 μA	10 μA

Options

AC Power Option	Price
028: transformer tap change for 230 V ac ±10%, single-phase input on HP 6130C and 6131C. (HP 6129C and 6140A are 115/230 switch selectable.)	N/C
J20: 16 bit binary interface for HP 12661A I/O programmer card for Hewlett-Packard computers.	N/C

Accessories Available

HP 14533B: Pocket programmer permits manual programming of all input functions by switch closure.	$500
HP 14534A: Pocket programmer extension cable (3 ft).	$250
HP 14535A: HP computer interface kit includes HP 12661A computer I/O card, HP 14539A cable, verification software and RTE Driver. Up to eight PBSS's may be controlled from one HP 14535A.	$2,000
HP 14536A: Chaining cable connects an additional PBSS to the existing chain of PBSS's.	$350

Ordering Information

An interface option must be ordered.

HP 6129C: Digital Voltage Source	$10,000
Opt 908: Rack Flange Kit	add $51
HP 6130C, 6131C: Digital Voltage Source	$5,500
HP 6140A: Digital Current Source	$10,000
Opt 908: Rack Flange Kit	add $38
Opt 910: One extra operating and service manual shipped with each power supply	$15