

Dual Power Supply

Educational Training Equipment for the 21st Century

Bulletin 426B

HBT-UVR-2-25-2 Dual Power Supply

Purpose

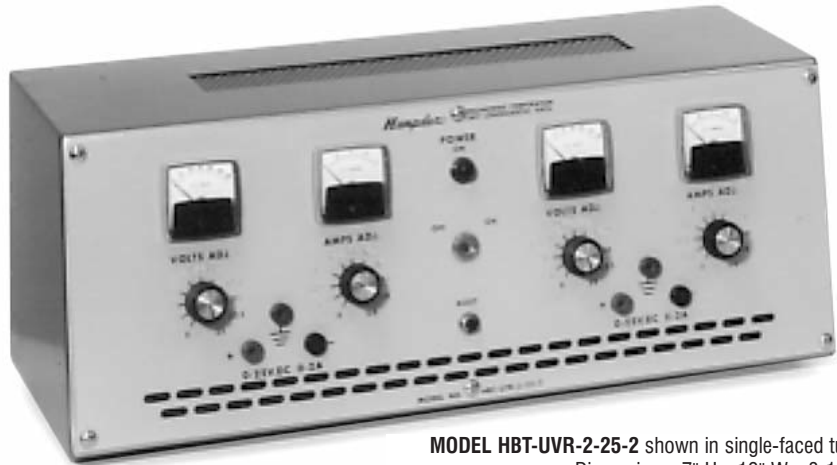
The Hampden **MODEL HBT-UVR-2-25-2** is a dual output, well regulated DC power supply for use in school electronics labs. Its voltage and current ranges are ideal for experiments involving solid-state components and integrated circuits.

Description

The Hampden **MODEL HBT-UVR-2-25-2** contains two independent power supplies. Each is adjustable from 0 to 25 volts DC and from 0 to 2 amps. They may be used independently or interconnected. A series connection produces a 0 to 50 volt range or a combination plus/minus (0 to +25V and -25 to 0 volt) supply.

The maximum output current of each supply is adjustable from 0 to 2 amps. As long as the current drawn is below set value, output voltage will be constant at its setting. If the load increased, the supply will automatically cross over from constant-voltage to the constant-current mode of operation. The voltage will drop to prevent current from exceeding the set limit. Each supply has its own meters to monitor voltage and current.

The dual power supply is housed in a standard Hampden Turret, single or double faced, low-profile or elevated. Enclosure sold separately. Legends are clearly silkscreened on panel face, where outputs terminate at Hampden HR-1S Receptacles. Outputs are continuously adjustable.



MODEL HBT-UVR-2-25-2 shown in single-faced turret.
Dimensions: 7" H x 19" W x 8-1/4" D
Shipping weight (less housing): 40 lbs.

Electrical Characteristics

Range:

0-25V DC at 0-2A DC

Ripple:

1 mV RMS

Load Voltage Regulation (0-2A load):

±3 mV

Line Voltage Regulation (105-130V AC):

±3 mV

Load Current Regulation (0-25V):

±5 mA

Power Input

The unit requires a 120V AC, 60 Hz. Both supplies are energized by means of a single keyed switch, with a pilot light to indicate energized condition.

The **MODEL HBT-UVR-2-25-2** Power Supply is available for operation at other voltages and frequencies.

Protection

A thermal magnetic circuit breaker provides protection of the power input to both supplies. Its reset button is on the panel face.

Cords

Two pair (red-black) of Hampden PC-4 cords are provided four-feet long, each having a stacking banana plug on one end and a hooded alligator clip on the other.

Also Available

Hampden **MODEL HBT-UVR-2-40-2** Dual 40-volt Power Supply, identical to **HBT-UVR-2-25-2** except for voltage ranges equal to 0-40V DC at 0-2A DC.

All Hampden units are available for operation at any voltage or frequency

Hampden
ENGINEERING CORPORATION

102315

Power Supply

Educational Training Equipment for the 21st Century

Bulletin 426-1B

HBT-442 Power Supply

Purpose

To provide Electronics students with the high-voltage DC and variable AC power required for the performance of electronics experimentation.

Description

The Hampden **MODEL HBT-442** contains two fixed, high-voltage DC "B+" supplies, a variable isolated AC supply, and line voltage via a grounding duplex receptacle. Both DC supplies are isolated and contain filtering networks. Each of the supplies is separately controlled by means of its own circuit breaker switch. Furnished complete with four Hampden PC-3 cords, 3-ft. long, having a banana plug on one end and a hooded alligator clip on the other.

Electrical Characteristics

Plate (B+) Supply No. 1:

250V DC, 50 mA

Termination: Hampden HR-1S Receptacles

Plate (B+) Supply No. 2:

400V DC, 50 mA

Termination: Hampden HR-1S Receptacles

Isolated AC:

0 to 135V AC, 2A

The output of the isolated AC Supply is continuously monitored by a built-in-voltmeter.



MODEL HBT-442 shown in single-faced turret.
Dimensions: 7" H x 19" W x 8-1/4" D
Shipping weight: 15 lbs.

Termination: Heavy-duty, five-way binding posts and three-prong receptacle.

Fixed Line Voltage:

120V AC, 15 A

Termination: Duplex Receptacle

Power Input:

120V AC, single-phase, 15 amperes through 3-wire No. 14 rubber-covered cord. Pilot light indicates energized condition.

Protection

Main power is controlled by a magnetic-hydraulic circuit breaker on/off switch. In addition, there is a separate circuit breaker on/off switch for each of the fixed DC supplies and the variable AC supply.

Enclosure

Standard Hampden turret, single or double faced, low profile or elevated. Housing is 14-gauge steel, while the panel is 12-gauge. Isolated AC is provided by an internal 270 VA transformer, continuously adjustable by means of a knob whose POSI-STOP action is capable of withstanding 2400 ounce-inches of torque.

The MODEL HBT-442 Power Supply is available for operation at other voltages and frequencies.

Also available: Hampden portable and flush-mounted power supplies having identical electrical characteristics.



Single-face Turret

All of the Hampden HBT Power Supplies and Metering Panels can be individually mounted in either Single-faced Turrets or Double-faced Turrets. Examples of both styles are shown.



Double-face Turret

All Hampden units are available for operation at any voltage or frequency

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