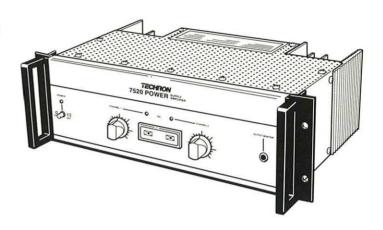


# 7520 Power Amplifier

This dual-channel member of the 7500 family of amplifiers supplies a controlled voltage output and operates at frequencies from dc to 20 kHz.



#### **Features**

The 7520 is a dual-channel amplifier with controlled voltage output. Important features of this amplifier include the following:

- ☐ The 7520 offers up to 135 watts of pure power into 4 ohms.
- Controlled current output is optional.
- Outputs can be "bridged" together for higher output to a single channel.
- ☐ Internal circuitry protects the 7520 from shorts, mismatches, and open circuits in voltage mode.
- ☐ Patented input/output comparator (IOC) circuitry immediately alerts you to any distortion exceeding 0.05%.
- ☐ Signal presence indicators verify complete signal flow—input to output.
- ☐ Standard voltage gain is 20.
- ☐ The amplifier installs easily into a standard 19" rack and occupies a 3U rack space.
- ☐ The 7520 operates on input power of 100, 120, 200, 220, or 240 Vac rms at 50–400 Hz.
- ☐ Aluminum construction of the 7520 allows for minimum weight and maximum cooling.
- All Techron amplifiers are designed and manufactured in the U.S.A. and are backed by a limited, 1-year warranty.
- ☐ Techron fully supports the 7520 with application engineering, service facilities, and comprehensive technical information.

## **Applications**

Versatile construction in 7500 amplifiers make them useful in numerous industrial and commercial power applications. For example, consider how they have been used in these environments:

**Shaker Devices**—Techron amplifiers supply reliable power to numerous shaker devices such as large and small tables and have even been used to resonate a building at low frequency.

**Positioning**—7500 amplifiers are used to drive actuators and servos for numerous applications. From telescopes to laser beams to medical uses, industry depends on the low distortion levels of our amplifiers for precise positioning.

**Auto industry**—In this industry, 7500 amplifiers power special coils to set up magnetic fields for testing sophisticated auto electronics.

Manufacturing—Need a 50 Hz power supply to simulate European frequency? Want to test fuses, circuit breakers, even power relays? Want to supply clean power for your processes? Need to do some electroplating? 7500 amplifiers have been used in these and many other jobs.

**Tranducers**—Whether under water or under ground, 7500 amplifiers drive tranducers, used in such ways as saving fish and finding resources.

And, with a wealth of technical knowledge, our skilled application engineers can show you how to handle new and unusual applications.

### **Specifications**

#### Performance (Per channel; both channels driven)

Output Load (for performance listed): 4  $\Omega$ 

Max. Output Voltage: 23.2 V rms, 32.9 V Peak Max. Output Current: 5.8 A rms, 8.2 A Peak

-Maximum Output Power: 135 W rms

Slew Rate: 12 V/us

Output Impedance:  $<0.015 \Omega$ 

Load Impedance for Max. Power Transfer: 2.7  $\Omega$ 

Input Impedance:  $30 \text{ k}\Omega$ 

Residual Noise (20 Hz-20 kHz): <0.069 mV Input Sensitivity: 1.3 V rms ± 2% for 90 watts

into  $8 \Omega$ 

Voltage Gain:  $20.6 \pm 2\%$  or  $26.3 \pm 0.2$  dB at

maximum gain

#### Physical

Weight: 25 lbs (11.4 kg)

Cooling: Convection (forced air optional; optional fans require frequencies of 47–63 Hz)

Chassis: Aluminum

Finish: Two tone front panel (tan and dark brown) coated in textured polyurethane, black anodized chassis and covers

#### **Indicators, Controls, and Connectors:**

- (A) On/off switch
- (B) Channel input level controls
- (C) Signal Presence Indicators
- (D) IOC Indicators
- (E) Output Monitor Jack

# (13.3 cm) B D F Anna A A 10.125" (25.7 cm) 1.5"

19"\_ (48.3 cm)

TECHRON. 7520 POWER 25

- (F) Input Barrier Block
- (G) Input BNC Connectors
- (H) 11-pin Accessory Socket
- (I) Fuse

5.25"

- (J) AC Power Cord
- (K) Output Binding Posts
- (L) Output Barrier Block
- (M) Dual/Bridged Output Switch
- (N) Ground Selection Switch

#### Support

Every Techron product is supported by our practices and people. Techron provides

- application engineering for your technical questions and customized product needs.
- □ a 1-year limited warranty.
- comprehensive technical manuals and related product information.
- a fully equipped service facility and experienced service technicians.

