

7521 Power Amplifier

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



Features

The 7521 is a single-channel amplifier with selectable controlled voltage or controlled current output (via a front panel toggle switch). Important features of this amplifier include the following:

- ❑ The 7521 offers up to 290 watts of pure power into 2 ohms.
- ❑ The 7521 can generate up to 24.1 volts rms (34.1 volts peak) and 12 amperes rms (17 amperes peak).
- ❑ Internal circuitry protects the 7521 from shorts, mismatches, and open circuits in voltage mode.
- ❑ Current and voltage monitor jacks are provided on the front panel as is a level control.
- ❑ Cooling fans are built in.
- ❑ Standard voltage gain is 20.
- ❑ The amplifier installs easily into a standard 19" rack and occupies a 3U rack space.
- ❑ The 7521 operates on input power of 100, 120, 200, 220, or 240 Vac rms at 47–63 Hz.
- ❑ Aluminum construction of the 7521 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 7521 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.

Transducers—Whether under water or under ground, 7500 amplifiers drive transducers, 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

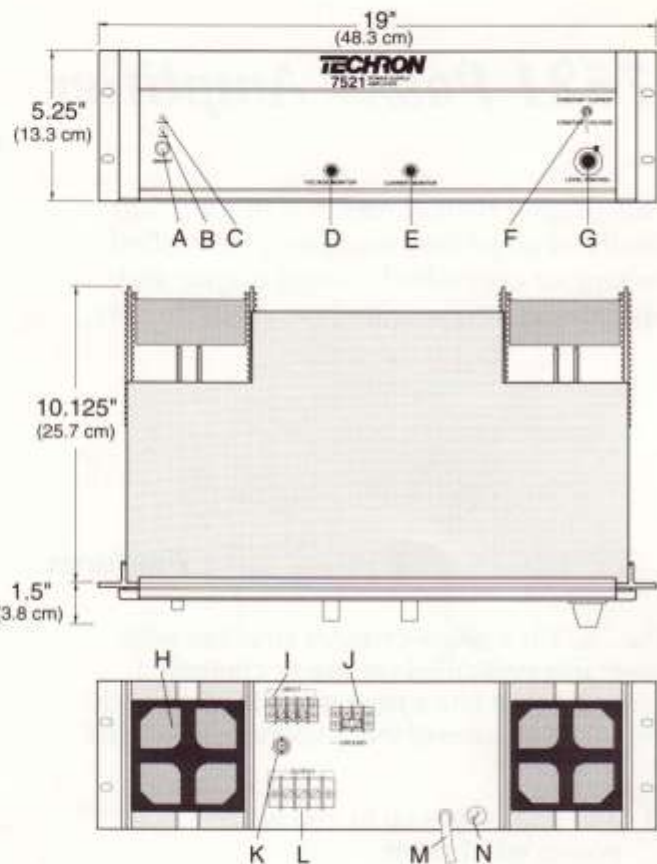
- Output Load (for performance listed): $2\ \Omega$
Max. Output Voltage: 24.1 V rms, 34.1 V Peak
Max. Output Current: 12.0 A rms, 17 A Peak
Maximum Output Power: 290 W rms
Slew Rate: 10 V/ μ s
Output Impedance: $<0.030\ \Omega$ at 1 kHz and $<0.30\ \Omega$ at 20 kHz
Load Impedance for Max. Power Transfer: $1.4\ \Omega$
Input Impedance: 20 k Ω (balanced or differential input), 10 k Ω (single-ended input)
Residual Noise (20 Hz–20 kHz): $<0.350\ \text{mV}$
Input Sensitivity: 1.3 V rms \pm 2% for 90 watts into $8\ \Omega$
Voltage Gain: $20.6 \pm 2\%$ or $26.3 \pm 0.3\ \text{dB}$ at maximum gain

Physical

- Weight:** 28 lbs (12.7 kg)
Cooling: Forced air (fans)
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) Power Indicator
(C) Standby Indicator
(D) Voltage Monitor Jack
(E) Current Monitor Jack



- (F) Controlled Voltage/Current Toggle Switch
(G) Level Control
(H) Cooling Fan
(I) Input Barrier Block
(J) Ground Connections
(K) Input BNC Jack
(L) Output Barrier Block
(M) Power Cord
(N) Fuse

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.

TECHRON
We Power Your Strongest Ideas