TEC7700 INDUSTRIAL AMPLIFIER



DESCRIPTION

The TEC7700 is Techron's most powerful single-channel power amplifier with an output capability of over 50 amperes peak at its rated voltage. A single TEC7700 is powerful enough for many applications and versatile enough to be combined with additional TEC7700 amplifiers to drive large industrial or medical imaging systems. Model TEC7700 operates in either voltage or current mode and features dc coupling, robust output devices and a power range of over 2800 watts rms.

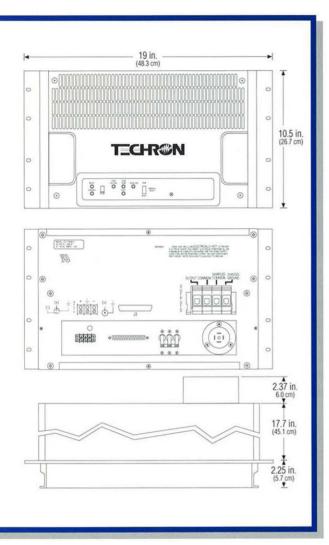
If you need clean reliable power, you will find the source at Techron. In addition to the TEC7700 series, Techron offers a full line of power amplifiers with frequencies to over 40,000 Hz and the cleanest power supplies available, plus Techron's total reliability. All of this combines to make Techron the choice for demanding industrial applications.

FEATURES

- Over 4,000 watts peak output; 2858 watts rms into a 2 ohm load. Systems output of 500 volts and 200 amperes maximum are possible with multiple, interconnected amplifiers.
- Voltage bandwidth from dc to over 20 kHz. Higher frequencies are possible, depending on application.
- Selectable controlled current or controlled voltage modes.
- Front panel LEDs indicate amplifier status.
- Designed to survive input overloads, continuous operation under demanding conditions and improper output connections—including improper loads.
- ◆ Installs into a standard 19-inch rack or stands alone for bench top operation.
- Backed by Techron's application engineering, service facilities, and a one year warranty.



SPECIFICATIONS



INDICATORS

Front panel LED's show ready, standby, high ac mains, high temperature, signal overload and faulty output stage.

CONTROLS

Front panel slide switches to place amplifier in run or standby condition and to reset indicator LEDs.

SUPPORT

When you purchase a Techron amplifier, a full complement of technical and factory support personnel join your team.

Techron provides:

- applications engineering for your technical questions and customized product needs.
- a one-year limited warranty to protect your equipment investment.
- a fully equipped service center that can keep your amplifier operating to original performance requirements.

PERFORMANCE

Maximum output current: 37.8 amperes rms

into a 2Ω load

Maximum output voltage: 75.6 volts rms into a

 2Ω load

Maximum output power: 2858 watts rms

Output offset current: Less than

10.0 milliamperes dc

Input: Balanced with ground. Three terminal

barrier block connector

Impedance: $20.0 \text{ k}\Omega$ differential

Gain: 20 volts/volt in voltage mode, 20 amperes/volt

in current mode

Residual noise: Less than 1 millivolt rms Slew rate: 46 volts per microsecond

Output load: The recommended range for the load is 0.75 to 2.2 ohms. For loads below 1 ohm, Techron recommends the BiLevel™ version of the TEC7700. The patented power supply in this version offers enhanced performance for high-current/low-voltage, low-impedance, and/or low-frequency applications.

Performance tests use a 1 kHz sine wave with amplifier in controlled-voltage mode. Specifications depend on load and waveform and are subject to manufacturing changes.

PHYSICAL CHARACTERISTICS

Chassis: All aluminum construction for stand alone or rack-mounted operation. Amplifier occupies six EIA 19-inch-wide rack units. Provisions for slide rails.

AC power: TEC7700 series amplifiers are shipped prewired to operate on three-phase ac mains. Specify 208, 240, 380 or 416 volts at the time of ordering.

Weight: 128 lb (57.9 kg)

Cooling: Forced air, 300 cfm required Dimensions: 19 x 10.5 x 22.37 in.

(48.3 x 26.7 x 56.8 cm)

Finish: Light pearl front panel and black chassis

