

# THE BGW 6500T PROLINE II™ POWER AMPLIFIER



Low feedback monolithic hybrid design • Convection cooled • Silent delayed turn on • Barrier strip terminations with ¼" inputs  
• Bridge mode operation • Audiophile quality • Optional: Input transformers, autotransformers, electronic crossover card,  
and precision stepped attenuators • BGW reliability



# Proline II™: Power and Performance in a Simply Designed Amp



The Model 6500T rear panel includes barrier strips, phone jack inputs, gain controls, and mono bridging switch.

## 6500T Specifications

**Total Output Power (mono)** 300 Watts minimum sine wave continuous average power output monaural driving an 8-ohm bridge-connected load over a power band from 20 Hz to 20 kHz. The maximum total harmonic distortion at any power level from 1 watt to 300 watts shall be no more than 0.1%. This power is equivalent to the sum of both channels when driving 4 ohm loads in the stereo mode.

**Output Power (dual channel)** 150 Watts minimum sine wave continuous average power output per channel when both channels are driving 4-ohm loads over a power band from 20 Hz to 20 kHz. The maximum total harmonic distortion at any power level from 1 watt to 150 watts shall be no more than 0.1%.

**Output Power (dual channel)** 100 Watts minimum sine wave continuous average power output per channel when both channels are driving 8-ohm loads over a power band from 20 Hz to 20 kHz. The maximum total harmonic distortion at any power level from 1 watt to 100 watts shall be no more than 0.05%.

**Intermodulation Distortion** Less than 0.05% at rated power output (SMPTE method, 60 Hz & 7 kHz, 4:1 ratio)

**Small Signal Frequency Response** 3 Hz – 100 kHz, +0/-3 dB

**DC Offset Voltage** Less than 20 millivolts at output terminals

**Hum and Noise Level** Better than 108 dB typical below 100 watts into 8 ohms (unwtd., 20 Hz to 20 kHz)

**Input Impedance** 15k ohms unbalanced – or balanced when ordered with BGW 6500T option 09

**Input Sensitivity** 0.9 Vrms for rated 8 ohm output; voltage gain = 31.8 (30 dB)

**Damping Factor** Greater than 200:1 (ref. 8 ohms, 500 Hz)

**Load Impedance** Designed for any load impedance equal to or greater than 4 ohms per channel (8 ohms bridged)

**Power Requirements** 120 or 240 V AC, 50–60 Hz, 640 watts maximum for rated 4 ohm output

**Dimensions:**  
**Height** 3.5 inches (8.9 cm)

**Width** 19 inch standard rack front panel (48.3 cm)

**Depth** 11.5 inches behind front panel (29.2 cm)  
12.9 inches overall depth (32.8 cm)

**Weight** 28 lbs. (12.7 kg.) net, 32 lbs. (14.5 kg.) shipping

### Factory Installed Options:

- Option 7 – Internally mounted single bridging input transformer
- Option 9 – Internally mounted dual bridging input transformers
- Option 15 – Internally mounted XOVER1 2-way, 18 dB per octave crossover card
- Option 36 – Internally mounted 70 and 100 volt autotransformers
- Option 43 – Precision stepped attenuators

## Straightforward Design, Optimized Performance

It took the expertise of BGW to create the Model 6500T, a simple amplifier that delivers plenty of clean, reliable power. The 6500T's circuitry is mounted on aerospace quality fiberglass material. Parts count has been minimized by using a combination of discrete circuitry and advanced, thick-film hybrids, each of which contains four large-geometry power transistors. The power hybrids are mounted directly to the convectively-cooled, heavy-aluminum, heat-sink extrusion. No fans or relays are required.

## Convenient Features

The Model 6500T rear panel includes a bridging switch for selection of stereo/mono mode and simple terminations for inputs and outputs. Six-terminal barrier strips (7/16") accommodate input and output connections. Additionally, 1/4-inch phone jack inputs are provided. The barrier strips afford reliable, low resistance, low cost connections, while the phone jacks are very convenient for rapid setup in portable applications. Both the barrier and phone jack inputs are normally unbalanced, but can be balanced by specifying the BGW 6500T option 09. This provides internally mounted transformers that not only avoid ground-loop problems in complex or portable sound systems, they are about the only way to avoid induced noise when high common mode voltages are present (i.e., near SCR dimmers).

The Model 6500T utilizes convection cooling, which makes it exceptionally reliable and suitable for installations where quiet operation is important or maintenance (cleaning air filters) is difficult.

If you need a "bi-amplifier," the 6500T can be converted to do the job by specifying an optional BGW XOVER 1 crossover card. The card mounts inside the chassis and comes factory wired to the amp's inputs. It provides 16 precise crossover frequencies from 100 Hz to 8 kHz — user-selectable with BGW's Switchset™ technology. The BGW crossover card is not only economical, it also protects speakers from accidental damage due to the inadvertent knob-twisting that can occur with stand-alone crossovers.

## SPECIFICATION NOTES

Measured with 120V AC 60 Hz power input.  
Due to continuous product improvement, all specifications and features are subject to change without notice.



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