



## IP broadcast power amplifier

### BG Series

The BG series SIP network multi-audio source five-zone broadcast power amplifier adopts a domestic dual-core ARM Cortex-A7 architecture processor with a main frequency of up to 1.2 GHz, realizing the full "localization" design of the core hardware, ensuring the independent controllability and long-term stability of the system. Equipped with a deeply customized Linux operating system, the average trouble-free running time of the system exceeds 10,000 hours; Built-in watchdog monitoring mechanism with excellent system robustness, security and cross-platform transplantation capabilities. It supports diversified integrated scheduling, and can realize functions such as background music, scheduled broadcast, TTS speech synthesis, emergency paging, live radio broadcast and alarm broadcast through broadcast server, network dispatch station, intercom machine, mobile APP, etc.

## Highlights

- ✓ Adopts a new 128 \* 64 graphic dot matrix display. The display content is rich, clear and clear at a glance.
- ✓ Provide a complete Web remote management interface. Users can access the device IP through the browser to realize system parameter configuration, including network parameter settings, SIP account management, volume control, online packet capture and online firmware upgrade, so as to improve operation and maintenance efficiency.
- ✓ It provides two terminal configuration channels: Web management background and dedicated client, supports DHCP and static mode, and supports cross-network segment search configuration.
- ✓ CLASS-D power amplifier circuit technology and full-loop feedback network are adopted to further reduce the distortion of power amplifier. Provides smooth and flexible handling at high power output while maintaining excellent sound integrity.
- ✓ Dual PFC switching mode power supply technology improves the performance of power amplifier and reduces power supply current consumption. Supports wide voltage operating range (AC90V-AC265V) to meet global power supply needs and achieve energy saving and environmental protection. With intelligent energy-saving function, it automatically enters standby mode when there is no signal, and the standby power consumption is  $\leq 10$  W, which is green and environmentally friendly.
- ✓ Fully digital architecture, easy expansion without geographical restrictions, can be deployed using existing networks, significantly reducing deployment and operation and maintenance costs.
- ✓ Integrated MP3 playback module, with USB interface and SD card interface, super disk reading ability; Supports MP3 and WMA dual decoding playback formats. MP3 can choose four playback modes: random, single loop, folder loop and all loop; It has 5 kinds of EQ sound effects to adapt to the hearing habits of people at different levels; It has built-in priority audio playback function.

# Detailed parameters

Product model	BG-80	BG-120	BG-180W	BG-240	BG-350	BG-500	BG-650	BG-800	BG-1000	BG-1500	BG-2000	BG-2500
Rated power	80W	120W	180W	240W	350W	500W	650W	800W	1000W	1500W	2000W	2500W
Weight	4.60 Kg	4.60 Kg	5.20 Kg	5.40 Kg	5.60 Kg	7.00 Kg	7.00 Kg	7.40 Kg	9.50 Kg	9.50 Kg	9.50 Kg	9.50 Kg
Dimensions (mm)	484x210x88	484x210x88	484x210x88	484x210x88	484x210x88	484x210x88	484x210x88	484x210x88	484x310x88	484x310x88	484x310x88	484x310x88
Network interface	Standard RJ45 input											
Transmission rate	10/100 Mbps											
Support Agreement	TCP/IP, UDP, SIP, HTTP											
Audio format	MP3, WAV											
Audio Mode	16-bit stereo, CD quality											
Sampling rate	8K ~ 16KHz											
Tone	bass $\pm$ 10 dB at 100 Hz; Treble : $\pm$ 10 dB at 10 KHz											
Input sensitivity & impedance	MIC1, 2, 3: 5mV/600 $\Omega$ , unbalanced TRS terminal input AUX1, 2: 350mV/10K $\Omega$ , unbalanced RCA terminal input											
Output sensitivity & source impedance	MIXOUT: 1000mV/470 $\Omega$ , unbalanced RCA terminal output											
Overload source electromotive force	MIC1, 2, 3: > 12dB, unbalanced TRS terminal input AUX1, 2: > 20dB, unbalanced RCA terminal input											
Standby power	< 10W											
Frequency	80Hz ~ 16KHz (+1/-3dB)											
Signal-to-noise	MIC1, 2, 3: 66 dB; AUX1, 2: 80dB											
Total harmonic	0.5% at 1KHz, 1/3 output power											
Channel crosstalk	$\leq$ 50 dB											
Output mode	100V constant voltage output (limiting amplitude: 135V)											
Heat dissipation	Forced air cooling from front to rear, built-in fan starts when radiator temperature is 55 degrees											
Protective circuit	Multiple intelligent detection and protection systems for soft start, DC, short circuit, overheating, overload and amplitude limiting											
Input power supply	~ 90-265V/50Hz											
Operating Temperature Operating Humidity	5 $^{\circ}$ C~40 $^{\circ}$ C; 20% ~ 80% relative humidity, no condensation											
Material	Black aluminum panel, SPCC cold rolled sheet material chassis											