



Certificate of constancy of performance 1438-CPR-1077
Certificate of admittance 5641/2025

EN54 16

FEATURES

- Class D amplifier technology
- Transformerless 100 V output
- True RMS power
- 24 V DC direct supply
- Independent audio channels
- Dynamic, high-quality sound
- Wide frequency response
- Ultra-low quiescent mode
- Fully isolated stages
- Compact size and weight
- Overvoltage, overcurrent, short circuit and thermal protection
- Ideal for speech and background music

OVERVIEW

The WB Series Amplifiers are high-efficiency, transformerless multi-channel amplifiers designed for use within the IVO system. They amplify 0 dB audio signals from 2LG2 cards or 16SG modules to the 100 V level required for loudspeaker lines. Each amplifier is equipped with a dedicated microprocessor for continuous monitoring and control of operational functions.

With idle power consumption as low as 2 W, WB amplifiers place minimal demand on backup batteries, making them highly efficient for systems with emergency power requirements.

Powered by 24 V DC from the ZDSOP24 power supply unit, each channel is individually protected, and one channel can be configured as a redundant backup while the others operate as primary outputs.

Each amplifier channel is equipped with LED indicators for power, signal, clip, and protection status. Channel-specific DIP switches provide gain adjustment (0 / -3 dB), while integrated cooling fans ensure reliable thermal management.

TECHNICAL SPECIFICATION

GENERAL

Power supply	24 V DC $\pm$ 20 %
Idle consumption	< 1 W
Standards	EN54, CE
Mechanical	1U, 19"
Operating temperature	-5 : +50 °C
Relative humidity	25 % - 90 %
Indicators	Power, operate, communication, fault, each channel: ready, signal, clip, protect
Connectors	2x Power, amplifier enable mode, RS485, fault, For each channel: symmetrical 0 dB audio input, 100 V output

AUDIO SPECIFICATION

Frequency response	10 Hz - 30 kHz (- 3 dB)
Distortion (THD + N) (1 kHz)	< 0,1 %
Signal-to-noise ratio	> 92 dB
Output voltage	0 - 140 V

OTHERS

Switches	For each channel: input signal attenuation 0 / -3 dB, hi-pass filter 0 / 210 Hz Global: Amplifier address (t.b.i.)
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SPECIFICATION PER UNIT	RATED OUTPUT POWER [W]	TOTAL EFFICIENCY
WB1500	1x 500	86 %
WB2200	2x 200	89 %
WB2500	2x 500	86 %
WB4150	4x 150	91 %
WB4200	4x 200	89 %
WB4500	4x 500	86 %
WB8150	8x 150	91 %

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