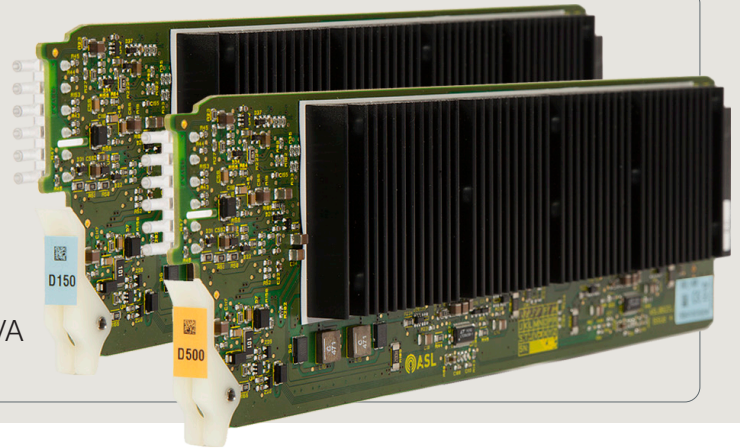


- ✓ Class D transformerless amplifiers
- ✓ Two models: 150 W or 500 W RMS
- ✓ Configurable 100, 70 or 50 V output
- ✓ Hot-swappable
- ✓ Very high efficiency and low standby current
- ✓ Compatible with the V2000 Mainframe and INTEGRA range
- ✓ An Integrated part of the Zenitel EN 54-16 Certified PAVA system



## D150 & D500

### PAVA Amplifier Cards for the V2000 / INTEGRA

The Zenitel D150 and D500 are advanced modular Class D transformerless amplifiers designed for simple installation inside the V2000 or INTEGRA mainframes along with the LSZDC loudspeaker line interface card. The D150 delivers up to 150 W RMS at 100 V, while the D500 provides up to 500 W RMS. Both amplifiers feature software-configurable power settings, adjustable in 25 W increments, ensuring optimal efficiency for various applications. With identical form factors, these amplifiers are designed for quick and secure installation without the need for specialized tools. They also support hot-swapping, allowing for fast replacements without powering down the mainframe or interrupting operation in zones driven by other active amplifiers. Engineered for reliability and efficiency, the D150 and D500 and associated products are ideal solutions for high-performance PAVA audio amplification.

#### High Performance

The compact, transformerless design enables up to 10 amplifiers to be housed within a single 2U mainframe, supporting an impressive 2000 W @ 100 V. This significantly reduces the overall size of a PAVA system, streamlining deployment while minimizing the space required in the often space-constrained equipment room. This sets us apart from other PAVA solutions on the market

#### EN 54-16 Certified

The D150 and D500 amplifier modules are EN 54-16 certified and fully compliant with industry standards as key components of the Zenitel PAVA system. Any detected input or output faults are reported to the host Audio Router and categorized in line with EN 54-16 requirements. Additionally, the amplifiers are engineered to operate in full compliance with EN 54-16 at their rated power, ensuring reliable and uninterrupted performance.

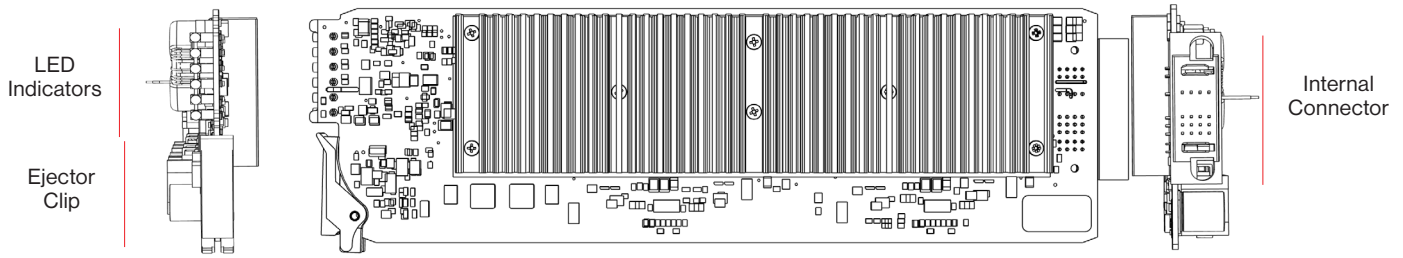
#### Easy Maintenance

The amplifier cards are hot-swappable and require no direct configuration, significantly reducing the Mean Time to Repair (MTTR). For critical installations, this design enables maintenance to be performed during operational hours without disrupting functionality, provided an automatic standby amplifier is included in the system configuration.

#### Low Power Consumption

An innovative auto-sleep feature, allows the D150 and D500 to achieve maximum efficiency and low quiescent power consumption without compromising system reliability and performance.

# MECHANICAL



# SPECIFICATION

## General

Amplification	Transformerless Class D
Quiescent Current	16mA
Frequency Response	100Hz to 20kHz +/- 3dB 50Hz to 20kHz +3dB -6dB
THD	< 0.5%
Output Noise A-Weighted	Better than 100dB below 100V <sup>(Note 3)</sup>
Output Voltage	100 / 70 / 50 V
Maximum Capacitive Load	200 nF

## Interface

Audio, Data and Power	Connection inside the V2000 / INTEGRA Frame
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## LED Indication

VU Meter	Green (Multiple LEDs)
Fault	Yellow
Power	Green
Select	Green

## D500 Variant

Power output @ 100 V	25W to 500W <sup>(Note 1)</sup>
Power output @ 70 V	25W to 350W <sup>(Note 1)</sup>
Power output @ 50 V	25W to 250W <sup>(Note 1)</sup>
Efficiency Measured at 100V rms sine into 20 Ohms load	>=83%

## D150 Variant

Power output @ 100 / 70 / 50 V	25W to 150W <sup>(Note 1)</sup>
Efficiency Measured at 100V rms sine into 66.67 Ohms load	>=86%

## Environmental

Operating Temperature	-10°C to +55°C <sup>(Note 2)</sup>
Storage Temperature	-20°C to +55°C
Humidity Range	0% to 93% non-condensing
Ingress Protection	IP 20 as part of the V2000 / INTEGRA Frame

## Mechanical

Finish	PCB
Mounting	Inside the V2000 / INTEGRA frame
Dimensions (H x W x D)	80 mm x 29 mm x 274 mm
Weight	0.5 kg

## Reliability

MTBF MIL-HDBK-217F (Notice 2)	> 319,100 hours
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## Software, Tools and Management

Configuration Tools	IP based SCT and ADT
Software Package	≥V1

## Approvals & Standards Compliance

Voice Alarm	EN 54-16
Rail Applications	EN 50121-4
Electromagnetic Compatibility Directive (Emissions & Immunity)	EN 61000 Series EN50130-4
Low Voltage Directive (Safety)	EN / UL / IEC 62368-1
Conformity	CE / CPR / UKCA
Environmental	RoHS / REACH

## Part Code

D150	PAVA 150W POWER AMPLIFIER MODULE FOR THE V2000
D500	PAVA 500W POWER AMPLIFIER MODULE FOR THE V2000

## Compatible Hardware

V2000 / V2000-r2	PAVA 2000W POWER AMPLIFIER MAINFRAME (0 AMPS)
INTEGRA Range Available in 0, 3, 5, 7 and 10 Channels	WALL MOUNT PAVA SYSTEM
LSZDC	PAVA AMPLIFIER INTERFACE MODULE FOR THE V2000

## Notes:

- Specified output power can be delivered when the amplifier mainframe is being powered from either mains or 24V battery supplies.
- With RAK-FAN-01 fans fitted. Otherwise 40°C. Note that fans are required in certain configurations. See Zenitel System Design Guide for more information.
- Without pilot tone or active route