

AoIP

AUDIO AMPLIFIER

MODEL : ELA Series



DESCRIPTION

The ELA series of network-able audio power amplifiers has the same high-fidelity, high-efficiency output stage as ComTrol's proven analogue CA-500 series, but a brand new processor-based front end. This enables ELA units to operate in Ethernet/ IP networks, allowing PA/GA nodes to be distributed and stacked to give the required sound power where it is needed. Two Ethernet ports are available for different subnets which can be configured for network redundancy. Together with ComTrol's Digital Audio Router, ELA amplifiers allow dependable PAGA systems to be deployed with maximum flexibility and simplicity.

Amplifier and speaker line supervision is integrated, requiring no external unit, and protection is provided against overload, short circuit and overheat. Each unit is monitored continuously with status changes displayed on a front panel LCD or remotely. The ELA has a change-over facility for standby amplifier switching with relays included in the unit. The ac power supply is universal, accepting 100-240Vac at 47-63Hz with power factor correction.

Initial setup and configuration can be easily done using a PC or workstation attached to the same subnet.

FEATURES

- Continuously rated 500W RMS and 300W RMS versions
- Integrated speaker line monitoring
- Click and Pop free operation during start-up and shutdown
- Industry standard 2-U, 19-inch enclosure
- Audio input/output galvanic isolation
- Temperature controlled cooling fan
- N+1 hot-standby amplifier protection
- Supports FE and GBE Ethernet networks
- A to D conversion: up to 32 bits per sample
- Lowest latency available from any networking technology
- Two Ethernet Ports for Redundancy

ELECTRICAL CHARACTERISTICS

| Power Requirements | Values |
|---|---|
| AC Power Supply Input Voltage | 96 to 264 V AC, 50/60 Hz |
| DC power Supply Input Voltage | 48 V DC |
| Speaker Amplifier | |
| Audio Power Output | 300 Watts/ 500 Watts |
| Duty Cycle | Continuous |
| Overall Efficiency | 86% |
| Frequency Response ($\pm 3\text{dB}$) | 300 - 19 KHz |
| Total Harmonic Distortion | Less than 0.5% rated power @ 1 KHz |
| Protection | Overload, Input overdrive, Over-temperature, Clipping |
| Voltage Output | 50V AC, 70 VAC, 100 VAC |
| Digital Audio | |
| Digital Audio Format | I2S |
| Audio transport Format | Dante Audio over IP |
| Sample Rates | 44.1/48/88.2/176.4/192 kHz |
| Sample Bit Depth | 16,24 or 32 bit per sample |
| IP Network Interface | |
| Connector | Dual RJ-45 |
| Speed | 100/1000Mbps |
| Network Configuration | Switched or Redundant |
| IP Address | Static/ Dynamic/ Automatic |
| Layer 3 Switching | Yes |
| Serial Data Interface | |
| Communication Standard | RS-485, isolated, 120 Ohms - balanced |
| Transmission Speed | 9600 Kbps within 1200 meters (point-point) |
| Number of Port(s) | One |
| Connector | Euroblock |

ENVIRONMENTAL RATINGS

| | |
|-----------------------|----------------------|
| IP Rating | IP-31 |
| Area Rating | Safe Area |
| Operating Temperature | 5 ° C to 65 ° C |
| Relative Humidity | 5-95% Non-condensing |

MECHANICAL CHARACTERISTICS

| | |
|---------------------------------|-----------------------------------|
| Enclosure Dimensions | 88 x 430 x 367 (H x W x D, in mm) |
| Weight | 15 Kg |
| Material and Protective coating | Mild Steel, Powder coated |

ORDERING INFORMATION

| Model | Description |
|--------|-------------|
| ELA300 | 300 Watts |
| ELA500 | 500 Watts |