

1023102100

ENA2100-AC

Exigo Network Amplifier 2 x 100W



Description

- ✓ 2 x 100 watt continuous GA effect
- ✓ Power efficient class D technology
- ✓ 115/230 VAC power
- ✓ Redundant Ethernet connections
- ✓ Digital audio processing
- ✓ Loudspeaker line monitoring
- ✓ Line input
- ✓ Embedded tick tone generator

- ✓ 2 configurable control outputs
- ✓ 2 configurable control inputs

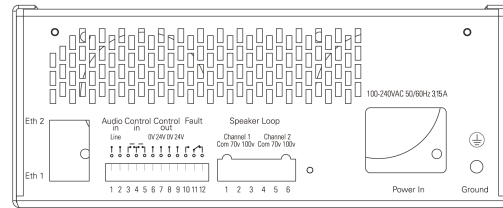
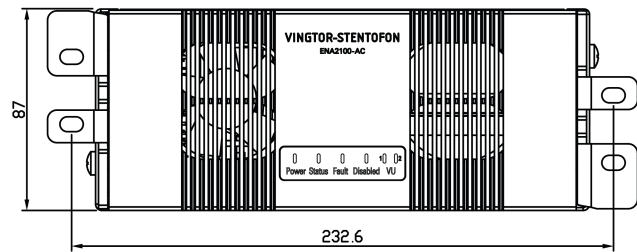
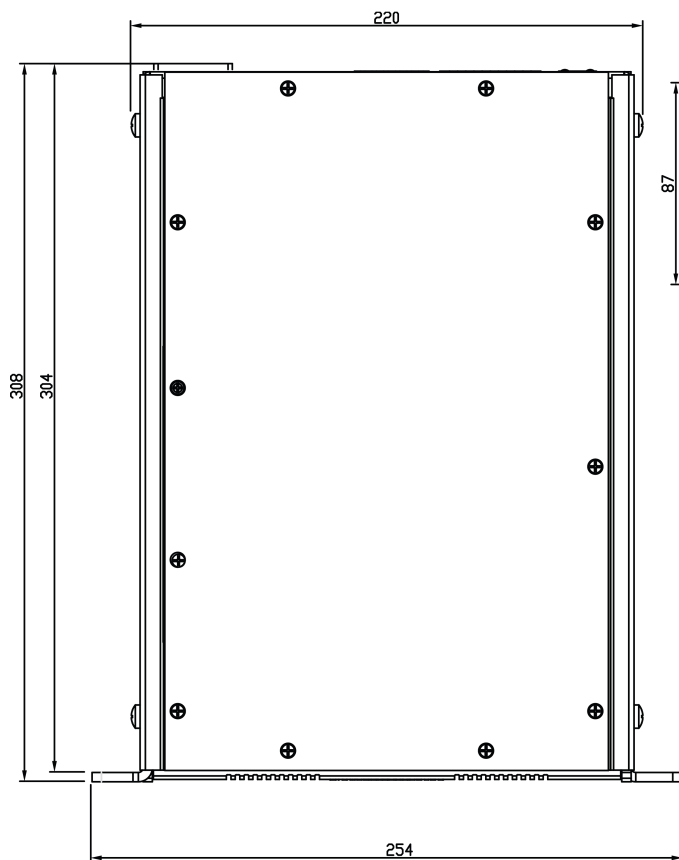
The Exigo Network Amplifier is designed for use in marine, offshore and other demanding environments. The amplifier utilizes state-of-the-art class D amplifier technology to ensure high power efficiency and superb audio quality for two audio channels which can be loaded with up to 100W each.

The Exigo Network Amplifier is part of the Exigo PA/GA system, which is based on standard Ethernet network and digital processing. Each amplifier has two network connections, allowing for redundant cabling between the amplifier and the network. Using standard network equipment also allows for a much wider selection of standard network equipment. The amplifier is also compatible with the Alphacom platform, allowing for advanced communication systems with both intercoms and PA.

The complete amplifier is self-monitoring and this includes advanced monitoring of the speaker lines and internal system. The audio output channels can be monitored for line faults such as shorts, ground faults and large load changes. In addition, up to 10 intelligent Line End Transponders (ELTSI) can be placed on the speaker lines for additional accuracy in the line monitoring. The amplifier also monitors control inputs, power supplies, temperature, network connections and every other components required for operation of essential services. Faults will be reported to the system controller, but will also be indicated locally on the amplifier.

The amplifier's configurable control inputs/outputs and audio inputs can be used to trigger various activities in the system. The audio line input can also be configured in a "hardware bypass" mode where audio on the line input will be forwarded to the 100V channels directly, even when no server is available. This allows for additional redundancy and functions to be built around this amplifier.

Technical Dimensions



19" double configuration
Total width 485mm
Mounting hole distance 465mm

ENA2100-AC

All dimensions in mm

Specifications

MECHANICAL

| | |
|--------------------|---------------------------------------|
| Dimensions (HxWxD) | 87 x 254 x 308 mm |
| Weight | 5.75 kg |
| Shipping Weight | 6.5 kg |
| Mounting | 19" rack, 2HU in double configuration |
| Color | Black |

ENVIRONMENTAL

| | |
|----------------------------------|-----------------------------|
| Operating temperature | -15°C to +55°C |
| Operating humidity | 15% to 95% (non-condensing) |
| Storage temperature | -40°C to +70°C |
| Storage humidity | 10% to 95% (non-condensing) |
| Air pressure | 700 hPa to 1300 hPa |
| IP rating | IP-32 |
| Magnetic Compass Safe Distance | 110 cm |
| IEC 60945 Environmental Category | Protected |
| Operator & Reading Distance | 0,71m |

USER INTERFACE

| | |
|------------|------------------------------------------|
| Indicators | Power, status, fault, disabled, VU meter |
|------------|------------------------------------------|

ELECTRICAL

| | |
|----------------------|------------------------------------------------------------------|
| Primary power | V-lock, IEC 60320-1 C14 compliant |
| Nominal voltage * ** | 110 – 230 VAC, 47-63 Hz |
| Inrush current | Max 15 A |
| Power consumption | $P_{nom} \leq 15 \text{ W}$ (idle), $P_{max} = 350 \text{ W}$ |
| | * Degradation to 2 x 60W on 110Vac |
| | ** Power cord not included |

AUDIO OUTPUTS

| | |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Output power | 2 x 100W music @ 55°C continuously, 2 x 100W alarm @ 40°C continuously, 2 x 100W alarm @ 55°C 30 min |
| Output power in degradation mode (Running on 110Vac) | 2 x 60W music @ 55°C continuously, 2 x 60W alarm @ 40°C continuously, 2 x 60W alarm @ 55°C 30 min |
| Output line | 100 volt / 70 volt |
| Frequency response | 200 Hz to 20 kHz $\pm 3 \text{ dB}$ |
| Audio codec | G711, G722, PCM L16/48kHz |
| SNR | 86dBA in test mode, A- weighted noise |
| THD | <0.5% @ 1kHz |
| Rated load resistance | 100V: 10 Ω , 70V: 50 Ω |
| Rated load capacitance | 470nF |

LINE INPUT

| | |
|------------------------------------------------------|------------------------------|
| Frequency response | 80 Hz – 20 kHz |
| Audio codec | G711, G722, PCM L16/48kHz |
| Nominal input level | 100 mVRMS – 1 VRMS |
| SNR | 70 dBA |
| Input impedance | 10 k Ω |
| Input level to trigger VOX for optional bypass | >30 mV |

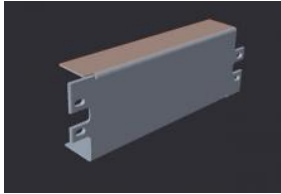
CONTROL INPUTS AND CONTROL OUTPUTS

| | |
|--------------------------------------|---------------------------------------------------------------------------|
| Control Inputs | 2 |
| Type | Closing contact, monitored |
| Control Outputs | 2 |
| Type | 24 VDC \pm 10%, 200 mA, monitored |
| Fault relay | 1 |
| Fault relay outputs: (COM, NO,NC) | Max recommended levels: 2A, 100Vdc, 125Vac, switching 60W/62.5VA |

CERTIFICATIONS

| | |
|-----------|--------------------------------------------------------------------|
| Immunity | EN 60945, EN 50130-4, EN 61000-6-1, EN 61000-6-2, EN 55103-2 |
| Emissions | EN 60945, EN 61000-6- 3, EN 61000-6-4 |
| Safety | EN 60065, IEC 60529 |

Accessories



ENA2100-Single

Mounting Kit for ENA2100-AC



ENA2100-Double

Mounting Kit for ENA2100-AC



EAM-100

ENA2100-AC Amplifier Module



EPMA300AC

ENA2100-AC, ENA2100-AC2, ENA2200-AC2 Amplifier Power Supply