


1023102200

ENA2200

Exigo Network Amplifier 2 x 200W



 ICX-AlphaCom

 Exigo

 EN54-16 Certified

 UL Certified Intercom

DESCRIPTION

- 2x 200 watt continuous effect
- Power efficient class D technology
- 110-230 VAC primary power and 24-48 VDC secondary power
- Redundant Ethernet connections
- Digital audio processing, equalizer and audio delay
- Loudspeaker line monitoring
- Input for backup amplifier
- Tick tone generator
- 6 configurable control outputs
- 6 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.

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 digital audio processing and maintenance of the amplifier is done with the embedded CPU and DSP. These components allow the amplifier to do advanced audio processing such as automatic gain control and equalizing while also maintaining a robust connection to the system controllers.

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 operates from a primary 115/230 VAC supply and have automatic uninterrupted switchover to a secondary 24-48 VDC supply if the primary should fail. The amplifier will continue to operate with full service during and after the switchover.

The amplifier's configurable control inputs/outputs and audio inputs can be used locally by the amplifier (e.g. for PTT and audio from a handheld microphone) or can be controlled by the system (e.g. audio input for background music).

SPECIFICATIONS

MECHANICAL

| | |
|--------------------|-------------------|
| Dimensions (HxWxD) | 87 x 482 x 390 mm |
| Weight | 13 kg |
| Shipping Weight | 14.5 kg |
| Mounting | 19" Rack, 2HU |
| Color | Black |

USER INTERFACE

| | |
|------------|---|
| Display | 3.5" QVGA Color TFT LCD |
| Button | Rotary selector button with push-to-select |
| Indicators | Primary power, Secondary power, Fault, Disabled |

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 |

ELECTRICAL

| | |
|----------------------|-----------------------------------|
| Primary power | |
| Connector | V-lock, IEC 60320-1 C14 compliant |
| Nominal voltage * ** | 110 – 230 VAC, 47-63 Hz |
| Inrush current | Max 16A |

ELECTRICAL

| | |
|-------------------|---|
| Power consumption | $P_{nom} \leq 25 \text{ W}$ (idle), $P_{max} = 650 \text{ W}$ |
| Secondary power | |
| Connector | Pluggable and lockable terminal |
| Nominal voltage * | $V_{nom} 24 - 48 \text{ VDC}$, $V_{min} 20 \text{ VDC}$, $V_{max} 63 \text{ VDC}$ |
| Power consumption | $P_{nom} \leq 25 \text{ W}$ (idle), $P_{max} = 650 \text{ W}$ |
| | * Degradation to 2 x 120W on 110Vac and 24Vdc |
| | ** Power cord not included |

AUDIO OUTPUTS

| | |
|---|--|
| Output power | 2 x 200 watt music @ 55 °C continuously, 2 x 200 watt alarm @ 40°C continuously, 2 x 200W alarm @ 55°C 30min |
| Output power in degradation mode (Running on 110Vac or 24Vdc) | 2 x 120 watt music @ 55 °C continuously, 2 x 120 watt alarm @ 40°C continuously, 2 x 120W alarm @ 55°C 30min |
| 25V (8 ohm) output | 2 x 50 watt music @ 55 °C continuously, 2 x 50 watt alarm @ 50 °C continuously, |
| Output line | 100 volt, 70 volt and 8 Ohm |
| Frequency response | 200 Hz to 20 kHz $\pm 3 \text{ dB}$ |
| Audio codec | G711, G722, PCM L16/48kHz |
| SNR | 86 dB in test-modus, A-weighted noise |
| THD | < 0.5% @ 1 kHz |
| Rated load resistance | 100V: 50 Ω , 70V: 25 Ω , 25V: 25.0 Ω |
| Rated load capacitance | 470 nF |

NETWORK

| | |
|--------------------------|--|
| Ethernet | 2 x 10BASE-T, 100BASE-TX, Auto negotiation, Auto MDIX |
| Protocols | Protocols IPv4 (with DiffServ), TCP, UDP, HTTPS, TFTP, RTP, DHCP, SNMP, STENTOFON CCoIP® , NTP |
| LAN Protocols | VLAN(IEEE 802.1pq), Network Access Control (IEEE 802.1x), STP (IEEE 802.1d) |
| Management and operation | HTTP/HTTPS (Web configuration) DHCP and static IP Remote automatic software upgrade Centralized monitoring |

LINE INPUT

| | |
|---------------------|---|
| Frequency response | 80 Hz – 20 kHz |
| Audio codec | G711, G722, PCM L16/48kHz |
| Nominal input level | 100 mVRMS – 1 VRMS |
| SNR | 80 dB |
| Input impedance | 600 Ω / 10 k Ω (selectable) |

MICROPHONE INPUT

| | |
|---------------------------|--|
| Frequency response | 80 Hz – 20 kHz |
| Audio codec | G711, G722, PCM L16/48kHz |
| Nominal input level | 1 mVRMS – 100 mVRMS |
| SNR | 80 dB |
| CMRR | 45 dB |
| Input impedance | 600 Ω / 10 k Ω (selectable) |
| Phantom supply (optional) | 12 VDC $\pm 10\%$ @ 15 mA (IEC 61938, P12) |

CONTROL INPUTS AND CONTROL OUTPUTS

| | |
|-----------------------------|---|
| Control Inputs | 6 |
| Type | Closing contact, monitored |
| Control Outputs | 6 |
| Relay outputs: (COM, NO,NC) | Max recommended levels: 3A, 100Vdc, 125Vac, switching 60W/125VA |
| 24 V outputs | 24 VDC $\pm 10\%$, 200 mA, monitored |
| Fault relay | 1 |
| Relay outputs: (COM, NO,NC) | Max recommended levels: 3A, 100Vdc, 125Vac, switching 60W/125VA |

CERTIFICATIONS

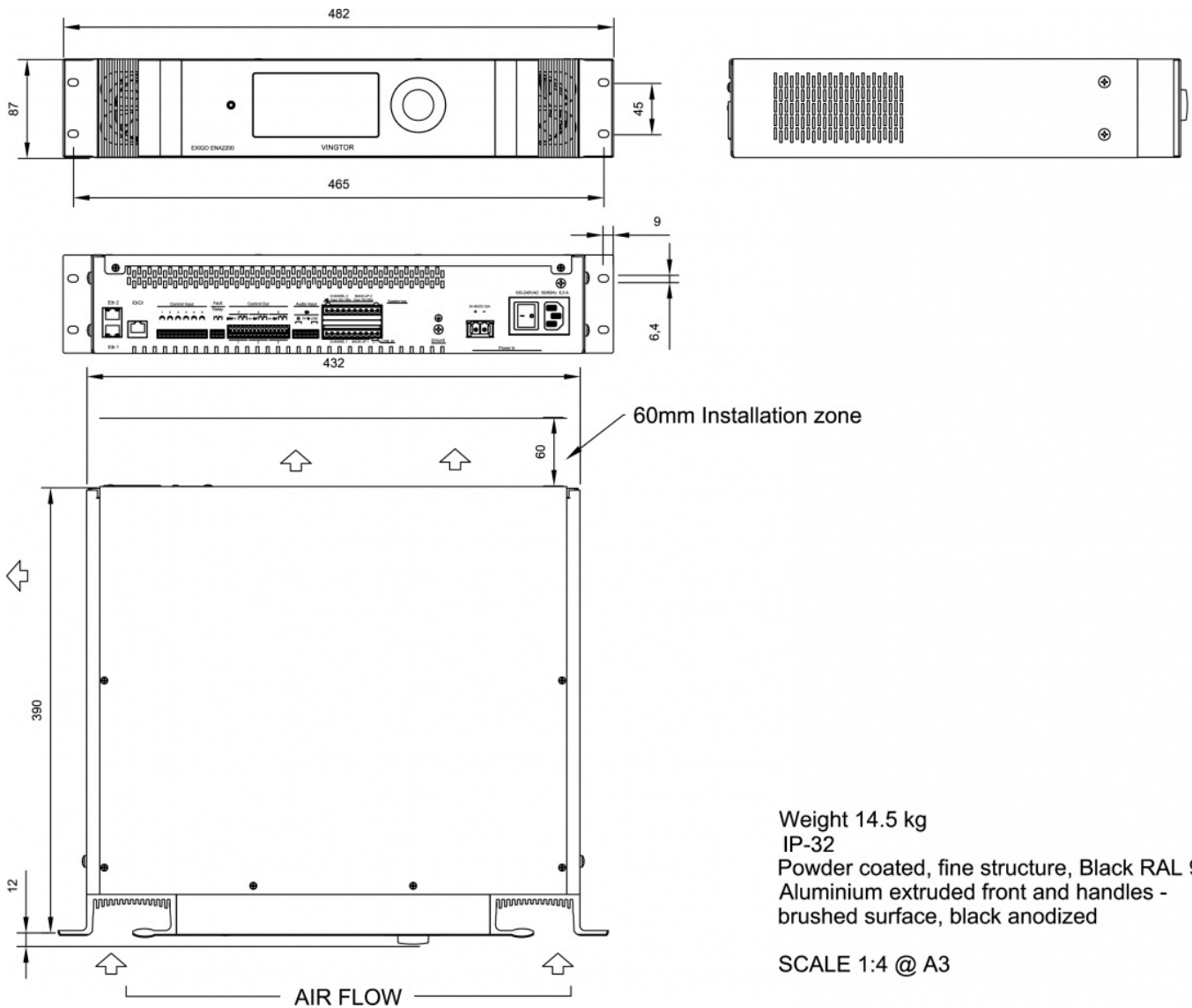
| | |
|----------|---|
| Immunity | EN 60945, EN 50130-4, EN 61000-6-2*, EN 55103-2 |
|----------|---|

CERTIFICATIONS

| | |
|-----------|---|
| Emissions | EN 60945, EN 61000-6-4* |
| Safety | EN 60065, EN 60950, EN 62368-1, IEC 60529 |

*When used in conjunction with PN: 1023598000 & 1023598100

TECHNICAL DIMENSIONS



ACCESSORIES



EAM-200

Item number: 1023922200



EPMA400

Item number: 1023911000



ELTSI-1

Item number: 1023540000

Created: 11.07.2014, updated: 07.07.2021

page 4/4

www.zenitel.com

info@zenitel.com

Zenitel and its subsidiaries assume no responsibility for any errors that may appear in this publication, or for damages arising from the information therein. Zenitel products are developed and marketed by Zenitel. The company's Quality Assurance System is certified to meet the requirements in NS-EN ISO 9001. Zenitel reserves the right to modify designs and alter specifications without notice.

ZENITEL PROPRIETARY. This document and its supplementing elements, contain Zenitel or third party information which is proprietary and confidential. Any disclosure, copying, distribution or use is prohibited, if not otherwise explicitly agreed in writing with Zenitel. Any authorized reproduction, in part or in whole, must include this legend; Zenitel - All rights reserved.