zenitel

DATASHEET

1023102400

ENA2400-DC

Exigo Network Amplifier 2 x 400W



ICX ICX-AlphaCom Exigo

Description

- 2x 400 watt continuous effect
- Power efficient class D technology
- 48 VDC power
- Redundant Ethernet connections
- Digital audio processing, equalizer and audio delay
- Loudspeaker line monitoring
- Input for backup amplifier

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- 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 48 VDC supply and is designed to survive minor interruptions on the power supply.

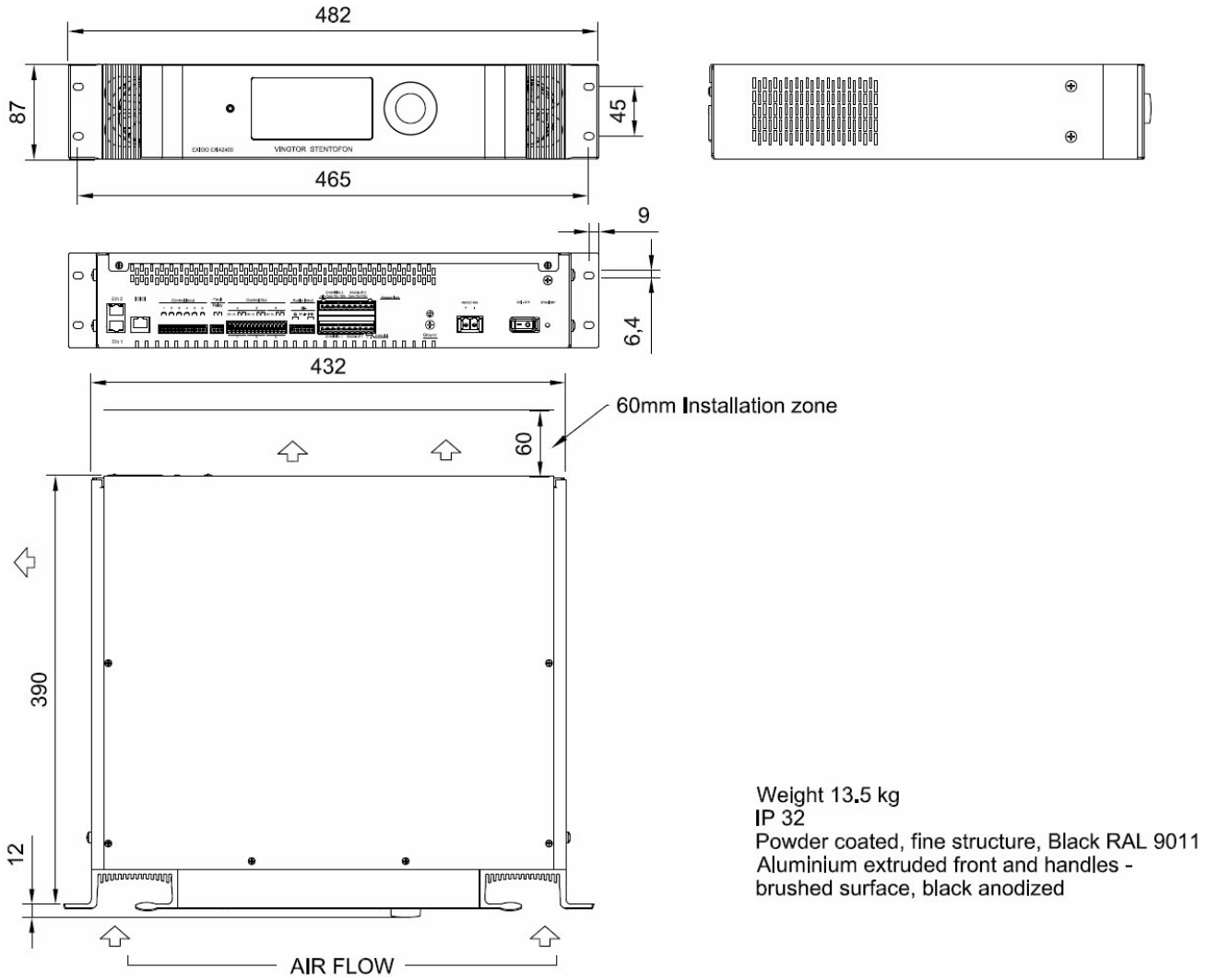
The amplifier’s configurable control inputs/outputs and audio inputs can be used locally by the amplifier (e.g. for PTT and audio from a handheld microphone) or can be controlled by the system (e.g. audio input for background music).

Technical Dimensions

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Weight 13.5 kg
IP 32
Powder coated, fine structure, Black RAL 9011
Aluminium extruded front and handles -
brushed surface, black anodized

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Specifications

MECHANICAL

Dimensions (HxWxD)	87 x 482 x 390 mm
Weight	13.5 kg
Shipping Weight	15 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	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

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ELECTRICAL

Connector	Pluggable and lockable terminal
Nominal voltage	48 Vdc, Vmin 40 Vdc, Vmax 63 Vdc
Inrush current	Max 26 A
Power consumption	Pnom: ≤ 35 W (idle) Pmax: ≤ 1250 W
	* Power consumption calculated with continious 6A 800 watt load on outputs, 10 LET units, all control I/O activated

AUDIO OUTPUTS

Output power (100V/70V)	2 x 400 Watt GA power, continuous @ 55 °C
25V (8 ohm) output	2 x 50 watt alarm, continuous @ 50 °C
Output line	100 volt, 70 volt and 8 Ohm
Frequency response	200 Hz to 20 kHz ±3 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: 25 Ω, 70V: 12,5 Ω, 25V: 25 Ω
Rated load capacitance	470 nF

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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
CMRR	45 dB
Input impedance	600 Ω / 10 k Ω (selectable)

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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 ±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 ±10%, 200 mA, monitored
Fault relay	1
Relay outputs: (COM, NO,NC)	Max recommended levels: 3A, 100Vdc, 125Vac, switching 60W/125VA

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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, EN 62368-1, IEC 60529

Accessories



EAM-400

ENA2400 Amplifier Module

Item Number: 1023922400



EPMA800DC

ENA2400-DC Power Supply

Item Number: 1023912200



ELTSI-1

Exigo Industrial Line End Transponder

Item Number: 1023540000

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