



Central Unit ELISA III-IP

Data Sheet

Doc. No.: see top of page

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1. Technical Data

1.1. Amplifiers and Interfaces

Information in square brackets [...] show the imprint on the housing.

Amplifiers		
	Quantity	4
	Loudspeaker outputs [LS Out]	8 (4x with A/B-wiring)
	Operating class	Class-D
	Type	100V, galvanically isolated
	Output voltage (max.)	100V _{eff} (sine) or 141V (peak)
	Output power	4x 150W ¹ • EN60268-3:2013 distortion-limited output power • DIN EN 54-16 output power requirement • FTC 63FR37233 title 16, CFR, paragraph 1, part 432, rated power • EIA SE-101-A-1949 1) 4x 200W according to standard EIA SE-101-A-1949
	Configuration of output power	4x 150W ² 2x 300W ² 1x 300W, 2x 150W ² 1x 450W, 1x 150W ² 1x 600W ² 2) 200/400/800W according to standard EIA SE-101-A-1949
	Frequency range	20Hz to 20kHz (-3dB)
	Damping factor	> 50
	Signal noise ratio SNR	> 96 dB (S-AES17)
	Crosstalk	> 80dB
	Distortion THD+N	<0.5% @1kHz
	Surveillance	Impedance-, power- and earth fault-measurement
	Standby amplifiers [Standby Amp]	4 interconnections

4x Audio inputs [AudioIn]		
	Input level	-9dBu (0.27V _{eff}) nominal, +6dBu (1.55V _s) maximum, symmetrical
	Input impedance Z _{in}	> 10kOhm
	Frequency range	20Hz to 20kHz
	Signal noise ratio SNR	> 90dB (A-rated)
	Distortion THD+N	<0.1%
4x Audio outputs [AudioOut]		
	Output level	-9dBu (0.27V _{eff}) nominal, +6dBu (1.55V _s) maximum, symmetrical
	Output impedance Z _{out}	< 100Ohm
	Frequency range	20Hz to 20kHz (-3dB)
	Signal noise ratio SNR	> 96dB (A-rated)
	Distortion THD+N	<0.1%
2x USB ports at front panel		
	Host	1x
	Device	1x
4x Ethernet [ETH1] [ETH2] [ETH3] [ETH4]		
	Data rate	10/100 BaseT
	PoE	30W max. in total
General Purpose (GP) Ports		
	4x control inputs [GPIIn]	configurable as GPIIn or GPIInMon
	4x control inputs [GPIIn-Mon]	configurable as GPIIn or GPIInMon or GPIInMonPwr
	GPIIn	Up to 8x GPIIn, max. 60V, >9V = active (I = 1mA, internally limited) , galvanically isolated
	GPIInMon	Up to 8x GPIInMon, monitored by an external device (DIN VDE 0833-4), 0-30V (max. 60V), <9V = deactive, >10V = active, Rin = 1kOhm (7V - 30V), I < 1mA (35V - 60V) , galvanically isolated

GpInMonPwr	Up to 4x GpInMonPwr, supporting direct connection of manual call points (DIN VDE 0833-4): internally powered with 12V , galvanically isolated in ground Short circuit: $I > 8.2\text{mA}$ ($R < 400\text{ Ohm}$) Active: $3.7\text{mA} < I < 8.2\text{mA}$ ($400\text{ Ohm} < R < 2000\text{ Ohm}$) Deactive: $2.2\text{mA} < I < 3.7\text{mA}$ ($2000\text{ Ohm} < R < 4000\text{ Ohm}$) Line break: $I < 2.2\text{mA}$ ($R > 4000\text{ Ohm}$)
4x control outputs [GpOut]	Output contacts, 60V, $< 0.1\text{A}$, galvanically isolated
4x control outputs [GpOutMon]	Quiescent current monitored outputs (DIN VDE 0833-4), 2x NO (normally open) and 2x NC (normally closed), galvanically isolated
2x Control power [GpPwr]	Power supply for GpIn functionality 12V, up to $< 50\text{mA}$
4x current loop 4-20mA [I20mA]	Two-wire long-distance measurement inputs

1.2. Essential Software Functions

Note



SOFTWARE LICENSES

The provision of certain functions may depend on the selected function packages.

Supported audio codecs for speech	G.711 PCMU/PCMA 8kHz G.722 16kHz broadband PCM Linear 16Bit, mono, 8kHz, 16kHz, 44.1kHz
Supported audio codecs for files (sounds and announcements)	PCM Linear 16Bit, mono, 48kHz (WAV) MPEG Audio Layer III (MP3)
VoIP protocols (LAN)	SIP, RTP, RTCP
Other announcement functions	SES-XML interface, traffic light status

DSP Functions

EQ, digital biquad filter Frequency bands	5-band graphic equalizer 59Hz, 205Hz, 790Hz, 2950Hz, 12000Hz Attenuation value between: -12dB to +12dB
Adjustable delay	0ms - 4000ms
Volume adjustment	Input and output between: -100dB to +20dB
Pitch shifter Pitch speed Note System call stations only	Switchable, 1Hz-150Hz (default value 50Hz) Infinitely variable between 1 (fast) and 10 (slow)
High pass filter per input channel	Switchable and selection of fixed cut-off frequencies: 4kHz, 8kHz, 16kHz
Low-pass filter per input channel	Switchable and selection of fixed cut-off frequencies: 50Hz, 100Hz

1.3. Electrical Data

Information in square brackets [...] show the imprint on the housing.

Power supply range		
	Input 230V _{AC} [200–260V _{AC}]	200 – 260V _{AC} , 40 – 60Hz
	Input 48V _{DC} [42–60V _{DC}]	42 – 60V _{DC}
Maximum power consumption		
	Input 230V _{AC} [200–260V _{AC}]	3,5A _{eff}
	Input 48V _{DC} [42–60V _{DC}]	20A _{eff}
Inrush current		
	Input 230V _{AC} [200–260V _{AC}]	< 16A
	Input 48V _{DC} [42–60V _{DC}]	< 25A
Leakage current		
	Input 230V _{AC} [200–260V _{AC}]	< 3.5mA
Heat loss rate (idle mode):		25W
Plus per active amplifier:		
	with speech (-12dB)	+10W
	with music (-9dB)	+15W



	at maximum sine power (0dB)	+30W
Connected value / maximum power consumption		1kW
Efficiency at full load		> 80%
Ingress Protection		IP30 (EN 60529)
Protection class		Class I (EN 61140 / VDE 0140-1)

1.4. Environmental Data

Operating temperature	-5°C – +55°C
Operating air humidity	0% – 100%, non-condensing
Storage temperature	-5°C – +60°C

1.5. Label

Nameplate with CE label

		Wenzel Elektronik GmbH Gehrstücken 7 D-25421 Pinneberg
Voice Alarm Central Unit		Power supply: xxx V/VC xxx V/DC
Type: ELISA III-IP		Max power: xxx W
Mat.No: 22-1-308-100-xxx		
S/N: XXXXXXUUIIDXXXXXX-XXXXXX		
DOP: mm/yyyy		

1.6. Standards

The product meets the following standards:

- DIN EN 50121-4:2017
- DIN EN 50130-4:2015
- DIN EN IEC 60268-3:2019
- DIN EN 60950-1:2007
- DIN VDE 0833-4: 2014
- DIN EN 54-16:2008
- TRVB S 158
- ISO 7240-16: 2007

1.7. Dimensions and Weight

NOTICE

RISK OF CABLE DAMAGE

If there is not enough space left in the depth to safely lay the cables, breaks and functional losses can occur.

- An additional space requirement in the installation depth of at least 90mm must be taken into account when wiring.

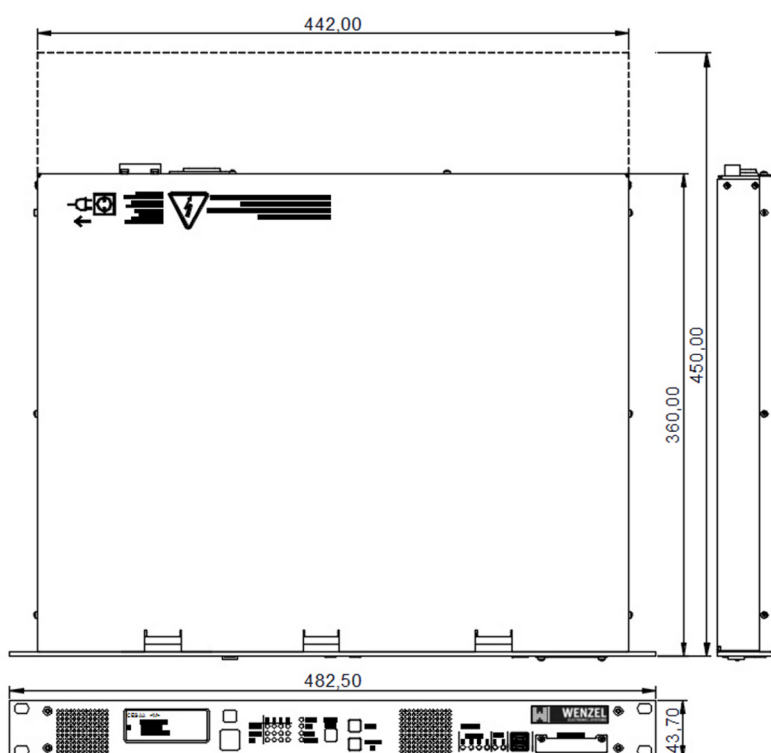


Figure 1. Dimensions

Table 1. Dimensions and weight

Type	Values
Width	482,5mm
Height	43.7mm (1 HU)
Depth	360mm
Weight	7.8kg

Metadaten:

/Wenzel/Dokumente/E/Produkte/ELISA III/Dokumentationen/Zentraleinheit

Name: Data Sheet ELISA III-IP-1.10.pdf

Titel: Central Unit ELISA III-IP

Author:

Erstellt am: 24.04.2024 09:23

Freigabe-Dokumenten ID: SAA-100058-1.10

Beschreibung: EXTERNER SRC

Dieses Dokument wurde genehmigt von:

Author:	auerswald	10-4-2024
Systemsleitung:	jahn	10-4-2024
Systemsolution:	nissen	11-4-2024
Produktionsleitung:	siepmann	15-4-2024
Entwicklungsleitung:	wagner	24-4-2024