

# MAXX SERIES

MA16 LP<sup>2</sup>

MA24 LP<sup>2</sup>

MA32 LP<sup>2</sup>



## DATASHEET

# AUDIO

<b>Output Power</b> (EIAJ Test Standard 1kHz 1% THD)	4Ω	8Ω	8Ω Bridge-Mode
	50W	30W	100W
<b>Max output Voltage</b>	24 V <sub>peak</sub>		48 V <sub>peak</sub>
<b>Max output Current Limited</b>	10 A <sub>peak</sub>		
<b>Emergency Shutdown Current</b>	15 A <sub>peak</sub>		
<b>DC Offset</b>	<25mV		
<b>Frequency response</b>	10Hz-20kHz / 4-8Ω: +0.0 -1.5dB		
<b>S/N typ</b>	108dBA		
<b>Analog Gain</b>	Software Adjustable, 0dBFS on any Input Interface: 20V <sub>p</sub> - 60V <sub>p</sub> (default: 32V <sub>p</sub> )		
<b>THD+N @ 4Ω</b>	1W	10W	
	< 0.05%	< 0.1%	
<b>SMPTE IMD</b>	< 0.1%		
<b>CCIF IMD</b>	< 0.1%		
<b>Output impedance</b>	typ 60 mΩ		
<b>Crosstalk</b>	channel enabled		channel disabled
	typ < 70dB	typ 90dB (distant channels)	typ < 120dB
<b>Latency @48kHz</b>	1.1ms		
<b>Protection</b>	Overtemperature, DC and Overcurrent		

# DSP

<b>Architecture</b>	FPGA based 32-bit fixed point
<b>Inputs</b>	16 x input matrix per channel (DANTE / AES3 / MADI)
	sine, white- pink- brown-noise
<b>Level Control</b>	Mute, Volume, Phase
<b>Filter per channel</b>	32 x EQ / Highpass / Lowpass

<b>Filter types</b>	bell, notch, highshelf, lowshelf, allpass 1th / 2nd order
<b>High- Lowpass types</b>	6 - 48dB/Oct, Bessel, Butterworth, Linkwitz/Riley, Variable Q
<b>FIR Filter</b>	2048 Tabs, ASCII file import
<b>Delay</b>	48000 Samples / 330m / 1000ms per channel
<b>CurrentLimiter</b>	Threshold [Ap]
<b>VoltageLimiter</b>	2 x Threshold [Vp], Attack, Release
<b>Powerlimiter</b>	Threshold [W], Attack, Release
<b>SpeakerDetection</b>	20kHz Pilot Tone generating with Volume, Threshold, Debounce

## CONNECTOR

<b>Control input connectors</b>	RJ45 ( 1Gbit/s Ethernet )
<b>Audio signal input connectors</b>	RJ45 ( DANTE ), BNC 75R ( MADI Coax, AES3id ), SC Optic ( MADI Fibre )
<b>Speaker connector</b>	Wuerth Elektronik 691352710002
	Phoenix Contact MSTB 2,5/ 2-ST - 1754449
	Phoenix Contact MSTB 2.5/16-ST-5,08 - 1757158
<b>AC mains</b>	C13

## AC MAINS POWER

<b>Power supply</b>	Universal, regulated switch mode with PFC (Power Factor Correction)
<b>Operating Voltage</b>	90 - 264VAC 50/60Hz
<b>AC Current typ.</b>	4.85A
<b>Inrush Current</b>	60A max.
<b>Suggested circuit breaker</b>	B16
<b>Earth Leakage Current</b>	<0.75mA / 240V

32 CH Version

<b>Power Factor</b>	@230V	@110V
amps power off	0.46	0.85
idle	0.64	0.95
1/8 power @ 4 Ohm	0.96	0.98
<b>Consumption / current draw</b>	@230V	@110V
amps power off	29W, 0.13A	29W, 0.26A
idle	56W, 0.24A	57W, 0.54A
1/8 power @ 4 Ohm	322W, 1.4A	332W, 3.0A

24 CH Version		
<b>Power Factor</b>	@230V	@110V
amps power off	0.44	0.83
idle	0.58	0.93
1/8 power @ 4 Ohm	0.94	0.99
<b>Consumption / current draw</b>	@230V	@110V
amps power off	26W, 0.11A	26W, 0.24A
idle	46W, 0.20A	38W, 0.35A
1/8 power @ 4 Ohm	241W, 1.05A	247W, 2.25A

16 CH Version		
<b>Power Factor</b>	@230V	@110V
amps power off	0.41	0.81
idle	0.52	0.90
1/8 power @ 4 Ohm	0.89	0.99
<b>Consumption / current draw</b>	@230V	@110V
amps power off	23W, 0.10A	24W, 0.22A
idle	36W, 0.16A	38W, 0.35A
1/8 power @ 4 Ohm	152W, 0.66A	164W, 1.49A

# THERMAL

<b>Enviromental operating temperature</b>	0 - 40°C			
<b>Thermal dissipation</b>	Fan, variable speed, temperature controlled front to rear airflow / passiv cooled			
	32 CH			
	@230V		@110V	
amps power off	24 kcal/h	95 BTU/h	24 kcal/h	95 BTU/h
idle	49 kcal/h	194 BTU/h	50 kcal/h	198 BTU/h
1/8 power @ 4 Ohm	104 kcal/h	412 BTU/h	105 kcal/h	416 BTU/h
	24 CH			
	@230V		@110V	
amps power off	22 kcal/h	87 BTU/h	22 kcal/h	87 BTU/h
idle	40 kcal/h	159 BTU/h	40 kcal/h	159 BTU/h
1/8 power @ 4 Ohm	78 kcal/h	309 BTU/h	79 kcal/h	313 BTU/h
	16 CH			
	@230V		@110V	
amps power off	19 kcal/h	75 BTU/h	19 kcal/h	75 BTU/h
idle	30 kcal/h	119 BTU/h	32 kcal/h	127 BTU/h
1/8 power @ 4 Ohm	43 kcal/h	171 BTU/h	44 kcal/h	174 BTU/h

# USER INTERFACES

<b>Hardware</b>	Multicolor LED, LCD Display with 6 navigation Keys
<b>Software</b>	Webpage, RESTful-API

# DIMENSIONS / WEIGHT

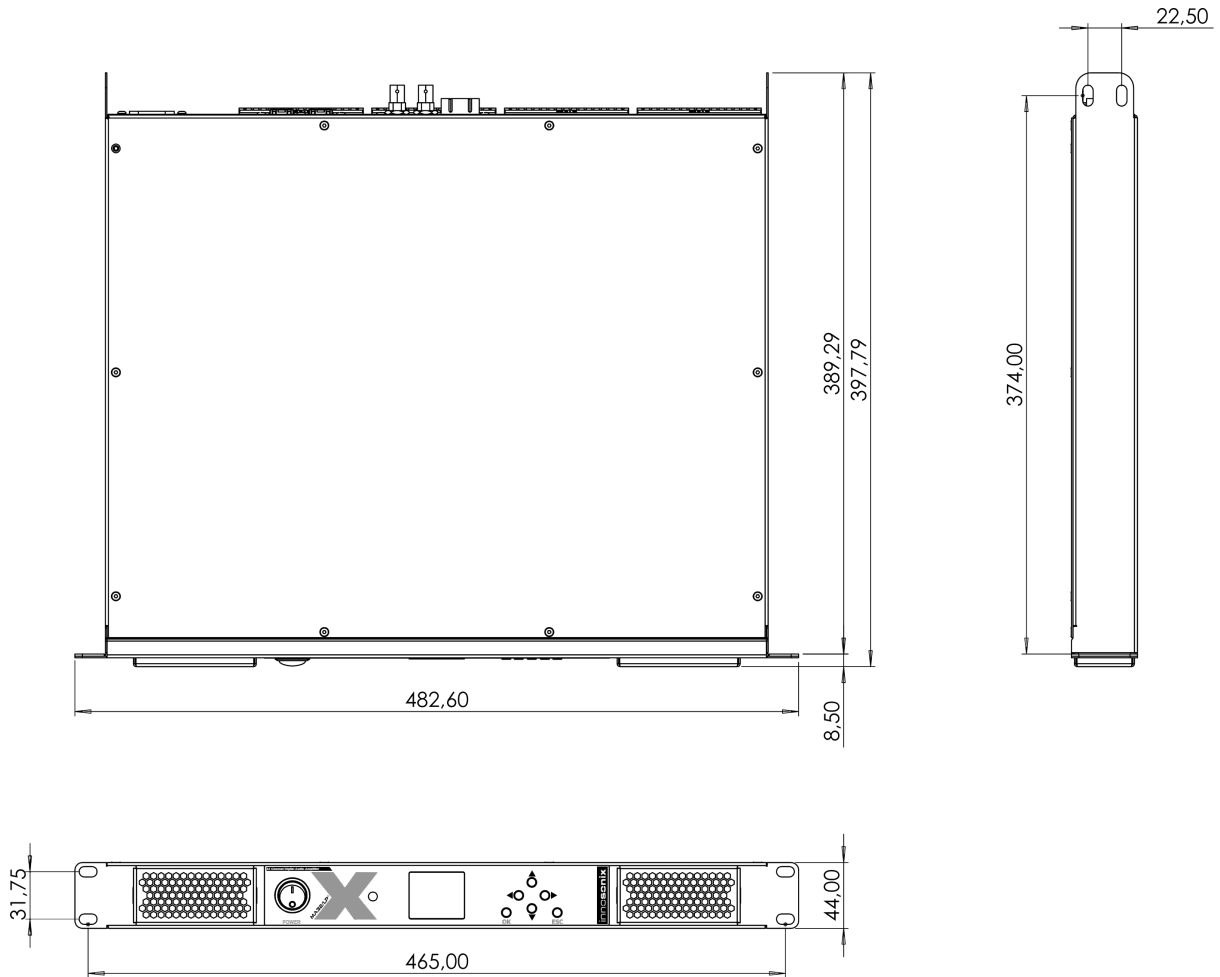


Figure 1. MAXX/LP<sup>2</sup> dimensions

<b>Dimensions</b>	W 482.60mm (19") H 44.00mm (1 RU), D 389.29mm		
	32CH	24CH	16CH
<b>Weight</b>	6.0 kg	5.7 kg	5.4 kg
<b>Dimensions Boxed</b>	68 x 53 x 25 cm		
<b>Weight Boxed</b>	9.0 kg	8.7 kg	8.4 kg

