



MAXX-SERIES

DIGITAL POWER AMPLIFIERS

MA 16/D²
MA 24/D²
MA 32/D²

AUDIO

Output Power (EIAJ Test Standard 1kHz 1% THD)	4Ω	8Ω	8Ω Bridge-Mode	
	280W	140W	500W	
Max output Voltage	52 V _{peak}		104 V _{peak}	
Max output Current	20 A _{peak}		20 A _{peak}	
DC Offset	<25mV			
Frequency response	10Hz-20kHz / 4-8Ω: +0.5 -0.5dB			
S/N typ	105dBA			
Analog Gain	Software Adjustable, 0dBFS on any Input Interface ⇒ 20V _p - 60V _p (default: 60V _p)			
THD+N @ 4Ω	1W	10W	280W	300W
	< 0.05%	< 0.05%	1%	2%
SMPTE IMD	< 0.1% @ 1/8 Power 4Ω			
CCIF IMD	< 0.1% @ 1/8 Power 4Ω			
Output impedance	typ 10 mΩ			
Crosstalk	channel enabled		channel disabled	
	typ < 75dB	typ 90dB (distant channels)	typ < 100dB	
Latency @48kHz	1.1ms			
Protection	Overtemperature, DC and Overcurrent			

DSP

Architecture	FPGA based 32-bit fixed point
Inputs	16 x input matrix
	sine, white- pink- brown-noise
	Mute, Volume, Phase
Filter per channel	32 x EQ / Highpass / Lowpass
Filter types	bell, notch, highshelf, lowshelf
High- Lowpass types	6 - 48dB/Oct, Bessel, Butterworth, Linkwitz/Riley, Variable Q
FIR Filter	2048 Tabs, ASCII file import
Delay	48000 Samples / 330m / 1000ms per channel

CurrentLimiter	Threshold [Ap]
VoltageLimiter	2 x Threshold [Vp], Attack, Release
Powerlimiter	Threshold [W], Attack, Release
Speakerdetection	20kHz Pilot Tone generating with Volume, Threshold, Debounce

CONNECTOR

Control input connectors	RJ45 (100Mbit/s Ethernet)
Audio signal input connectors	RJ45 (DANTE), BNC 75R (MADI Coax, AES3id), SC Optic (MADI Fibre)
Speaker connector	Wuerth Elektronik 691352710002 Phoenix Contact MSTB 2,5/ 2-ST - 1754449
AC mains	C19

AC MAINS POWER

Power supply	Universal, regulated switch mode with PFC (Power Factor Correction)	
Operating Voltage	90 - 264VAC 50/60Hz	
AC Current typ.	@230V	@110V
	10A	16A
Inrush Current	50A max.	
Suggested circuit breaker	B16	
Earth Leakage Current	<2mA / 240V	

32 CH Version		
Power Factor	@230V	@110V
amps power off	0.46	0.85
idle	0.64	0.95
1/8 power @ 4 Ohm	0.96	0.98
Consumption / current draw	@230V	@110V
amps power off	36W	36W

idle	98W	102W
1/8 power @ 4 Ohm	1514W	1532W

24 CH Version		
---------------	--	--

Power Factor	@230V	@110V
amps power off	0.44	0.83
idle	0.58	0.93
1/8 power @ 4 Ohm	0.94	0.99
Consumption / current draw	@230V	@110V
amps power off	36W	36W
idle	83W	84W
1/8 power @ 4 Ohm	1145W	1150W

16 CH Version		
---------------	--	--

Power Factor	@230V	@110V
amps power off	0.44	0.83
idle	0.58	0.93
1/8 power @ 4 Ohm	0.94	0.99
Consumption / current draw	@230V	@110V
amps power off	36W	36W
idle	67W	68W
1/8 power @ 4 Ohm	775W	778W

THERMAL

Enviromental operating temperature	0 - 40°C			
Thermal dissipation	Fan, variable speed, temperature controlled front to rear airflow			
	32 CH			
	@230V		@110V	
amps power off	31 kcal/h	123 BTU/h	31 kcal/h	123 BTU/h
idle	84 kcal/h	333 BTU/h	88 kcal/h	349 BTU/h
1/8 power @ 4 Ohm	269 kcal/h	1066 BTU/h	270 kcal/h	1071 BTU/h
	24 CH			
	@230V		@110V	
amps power off	31 kcal/h	123 BTU/h	31 kcal/h	123 BTU/h
idle	71 kcal/h	282 BTU/h	72 kcal/h	286 BTU/h
1/8 power @ 4 Ohm	210 kcal/h	833 BTU/h	212 kcal/h	840 BTU/h
	16 CH			
	@230V		@110V	
amps power off	31 kcal/h	123 BTU/h	31 kcal/h	123 BTU/h
idle	58 kcal/h	230 BTU/h	58 kcal/h	230 BTU/h
1/8 power @ 4 Ohm	150 kcal/h	595 BTU/h	152 kcal/h	603 BTU/h

USER INTERFACES

Hardware	Multicolor LED, LCD Display with 6 navigation Keys
Software	Webpage, RESTful-API

DIMENSIONS / WEIGHT

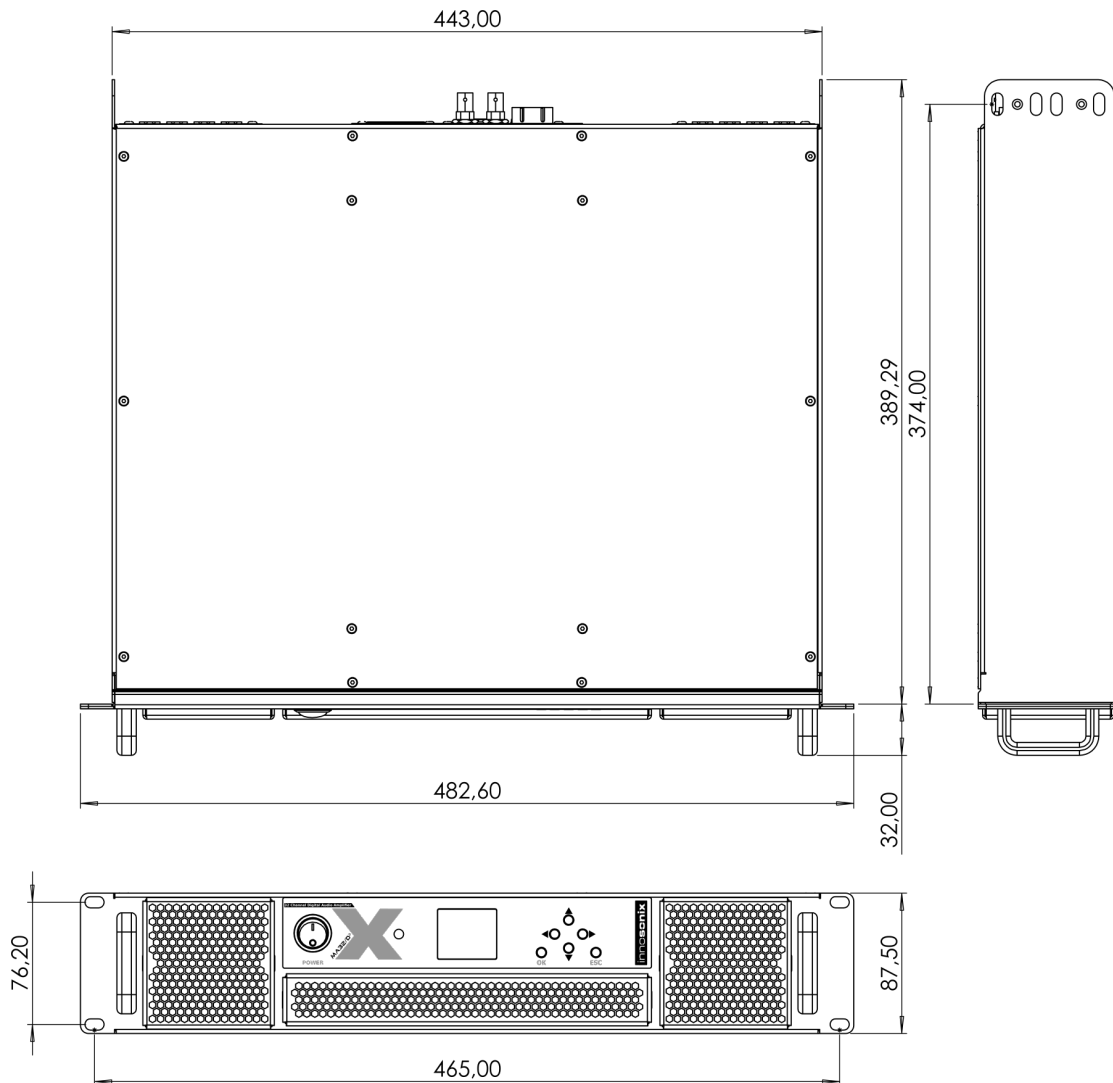


Figure 1. MAXX/D² dimensions

Dimensions	W 482.60mm (19") H 87.50mm (2 RU), D 389.29mm		
	32CH	24CH	16CH
Weight	15.0 kg	14.3 kg	13.0 kg



Address : innosonix GmbH
 Hauptstr. 35
 D-96482 Ahorn (Germany)
Phone : +49 (0) 9561 74599-80
Telefax : +49 (0) 9561 74599-89
E-Mail : info@innosonix.de

innosonix GmbH
Executive board: Markus Bätz, Steffen Bätz
USt.-IdNr.: DE 266020313
HRB 5192 Coburg
WEEE-Reg.-Nr. DE 88021242

You can find us on:
www.innosonix.de
www.facebook.com/innosonix.gmbh
www.instagram.com/innosonix.gmbh