

MICRO MAXX SERIES

μ MAO4/M



DATASHEET

Specifications

Table 1. AUDIO

Power Stage	Half-Bridge GaN amplifier (Gallium nitride)		
Output Power (EIAJ Test Standard 1kHz 1% THD)	4Ω		8Ω Bridge-Mode
	120W		240W
Max output Voltage	50 V _{peak}		100 V _{peak}
Max output Current Limited	10 A _{peak}		
Emergency Shutdown Current	15 A _{peak}		
DC Offset	<25mV		
Frequency response	10Hz-20kHz / 4-8Ω: +0.0 -1dB		
S/N typ	108dBA		
Analog Gain	Software Adjustable, 0dBFS on any Input Interface: 20V _p - 60V _p (default: 50V _p)		
THD+N @ 4Ω	1W		10W
	< 0.05%		< 0.1%
SMPTE IMD	< 0.1%		
CCIF IMD	< 0.1%		
Output impedance	typ 40 mΩ		
Crosstalk	channel enabled		channel disabled
	typ < 70dB	typ 90dB (distant channels)	typ < 120dB
Protection	Overtemperature, DC and Overcurrent		

Table 2. DSP

Architecture	ARM based 32/64-bit floating point
Inputs	1 x input matrix (4 inputs) per channel
	4-Ch AoIP (Dante / AES67 / etc) + sine, white- pink- brown-noise
Level Control	Mute, Volume, Phase
Filter per channel	32 x EQ / Highpass / Lowpass

Filter types	bell, notch, highshelf, lowshelf, allpass 1th / 2nd order
High- Lowpass types	6 - 48dB/Oct, Bessel, Butterworth, Linkwitz/Riley, Variable Q
FIR Filter	512 Tabs, ASCII file import
Fraction Delay	48000 Samples / 330m / 1000ms (resolution 0.001 units) per channel
CurrentLimiter	Threshold [Ap]
VoltageLimiter	2 x Threshold [Vp], Attack, Release
Powerlimiter	Threshold [W], Attack, Release
Speaker Monitoring	Live Impedance Analyzer: This method requires an active signal to be present at the output. It calculates impedance spectrum information by analyzing the current and voltage of the output signal. Pilot Tone Generator: This alternative uses a dedicated 20 kHz pilot tone to determine impedance. Crucially, this tone is transmitted continuously and operates independently, meaning no program signal is required at the output.

	Latency	
digital input	134 samples, (117 samples DSP + 17 samples DAC)	
Input	@ 44.1kHz	@ 48kHz
AoIP	3.04ms	2.8 ms

Table 3. CONNECTOR

Mains	IEC C6 (IEC C5 Cable)
Network	RJ45 (100Mbit/s Ethernet)
Speaker connector	Wuerth Elektronik 691343710004
	Phoenix Contact MSTB 2,5/ 4-ST - 1779851
	Phoenix Contact MSTB 2,5/ 4-STF - 1786857
	Note: All 5mm pitch "Euroblock" connectos can be used

Table 4. Power Specification

Power supply	Universal, regulated switch mode with PFC (Power Factor Correction)	
Operating Voltage	90 - 264VAC 50/60Hz	
AC Current typ.	@230V	@110V

	0.5A	1A
Inrush Current	5A max.	
Earth Leakage Current	<1mA / 240V	
Power Factor	@230V	@110V
amps power off	0.41	0.79
idle	0.54	0.88
1/8 power @ 4 Ohm	0.91	0.96
Power consumption	@230V	@110V
amps power off	4W	4W
idle	8W	8W
1/8 power @ 4 Ohm	70W	71W

Table 5. THERMAL

Environmental operating temperature	0 - 40°C			
Thermal dissipation	Fan, variable speed, temperature controlled front to rear airflow			
	@230V		@110V	
amps power off	TBD kcal/h	TBD BTU/h	TBD kcal/h	TBD BTU/h
idle	TBD kcal/h	TBD BTU/h	TBD kcal/h	TBD BTU/h
1/8 power @ 4 Ohm	TBD kcal/h	TBD BTU/h	TBD kcal/h	TBD BTU/h

Table 6. USER INTERFACES

Hardware	Multicolor LED, Factory-reset button
Software	RESTful-API used by maxx_remote
Third Party Plugins	Q-SYS, Loxone

DIMENSIONS / WEIGHT

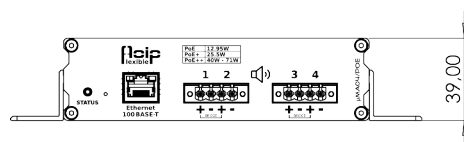
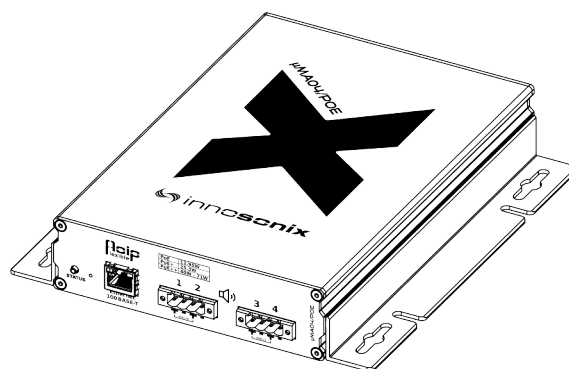
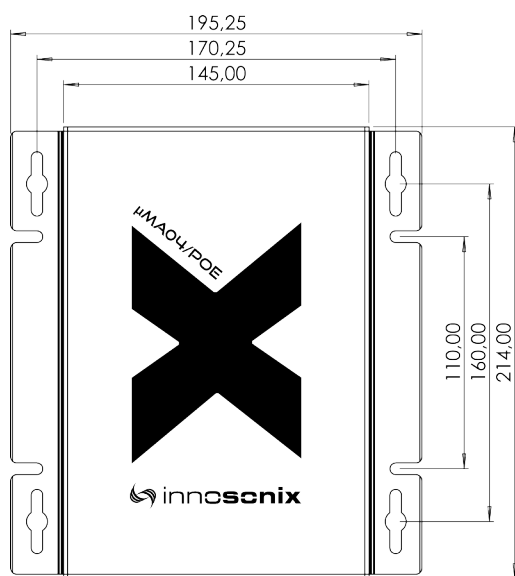


Figure 1. μMaxx dimensions

Table 7. μMaxx dimensions

Dimensions	W 195.25mm H 39.00mm, D 214mm
Weight	1.35 kg
Dimensions Boxed	30 x 26 x 6 cm
Weight Boxed	1.75 kg

