

MAXX SERIES

MA16 D²

MA24 D²

MA32 D²



DATA SHEET

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 Limited | 20 A _{peak} | | | |
| Emergency Shutdown Current | 31 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 per channel (DANTE / AES3 / MADI) |
| | 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 | 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 (1Gbit/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

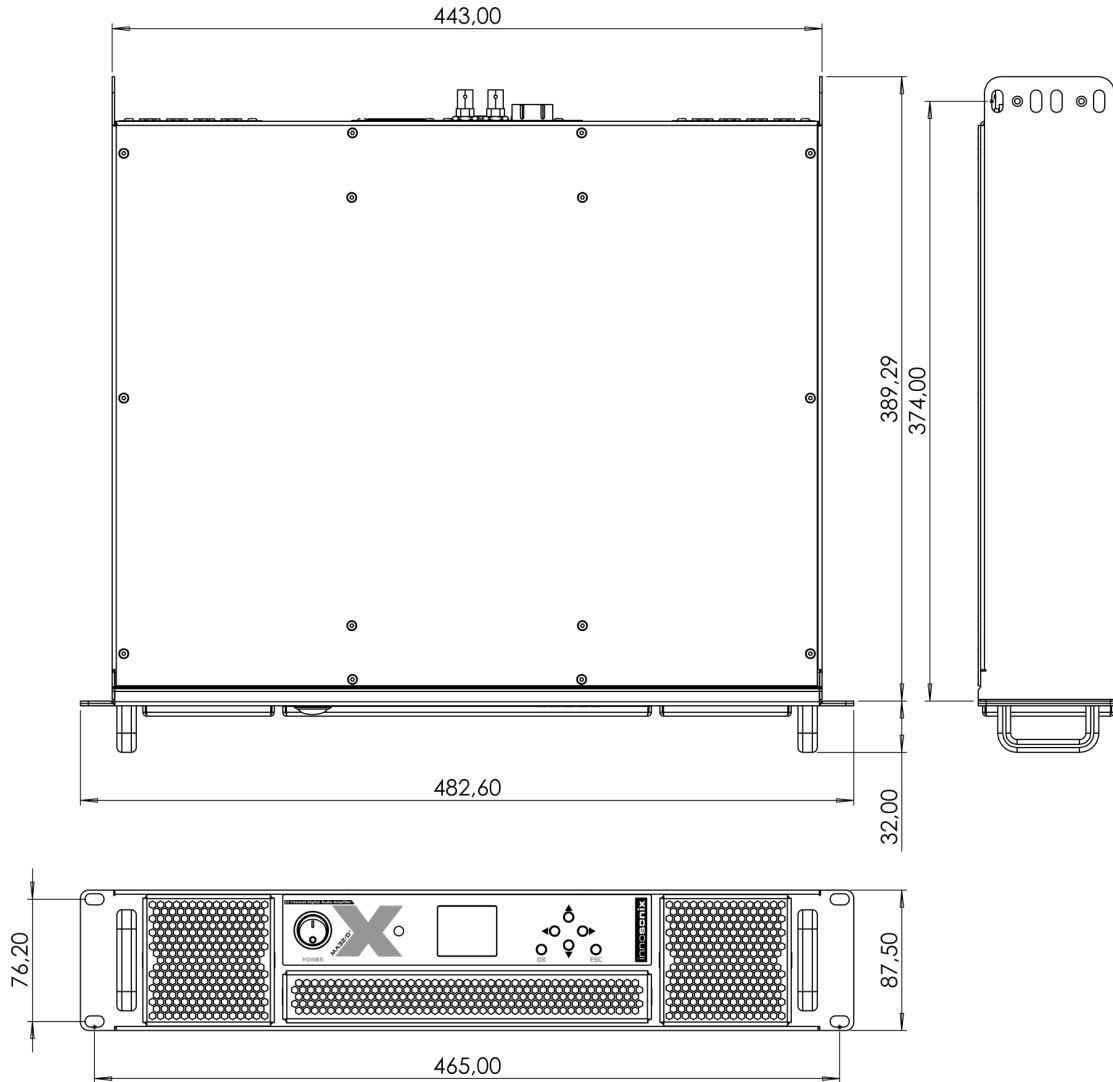


Figure 1. MAXX/D² dimensions

| | | | |
|-------------------------|---|---------|---------|
| Dimensions | W 482.60mm (19") H 87.50mm (2 RU), D 389.29mm | | |
| | 32CH | 24CH | 16CH |
| Weight | 13.4 kg | 12.9 kg | 11.2 kg |
| Dimensions Boxed | 68 x 53 x 25 cm | | |
| Weight Boxed | 16.4 kg | 15.9 kg | 14.2 kg |

