GTX Amplifiers GTX SERIES DATASHEET

The GTX Series are 4-channels high power level amplifiers designed to the rough requirements of the touring market. It is remarkable their high efficiency.

These amplifiers have been equipped with a high quality FIR-DSP with high performance 96kHz DSP process and a large IPS display, capacitive touch panel user interface.

In the design it has been implemented the advanced Audio Power Control Management to configure through the DSP how to sharing the power between the channels according to the user needs, having the possibility to obtain in just one channel the maximum power.

Optional DanteTM Networking (AES67) and AES3 Digital inputs are available for GTX amplifiers.

Technical Data

	GTX-5K	GTX-10K	GTX-14K	GTX-20K
Number of channels	4	4	4	4
Total output power	5000 W	10000 W	14000 W	20000 W
Output power				
@ 2 Ohms	4 x 1250W / 1 x 1250W	4 x 1250W / 1 x 1250W	4 x 1250W / 1 x 1250W	4 x 1250W / 1 x 1250W
@ 4 Ohms	4 x 1250W / 1 x 2500W	4 x 1250W / 1 x 2500W	4 x 1250W / 1 x 2500W	4 x 1250W / 1 x 2500W
@ 8 Ohms	4 x 1250W / 1 x 1250W	4 x 1250W / 1 x 1250W	4 x 1250W / 1 x 1250W	4 x 1250W / 1 x 1250W
@4 Ohms Bridged	2 x 2500 W	2 x 5000 W	2 x 7000 W	2 x 10000 W
@8 Ohms Bridged	2 x 2500 W	2 x 5000 W	2 x 7000 W	2 x 10000 W
Hi-Z 100V	4 x 1250 / 1 x 1250 W	4 x 2500 / 1 x 2500 W	4 x 3500 / 1 x 4200 W	4 x 5000 / 1 x 5000 W
Hi-Z 70V	4 x 1250 / 1 x 1800 W	4 x 2500 / 1 x 2500 W	4 x 2950 / 1 x 2950 W	4 x 3500 / 1 x 3500 W
Max output voltage	150 V peak	150 V peak	189 V peak	235 V peak
Max output current	36 A peak	50 A peak	59 A peak	71 A peak
Total Harmonic Distortion	<0.05%	<0.05%	<0.05%	<0.05%
Crosstalk /20Khz-1KHz), typical	>70 dB	>70 dB	>70 dB	>70 dB
Voltage Gain	26 dB to 44 dB	26 dB to 44 dB	26 dB to 44 dB	26 dB to 44 dB
SNR	111 dBA	111 dBA	113 dBA	115 dBA
Required AC Mains Operating Voltage (50Hz-60Hz)	90V-140V AC	90V-140V AC	90V-140V AC	90V-140V AC
1/8 Rated Power (@ 4 ohms)	3.7 A	7.3 A	10 A	14 A
Dimensions W x H x D (mm)	483x89x355	483x89x355	483x89x355	483x89x355
Weight Net (kg - lbs)	7 - 15.4	7 - 15.4	7.5 - 16.5	7.5 - 16.5
Protections	Soft-start, Turn-on Turn-off transients, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™, PMS™ and SSP™			

* IEC filtered pink noise signal (40Hz-5kHz, 12 dB crest factor). 230V AC mains.

GTX amplifier characteristics:

• Large IPS display, capacitive touch panel user interface

• 64 bit double-precision 96kHz DSP process

• Optional DanteTM Networking (AES67) and AES3 Digital inputs

• Two ports Ethernet and USB port for DSP control

• Low weight high efficiency class D topology

• Universal power supply with PFC

• Audio advanced Power Control Management (PCMTM)

• Neutrik® XLR and Speakon® connectors

• Up-side-down design to avoid fan dust accumulation

• Temperature controlled, front to back cooling fan

• 8, 4 and 2 Ohm low impedance operation. 100, 70, 50 and 35 V high impedance modes

• Up to 20000 W in 4 channels

DSP management using OCS and amplifier display:

• Input Routing matrix Analog/Dante/AES3

• Input EQ section with 8 filters and 20 memories

• Input EQ Mode section

• System Preset selection (Locked/Unlocked)

• Snapshot library management up to 20 presets

• Master Control Groups

• Input EQ Mode section creation, up to 20 presets

• Ways routing section (Locked/Unlocked)

• IIR EQ section: XOver, Gain, Delay and 7 EQ filters

• FIR EQ section: linear phase XOver and EQ filters, or custom up to 1000 taps

• RMS and Peak Dynamic control

• Snapshot Preset library management up to 20 presets (Locked/Unlocked)

• System Preset library management up to 100 pre-sets

• 5 Security levels definition to limit final user functionality

DSP Specifications

Overall:
• High performance 96kHz/24 bits AD/DA converters
• 64 bit double-precision 96kHz DSP process
• 0.85ms minimum process latency time
• Custom FIR process up to 1000 taps
• Dante and AES3 input versions

Input Section (x4):
• Gain, Mute and Phase inversion
• Delay: in In A: 333ms (114m), In B/C/D: 90ms (31m)
• Input EQ: 16 filters (Param., Shelving, LP, HP, BP, SB, AP)

Output Section (x4):
• Crossover Filters: FIR and IIR (up to 48dB/oct, Butterw./LR/Bessel)
• Output Delay: 0 to 31 meters (90ms) per channel
• Output IIR EQ: 12 filters per channel (Param., Shel, LP, HP, BP, SB, AP)

• Output FIR EQ: 20 filters per channel (Parametric, Shelving, LP,HP, BP, SB, PA), or Custom. Up to 1000 taps
• RMS and Peak limiter per channel

Communications:
• Two ports Ethernet switch for daisy chain connection
• UBS 2.0 Type B port

Miscellaneous:
• 20 User preset memories library
• 20 User snapshot memories library
• Manufacturer/User passwords
• User control groups for virtual Equalization, Gain and Delay
• Zone management for library, and alerts information
• Smaart ® analysis software integration