

T Series

2/4-Channel High-Performance Amplifier Platform with DSP and Dante™



- TOURING
- INSTALLATION



ArmoníaPlus
System Manager

The T Series is a flexible and cost effective amplifier platform loudspeaker processor. The range consists of 2 and 4 channel models supporting channel powers from 750 W to 3000 W.

All models deliver the same high peak voltage allowing high SPL with single 8/16 ohm cabinets. The high voltage is also good for sharing power between the channels for applications such as bi-amped loudspeakers or subwoofers with passive tops.

The T Series offers input via Dante, AES3, and analog. The Dante™ and AES3 solutions are optimized for daisy-chained distribution of 2-channel audio, enabling routing to many amplifiers without the need for external switches, repeaters, or splitters.

This helps in simplifying the process of setting up a typical networked system, which may consist of a daisy chain with the mixing console at one end, a WiFi access point at the other end, and the amplifiers in between.

The loudspeaker processing features set a new benchmark for cost-effective amplification for small and medium sized systems and stage monitoring applications.

The T Series can be controlled and configured in various ways:

- through ArmoníaPlus, where it can be in mixed groups with advanced EQ together with other Powersoft products
- from the front panel display for things like preset recall (also per output), gain, delay, mute. This makes it the

perfect match for powering the smaller solutions that are offered by rental companies. The display also shows the available headroom, along side with other status monitoring

- with the dedicated webapp, that runs on any device with a browser (e.g. a tablet) and access the amplifier via an external WiFi access point to control all parameters.

- ▶ Renowned sound clarity
- ▶ Group controllable advanced EQ with raised cosine filters
- ▶ Large preset library
- ▶ Preset compatibility with X Series
- ▶ Very long FIR filters (42.6 ms)

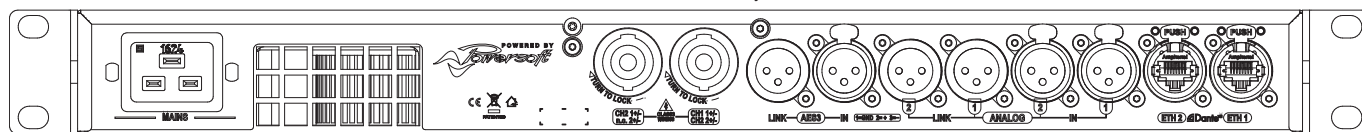
* DANTE version only



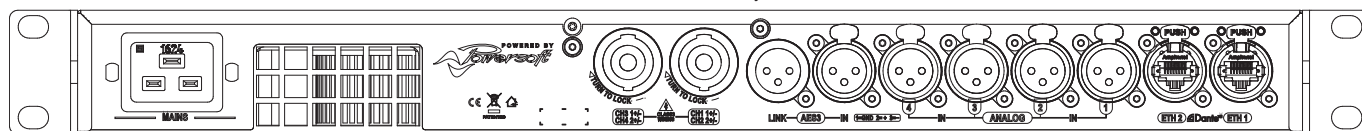
T Series

2/4-Channel High-Performance Amplifier Platform with DSP and Dante™

2 Channel - T302, T602



4 Channel - T304, T604



Specifications

Channel Handling	T302 - T602	T304 - T604
Number of output channels	2 (2 Speakon NL4)	4 (2 Speakon NL4)
(bridgeable per channel pair)		
Number of input channels		
Analog	2 XLR (female) 2 XLR LINK (male)	4 XLR (female)
Digital	AES3 - 1 XLR (female) LINK - 1 XLR (male)	

Audio	Gain	T302	T602	T304	T604
Input sensitivity @ 8 Ω	32 dB	2.57	2.57	2.57	2.57
S/N (20 Hz - 20 kHz @ 8 Ω)		>110	>110	>110	>110

Max input level	24 dBu
Frequency Response	20 Hz - 20 kHz +/-0.5 dB
Crosstalk (1 kHz)	<-70 dB
Input impedance	20kΩ Balanced
CMRR	>65 dB
THD+N (from 0.1 W to Half Power)	< 0.1% (typical < 0.05%)
SMPTE IMD (from 0.1 W to Half Power)	< 0.1% (typical < 0.05%)
Output impedance at 100 Hz	26 mΩ

DSP	
AD converters	24 Bit Tandem™ @ 48 kHz 125 dB-A Dynamic Range - 0.005 % THD+N
DA converters	24 Bit Tandem™ @ 48 kHz 117 dB-A Dynamic Range - 0.003 % THD+N
Sample rate converter	24 Bit @ 96 kHz 140 dB Dynamic Range - 0.0001 % THD+N
Internal precision	32 bit floating point
Latency	2.5 ms fixed latency architecture
Memory/Presets	256 MB (RAM) plus 512 MB flash for presets
Delay	2 s (input) + 100 ms (output) for time alignment
Equalizer	Raised-cosine, custom FIR, parametric IIR: peaking, hi/lo-shelving, all-pass, band-pass, band-stop, hi/lo-pass
Crossover	linear phase (FIR), Butterworth, Linkwitz-Riley, Bessel: 6 dB/oct to 48 dB/oct (IIR)
Limiters	TruePower™, RMS voltage, RMS current, Peak limiter
Damping control	Active DampingControl™ and LiveImpedance™ measurement

Output Stage	T302	T602	T304	T604
per channel @ 8 Ω (symmetrical)*	1200 W	1300 W	750 W	1250 W
per channel @ 4 Ω (symmetrical)*	1500 W	2500 W	750 W	1500 W
per channel @ 2 Ω (symmetrical)*	1500 W	3000 W	750 W	1500 W
per channel @ 8 Ω (asymmetrical)**	1300 W	1400 W	1200 W	1250 W
per channel @ 4 Ω (asymmetrical)**	2200 W	2500 W	1200 W	2100 W
per channel @ 2 Ω (asymmetrical)**	1600 W	3800 W	1200 W	1600 W
@ 4 Ω Bridged	3000 W	6000 W	1500 W	3000 W
@ 8 Ω Bridged	3000 W	5000 W	1500 W	3000 W
Maximum unclipped output voltage	145 V _{peak}	145 V _{peak}	145 V _{peak}	145 V _{peak}
Maximum output current	50 A _{peak}	100 A _{peak}	50 A _{peak}	50 A _{peak}

*Calculated by driving and loading symmetrically all the channels.
**Calculated by driving all channels, but with every second channel at -6dB

Power & Thermal	T302	T602	T304	T604	
@ 120 V	Standby Power	13.5	15	15	15
	Idle Power	23	32	32	32
	1/8 Power	517	824	532	1054
	@ 4 Ω	Current Draw	4.6	7.6	4.7
@ 230 V	Standby Power	14	16	16	16
	Idle Power	23	32	32	32
	1/8 Power	527	839	525	1027
	@ 4 Ω	Current Draw	2.7	4.3	2.7
Thermal Loss		485	678	537	1039
Thermal Loss		517	731	512	944

Power supply	Universal regulated switch mode with PFC, SRM
Nominal voltage (±10%)	100-240 VAC @ 50-60Hz
Operating Voltage	90-264 VAC @ 50/60 Hz
AC Mains connector	IEC C20 inlet (20 A max) region-specific power cord provided

Networking	
Standards compliance	auto sensing Gigabit Ethernet IEEE 802.3ab
Supported topologies	Star
Remote interface	ArmoniaPlus™

Construction	T302	T602	T304	T604
Dimensions	484 x 405 x 44.5 mm (19 x 16 x 1.75 in)			
Weight	6.7 kg	7.5 kg	7.1 kg	7.5 kg

Data subject to change without notice.

