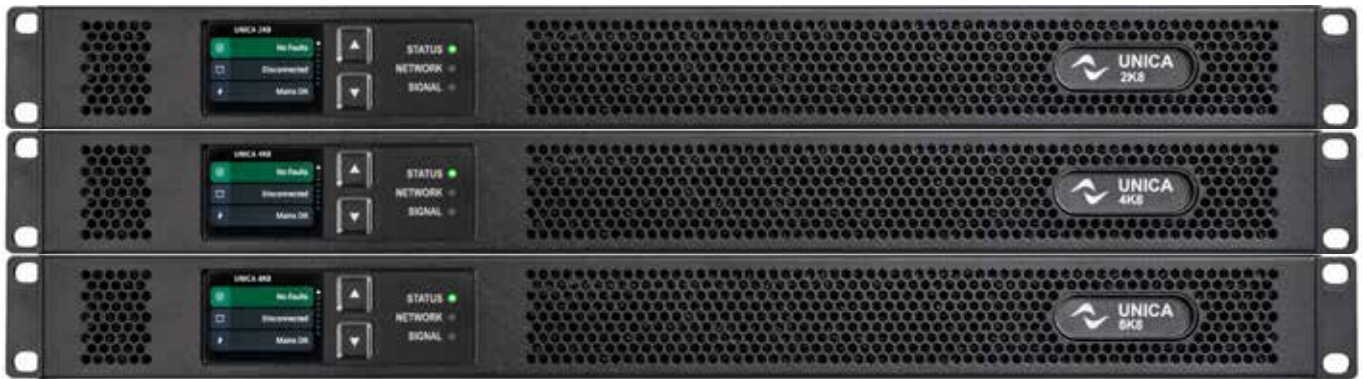


Unica™

8-Channel Cloud Based Amplifier Platform



The Unica™ Series is a compact, 1RU amplifier platform developed primarily for installed applications. The 8-channel version includes 2kW, 4kW, and 8kW total power models, making Unica™ one of the most power-dense solutions available.

The output channels can drive Lo-Z and 70/100V lines seamlessly, delivering up to twice the rated power when asymmetrically loaded, resulting in 2000W @4Ω for the 8kW model. The power supply allows worldwide operation (100-240VAC), and it is equipped with the latest generation of single-stage power factor correction (PFC). The proprietary Smart Rails Management (SRM) allows the supply rails to adapt in real time

to the required output voltage to maximize efficiency and reduce idle losses.

Unica™ platform features Powersoft's next-generation DSP for state-of-the-art processing and audio performance. The three 1Gb Ethernet ports, along with the native Dante™ and AES67 support allow for different network topologies including daisy-chain and Dante™ redundant.

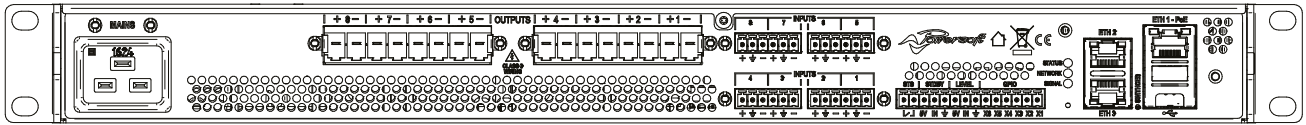
The front panel display allows quick access to the amplifier operating status information for local monitoring. The PoE (Power over Ethernet) input allows for short recovery time in case of mains loss, as well as testing and monitoring loudspeakers 24/7 without the need for mains power.

Lastly, Unica™ Series amplifiers natively support cloud connectivity for remote monitoring and control from any device anywhere in the world via Universo™, the Powersoft cloud platform interface.

- ▶ Medium to large-scale venues
- ▶ Main systems, central or distributed, subwoofers, hi-Z/lo-Z
- ▶ Mission critical applications
- ▶ Theatres, performance venues
- ▶ Houses of worship
- ▶ Convention centres
- ▶ Business centres
- ▶ Cruise ships



8-Channel Cloud Based Amplifier Platform



Specifications

Channel Handling		
Number of output channels	8 Hi-Z or Lo-Z (bridgeable per ch. pair)	Phoenix PC 5/8-STF1-7,62
Number of input channels		
Analog	8	Phoenix MC 1,5/6-ST-3,81
Dante™/AES67	8	3 x RJ45
Audio		
Default gain	32 dB	
Input sensitivity	2.84 Vrms / 11.3 dBu	
Output noise floor (Analog Input)	-72 dBV(A) typical	
SNR (Analog Input)	112 dB(A)	
Output noise floor (Dante™/AES67 Input)	-76 dBV(A) typical	
SNR (Dante™/AES67 Input)	116 dB(A)	
Max input level	>+24 dBu	
Frequency Response	20 Hz - 20 kHz +0.0 dB/-1.0 dB, @ 8 Ω	
Crosstalk	<-80dB typical, 20Hz to 1 kHz range <-60dB @20kHz typical	
Input impedance	20 kΩ balanced	
THD+N (from 0.1 W to Half Power)	< 0.05%	
SMPTE IMD (from 0.1 W to Half Power)	< 0.01%	
Damping factor	>2500 20Hz to 500 Hz	
DSP		
AD converters	24 Bit Tandem™ @ 48 kHz 130 dB(A) Dynamic Range - 0.00005 % THD+N	
DA converters	24 Bit Tandem™ @ 48 kHz 132 dB(A) Dynamic Range - 0.00003 % THD+N	
Latency	2.6 ms analog Input to amplifier Output	
Onboard memory	Store and recall up to 50 amplifier snapshot	
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	RMS voltage, RMS current, Peak limiter, TruePower™, Dynamic EQ	
Damping control	Active DampingControl™	
Loudspeaker diagnostic	Pilot tone monitoring, average impedance monitoring, load impedance measurement	
Startup time	<10 s <0.5 s (with PoE backup power)	
Construction		
Dimensions	489 x 400 x 44.3 (WxDxH) mm 19.3 x 15.8 x 1.7 (WxDxH) in	
Weight	7.9 Kg (17.4 lb)	

Output Stage		2K8	4K8	8K8	
Commercial total rated power		2000	4000	8000	W
Maximum output power	per channel @ 100 V (symmetrical)*	250	500	800	W
	per channel @ 70 V (symmetrical)*	250	500	1000	W
	per channel @ 16 Ω (symmetrical)*	250	500	650	W
	per channel @ 8 Ω (symmetrical)*	250	500	1000	W
	per channel @ 4 Ω (symmetrical)*	250	500	1000	W
	per channel @ 2 Ω (symmetrical)*	250	500	1000	W
	per bridged pair @ 8 Ω (symmetrical)*	500	1000	2000	W
	per bridged pair @ 4 Ω (symmetrical)*	500	1000	2000	W
	per channel @ 100 V (asymmetrical)**	500	1000	2000	W
	per channel @ 70 V (asymmetrical)**	500	1000	1500	W
	per channel @ 16 Ω (asymmetrical)**	500	500	750	W
	per channel @ 8 Ω (asymmetrical)**	500	1000	1500	W
	per channel @ 4 Ω (asymmetrical)**	500	1000	2000	W
	per channel @ 2 Ω (asymmetrical)**	500	1000	1000	W
Maximum unclipped output voltage		160			V _{peak}
Maximum output current		30	40	48	A _{peak}

*: Available by driving and loading all the channels symmetrically.
*: Maximum power-sharing capacity per channel

Power & Thermal			2K8	4K8	8K8	
@ 115 V	Power		65	65	65	W
	Idle	Current Draw	0.707	0.707	0.707	A _{rms}
		Thermal Loss	222	222	222	BTU/h
	1/8 Power @ 4Ω	Power	406	729	1380	W
		Current Draw	3.61	6.44	12	A _{rms}
		Thermal Loss	532	781	1297	BTU/h
@ 230 V		Power	73	73	73	W
	Idle	Current Draw	0.605	0.605	0.605	A _{rms}
		Thermal Loss	249	249	249	BTU/h
	1/8 Power @ 4Ω	Power	412	724	1360	W
		Current Draw	2.24	3.51	6.1	A _{rms}
		Thermal Loss	553	764	1228	BTU/h
	Power supply		Universal regulated switch mode with PFC and SRM			
	Nominal voltage		100-240 VAC @ 50-60 Hz (400 VAC surge)			
Operating Voltage		80-265 VAC @ 50-60 Hz				
AC Mains connector		IEC C20 inlet (20 A max) region-specific power cord provided				
Eco Mode consumption		43 W				
Standby consumption		20 W Typical, CPU fully functional				
PoE Input		Class 4 or higher				
Networking						
Network		3 x Gigabit Ethernet ports RJ45 connectors				
Network modes		Switched Mode, Split-Redundant Mode				
Remote interface		ArmoniaPlus™, Universo™				