



PD 1000 Series Digital Power Amplifier Compact Range



AEX System PD 1000 Series Digital Power Amplifiers are specially designed to be a small form factor compact 100V line power amplifier with no compromise on its output capacity. The Digital Power Amplifiers provide amplification for all audio signals after a preamplifier, digital matrix or any Network Audio Extract device. It uses a high efficiency and robust Class-D amplifier technology. The power amplifiers provide a wide frequency response, low THD+Noise and a high Signal-to-Noise ratio. The PD 1000 series uses a transformerless, technology that reduces electromagnetic noise and improves power efficiency. This results in an extremely low power consumption and a low carbon footprint product.

The compact PD Series design allows the amplifiers to require less rack space in any equipment room and application that has space constrain. The PD 1000 Series Digital Power Amplifier consist of the following 7 models; PD 1060 (600W Digital Power Amplifier), PD 1160 (1600W Digital Power Amplifier), PD 1415 (4 x 150W Digital Power Amplifier), PD 1230 (2 x 300W Digital Power Amplifier), PD 1430 (4 x 300W Digital Power Amplifier), PD 1260 (2 x 600W Digital Power Amplifier) and PD 1120 (1200W Digital Power Amplifier)

- Robust design in an ultra-compact 1U casing
- Transformerless Class-D technology improves power efficiency
- Low power consumption and a low carbon footprint
- High Signal-to-Noise ratio
- Wide audio bandwidth frequency response
- Very low THD+Noise distortion and crosstalk
- PD 1060 600W Digital Power Amplifier
- PD 1120 1 x 1200W Digital Power Amplifier
- PD 1160 1 x 1600W Digital Power Amplifier
- PD 1230 2 x 300W Digital Power Amplifier
- PD 1260 2 x 600W Digital Power Amplifier
- PD 1415 4 x 150W Digital Power Amplifier
- PD 1430 4 x 300W Digital Power Amplifier



PD 1060
PD 1120
PD 1160
PD 1230
PD 1260
PD 1415
PD 1430





Technical Specification

	PD 1060	PD 1120	PD 1160
Rated Output Power	1x600W	1x1200W	1x1600W
Output Voltage	100Vline / 8Ω		
Frequency Response	20 Hz to 20kHz (+1/-2dB) (High Pass Filter Off) 120 Hz to 20kHz (+1/-3dB) (High Pass Filter On)		
Total Harmonic Distortion (1kHz)	Less than 1%		
Total Harmonic Distortion (1/3 Rated)	Less than 0.05%		
Signal-to-Noise Ratio	>=105 dB		
Input Connections (per channel)	1 Balanced Program Signal Input (RJ45) with Pilot Tone		
Input Level	Balanced 0 dB		
Input Impedance	10 kΩ (balanced)		
Power Efficiency	Super High Efficiency of >92%		
Max Load Impedance (per channel)	16.6 Ω	8.3 Ω	6.25 Ω
Power Consumption	652W	1304W	1739W
Power Requirement	220 - 240Vac 50/60Hz or 24Vdc Backup Power		
Standby Idle Power (per channel)	Ultra Low Power Consumption of 1.2W		
Operating Temperature	-10 C to 40 C		
Storage Temperature	-40 C to 70 C		
Relative Humidity	Less than 95%		
Material & Finish	Mild Steel Casing, Epoxy Coated, Textured Black		
Dimensions	484 x 44 x 383 mm (W x H x D)		
Weight	6.9 kg	6.9 kg	6.9 kg

Technical Specification

	PD 1230	PD 1260	PD 1415	PD 1430
Rated Output Power	2x300W	2x600W	4x150W	4x300W
Output Voltage	100Vline / 8Ω			
Frequency Response	20 Hz to 20kHz (+1/-2dB) (High Pass Filter Off) 120 Hz to 20kHz (+1/-3dB) (High Pass Filter On)			
Total Harmonic Distortion (1kHz)	Less than 1%			
Total Harmonic Distortion (1/3 Rated)	Less than 0.05%			
Signal-to-Noise Ratio	>=105 dB			
Input Connections (per channel)	1 Balanced Program Signal Input (RJ45) with Pilot Tone			
Input Level	Balanced 0 dB			
Input Impedance	10 kΩ (balanced)			
Power Efficiency	Super High Efficiency of >92%			
Max Load Impedance (per channel)	33.3 Ω	16.6 Ω	6.6 Ω	33.3 Ω
Power Consumption	652W	1304W	652W	1304W
Power Requirement	220 - 240Vac 50/60Hz or 24Vdc Backup Power			
Standby Idle Power (per channel)	Ultra Low Power Consumption of 1.2W			
Operating Temperature	-10 C to 40 C			
Storage Temperature	-40 C to 70 C			
Relative Humidity	Less than 95%			
Material & Finish	Mild Steel Casing, Epoxy Coated, Textured Black			
Dimensions	484 x 44 x 383 mm (W x H x D)			
Weight	7 kg	7 kg	7.2 kg	7.2 kg

Engineers' Specification

The digital power amplifier shall have a balanced line level input with gain control. The total harmonic distortion at rated output shall be less than 0.1 % at 1 kHz, and frequency response shall be 20 Hz to 20 kHz. The unit shall consist of a Class-D Digital power amplifier circuit with overload protection and thermal overloading cut off. The unit shall be fan cooled with a friction-less fan design and shall be a transformerless designed for 100Vline distributed speaker system. It shall deliver amplification power of a single channel of 600W rms (PD 1060), a single channel of 1600W rms (PD 1160),

4 channels of 150W rms (PD 1415), 2 channels of 300W rms (PD 1230), 4 channels of 300W rms (PD 1430), 2 channels of 600W rms (PD 1260) and 1200 W rms (PD 1120). The unit shall be able to operate off mains supply or 24 Vdc battery backup supply. The unit shall be 19" rack mountable with dimensions not exceeding 484 x 44 x 383 mm. Weight shall not exceed 7.2kg (PD 1430, PD 1415) / 7.0kg (PD 1260, PD 1230) / 6.9kg (PD 1060, PD 1160, PD 1120).