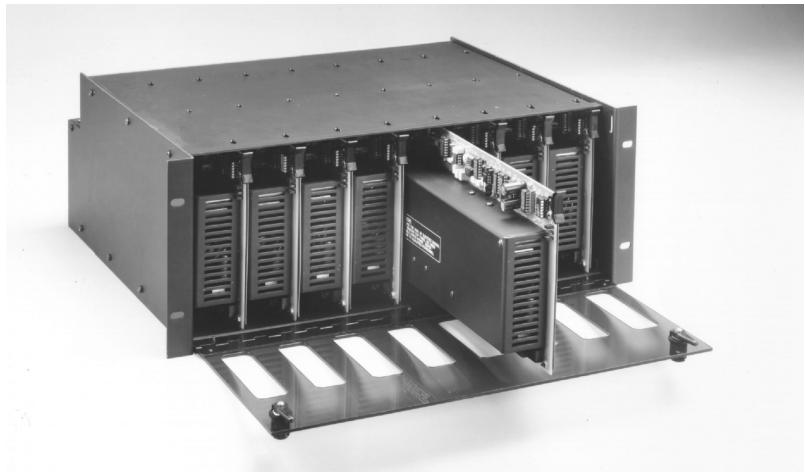




6000 Series Power Amplifier System

Compact design

Consumes less rack space
8 - 200W or 16 - 100 W amplifiers
in 4 EIA rack spaces



Efficiency

Consumes less power with
Class D design

Reliability

Speaker protecting design

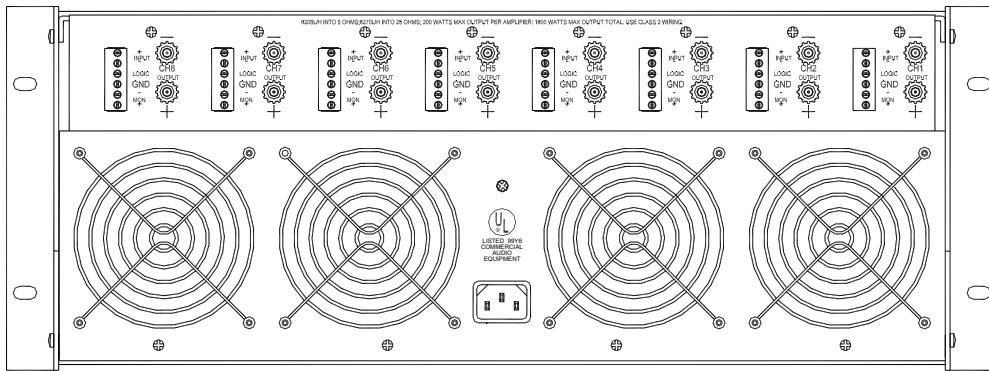
The IED 6000 Series of power amplifiers is based on Class "D" (switching mode) operation which means that the power devices are either On or Off, conditions in which wasteful losses are almost eliminated. To further reduce losses, the power supply is also a switching mode design.

IED's proprietary design solutions provide all of the benefits of Class 'D' with none of the penalties. This product family offers the system integrator the advantages of high channel density and low power consumption together with high fidelity signal performance.

The IED 6000 Series is fully protected and stable under all load conditions, inductive, capacitive, or resistive. It embodies a unique speaker protection circuit that provides ultra-high speed peak signal limiting to prevent damaging overvoltage spikes. Other features include a logic level status indicator 6208L/H and 6270L/H, only) and a monitor output for system testing (all models).

The IED Model 6000 Series Power Amplifier System offers high density, high efficiency, and low weight as a result of the unique IED design which combines Class 'D' switching mode amplifier technology with an integral switching power supply, a combination offered only by the audio technology leader, IED.

- *81 % efficient, pays for itself in reduced operating cost*
- *All connections pluggable*
- *Individual power supplies and power switches on each card*
- *Simplify service with plug-in cards*
- *6270L/H - 200 Watts - 70 Volt card*
- *6208L/H - 200 Watts - 8 Ohm card*
- *6272L/H - Two Channels of 100 Watts - 70 Volts
or
One Channel 200 Watts - 70 Volts*
- *6282L/H - Two Channels of 100 Watts - 8 Ohms
or
One Channel 200 Watts - 8 Ohms*
- *120 VAC or 240 VAC operation*
- *Automatic backup amplifier switching via the IED 6416 Switching System*
- *UL LISTED*



Rear view of Model 6800L Mainframe.
Note that all connections are pluggable.

Electrical Specifications

	6208L/H $R_L=8\Omega$	6270L/H $R_L=25\Omega$	6208L/H $R_L=12.5\Omega$	6282L/H $R_L=8\Omega$	6272L/H $R_L=50\Omega$
Power Output (RMS/AES)	200 W (40 V)	200 W (70 V)	400 W (70 V)	100 W (28.28 V)	100 W (70 V)
Frequency Response, 20 Hz - 20 kHz	+0, -3 dB	+0, -3 dB	+0, -3 dB	+0, -1 dB	+0, -1 dB
Total Harmonic Distortion, THD, $P_o = 1 \text{ W}$ - 200 W, $f = 2 \text{ kHz}$	<0.6 %	<0.5 %	<0.7 %	<0.5 %	<0.5 %
Signal-to-Noise Ratio, unweighted, 20 Hz - 20 kHz noise bandwidth	> 85 dB	> 85 dB	> 80 dB	> 85 dB	> 80 dB
Input Sensitivity $P_i = 200 \text{ W}$ (400 W, bridge connection, 100 W, duals)	0.9 V	0.9 V	0.9 V	0.636 V	0.9 V
Input Impedance	86 kΩ, balanced	86 kΩ, balanced	86 kΩ, balanced	24 kΩ balanced	24 kΩ balanced
Output Impedance	0.66 Ω	1.5 Ω	1.32 Ω	0.6 Ω	0.6 Ω
Output Loading, 20 Hz - 20 kHz	> 8 Ω	> 25 Ω	> 12.5 Ω	> 8 Ω	> 50 Ω
Damping Factor, 20 Hz - 20 kHz	> 13	> 13	> 13	> 13	> 13
Efficiency, $P_o = 200 \text{ W}$ (400 W, bridge connection, 100 W ½ dual)	81 %	81 %	84 %	79 %	79 %
Efficiency, $P_o = 50 \text{ W}$ (100 W, bridge connection)	69 %	69 %	70 %	76 %	76 %
Quiescent Input Power (AC line), $P_o < 1 \text{ W}$ ($P_o < 2 \text{ W}$, bridge connection)	17 W	17 W	34 W	18 W	18 W
Monitor Output, maximum load	1 W	1 W	1 W per amp.		

Indicators, Controls, Connectors

Power Supply Overcurrent Protection	Fuse - 3AG, 3.0 A, slow blow, front accessible
Front Panel LED Indicators	Clipping = Red, Signal Present = Yellow, Power ON = Green
Amplifier Card Power Switch	Two position slide switch
Stepped Input Attenuator	Front accessible DIP switch, 1 dB steps, 0 - 63 dB
Audio Input, Logic Status Monitor, and Output Signal Monitor	Lugless compression-type screw terminal, plug-in
Output Connectors	5-way binding posts on 3/4" centers for standard dual banana plug
Remote Logic Status Indicator (6208L/H and 6270L/H only)	+ 5 VDC = Operational, 0 VDC = Fault or Protected

Mainframes

Capacity, Amplifier Cards, 6800-8L/H: 6160-8L/H:	Up to 8 6208L/H and/or 6270L/H in any combination (1600 W Max. total) Up to 8 6282L/H and/or 6272L/H in any combination (1600 W Max. total)
Maximum Input Power Requirement	2,000 W from AC line for maximum audio output of 1600 W
Size, overall	19" W x 7" H x 16.1" D (48.2 cm W x 17.8 cm H x 40.9 cm D)
Mounting Depth	17.5" (44.5 cm)
Weight	6800L/H - 14.9 lb empty, 36.9 lb fully loaded (amp. cards 2.75 lb each) 6160L/H - 10.5 lb empty, 35.2 lb fully loaded (amp. cards 3.09 lb each)
Cooling	4 internal fans, proper cabinet ventilation is required
Input Power Connection	1 - Belden model 17250

Note: "L" suffix models are for nominal 120 VAC operation, "H" suffix models are for nominal 240 VAC operation

Innovative Electronic Designs, Inc. • 9701 Taylorsville Road • Louisville, Kentucky 40299 • USA
Phone: (502) 267-7436 • Fax: (502) 267-9070 • Internet: <http://www.iedaudio.com>