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- **High power density –** 4 x 250 W in 1U
- **Certified Energy Star compliant**
- **Flexible –** IntelliDrive delivers comparable power per channel at 70 V or Low-Z (4, 8 and 16 ohms)
- **Asymmetric loading –** Allows "mixing and matching" of loads with different impedances to maximize system efficiency and inventory utilization
- **IDEEA™ output state based on patented Class D variant**
- **Exceptionally low lifetime operating costs**
- **High efficiency –** Extremely low power consumption and heat output
- **Auto-standby function –** Power consumption < 1 W in standby mode
- **RSL Switch –** Innovative circuit senses rail voltage and optimizes output for instantaneous load conditions
- **Efficient cooling –** Dual temperature-controlled fans
- **Comprehensive circuit protection and fault indication**

E Series, built around Lab.gruppen's eco-friendly IDEEA: IntelliDrive Energy Efficient Amplifier

Specifically designed for greater sustainability through "greener" commercial installations, E Series incorporates the latest advances in Lab.gruppen quality and durability into a complete line of compact (1U) and highly cost-effective two- and four-channel amplifiers.

Small in size, huge in benefits

Building on Lab.gruppen's touring reputation for sonic excellence and rock-solid durability, E Series brings a competitive edge to the installation market by adding ultra-compact size, high operating efficiency, output configuration flexibility, and an unprecedented cost-benefit ratio.

At the heart of E Series is Lab.gruppen's IDEEA (IntelliDrive Energy Efficient Amplifier) technology. Based around a patented Class D variant output stage, IDEEA produces high power levels with very low distortion while drawing minimal mains current.

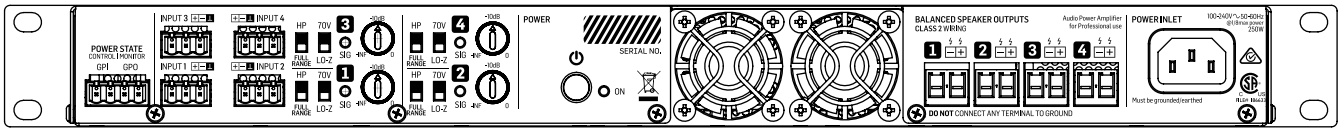
Lab.gruppen's proprietary Rail Sensing Limiter (RSL™), also exclusive to E Series, greatly reduces signal clipping to ensure high quality audio output at all times. User configurable for Hi-Z (70 V) or Lo-Z, RSL senses rail voltages and optimizes each output for instantaneous load conditions. RSL settings also facilitate asymmetric loading of the channels to optimize performance and efficiency. Total available output power can be allocated among the channels as required by the application. This makes it possible, for example, to drive a small sub on one channel, a number of 70 V ceiling loudspeakers on the second channel, and a pair of full-range low impedance loudspeakers on the two remaining channels.

Lab.gruppen performance with Energy Star compliance

Lab.gruppen's IDEEA architecture secures full Energy Star compliance by combining net operating efficiency of greater than 80% with an auto-power-down feature. After 20 minutes with no input signal, the amplifier automatically switches to standby mode – with consumption of less than 1 W – and switches back on when an input signal returns. GPIO facilities enable third-party systems to remotely control and monitor power state via contact closure.

Applications

- **Bars & restaurants**
- **Retail outlets**
- **Malls**
- **Hotels & ballrooms**
- **Conference centers**
- **Museums & galleries**
- **Houses of worship**
- **Theme park installations**
- **Educational establishments**
- **Auditoriums**
- **Performing arts centers**
- **Convention centers**
- **Transport hubs**



Specifications E 10:4

General	
Number of channels	4
Total output all channels driven	1000 W
Peak output voltage per channel	100 V / 70 Vrms
Max. output current	14 Arms
Max. Output Power (all ch.'s driven)	
2 ohms	N.R.
4 ohms	250 W
8 ohms	250 W
16 ohms	250 W (requires the "70 V" mode for the RSL, "Lo-Z" gives 125 W)
70 V	250 W
100 V	Can deliver 250 W to a 100 V load tapped at 500 W
Performance	
THD 20 Hz - 20 kHz for 1 W	<0.1%
THD at 1 kHz and 1 dB below clipping	<0.05%
Signal To Noise Ratio	>112 dBA
Channel separation (Crosstalk) at 1 kHz	>70 dB
Frequency response	2 Hz - 40 kHz
Input impedance	20 kOhm
Common Mode Rejection (CMR)	50 dB
Output impedance	25 mOhm
Gain, Sensitivity and Limiters	
Limit and gain switch defining limit and gain (per channel)	2 pos: Lo-Z and 70 V
VPL for 70 V mode	100 V
VPL for Lo-Z mode	63.2 V
Sensitivity for stated power into 8 Ohm in Lo-Z mode	4 dBu
Sensitivity for 70.7 V out in 70 V mode	4 dBu
Sensitivity for stated power into 4 Ohm in Lo-Z mode	1 dBu
Sensitivity for stated power into 16 Ohm in 70 V mode	3 dBu
Gain in 70 V mode	35.2 dB
Gain in Lo-Z mode	31.2 dB
Level adjustment (per channel)	Rear panel potentiometer, from -inf to 0 dB
Connectors and switches	
Input connectors (per ch.)	3-pin detachable screw terminals, electronically balanced
Output connectors (per ch.)	2-pin detachable screw terminals
High pass filter	Fixed at 50 Hz, switchable per channel
Power control	Can be used to go between standby and ON
GPI (power control input)	Contact closure type, 2-pin detachable screw terminal, controls the power state
GPO (power state output)	Contact closure type, 2-pin detachable screw terminal, for external monitoring of the power state
Cooling	Two fans, front to rear airflow, temperature controlled speed
Power	
Nominal voltage	100 - 240 VAC
Operating voltage	85 - 265 VAC
Standby consumption	<1 W
Mains connector	IEC inlet
Dimensions	W: 483 mm (19"), H: 44 mm (1 U), D: 381 mm (15")
Weight	6.2 kg (13.7 lbs)
Finish	Dark grey aluminium front and black steel chassis
Approvals	CE, ANSI/UL 60065 (ETL), CSA, CCC, PSE, Energy Star

All specifications are subject to change without notice.