



# LCPF

## Peerless Pro Family of Power Amplifier Modules



**POWER RANGE:**  
600W – 1200W



**POWER SUPPLY:**  
RESONANT LLC – ACTIVE PFC



**CONFIGURATIONS:**  
FLEXIBLE 2 – 4 CHANNELS

For nearly a decade, Peerless has been driving innovation and working with the most respected names in the pro industry. We now bring that extensive experience and our system design mindset to our new electronics module. The LCPF family is Peerless's line of flexible and reliable professional power amplification modules.

Our efforts are not just about the module. They are about enabling your teams to design the best end product that stands out with the performance, features, and competitiveness to help you win in the market.



# LCPF

## Technical Highlights

The LCPF family of amplifier modules introduces a robust power supply, extensive monitoring facilities, and output configuration flexibility for your pro system design needs.

### Optimized Power Supply Driving Performance

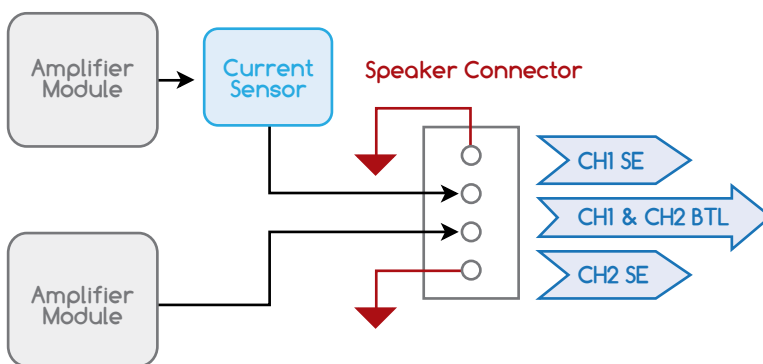
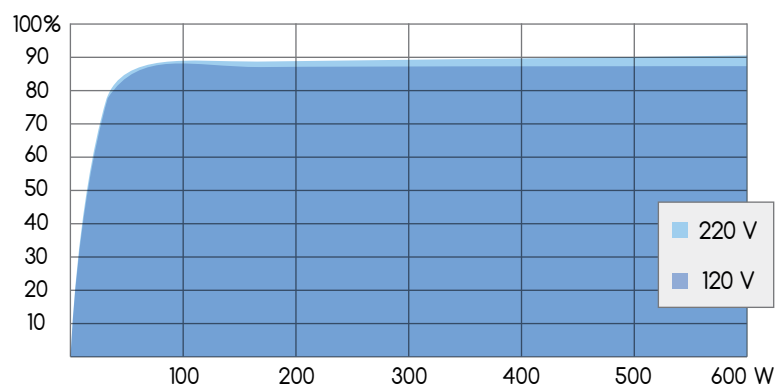
The LCPF amplifier modules contain an interleaved PFC which brings low and optimal current draw from the mains supply and avoids the need for multiple voltage versions of products. PFC also improves performance when a system is being run off a current-limited supply. The second stage of the SMPS design, the LLC converter, provides well-regulated and low-noise voltage rails with an absence of mains ripple.

Finally, our integrated power supply is optimized for continuous and peak output. Our designs are named after our power supply ratings in the most demanding use case (low mains voltage, low frequency). No bad surprise, no inflated numbers.

### Monitoring to Improve System Performance With DSP

Extensive monitoring is included — for each amplifier stage, the output current and voltage are continuously reported back to the front-end board for analysis, reaction, and performance optimization. Amplifier and power supply temperatures are also continuously reported so appropriate measures can be taken to protect the system in extreme thermal conditions.

### Efficiency vs. Loading Power



LCPF600 Power Amplifier Module Block Diagram

### Flexible Channel Configuration With Systems In Mind

As the output channels can be run as single-ended (SE) or bridge-tied-load (BTL), multiple channel configurations are possible, allowing you to create many different systems from our standard modules. Additionally, they can be built into rack amplifiers, offering a great variety of output power configurations.

### Example Configurations

