



F6-MF

Amplifier Mainframe System



Features

- Modular Input and Output Section
- 70.7V or 4/8 Ohm, 250 watt Amplifier Modules
- Amp Modules Include Limiter and Enabled HPF
- 110/220 V PSU Allows Global Operation
- Intuitive Metering on Front and Back Panels
- Optional Analog Mixer and DSP Input Cards
- Security Cover Included for Front Panel Input Attenuators
- System Bundle Includes Frame with Standard Input Attenuator Module and x4 70.7V or 4 Ohm, 250 watt Amplifier Modules (Additional Modules Sold Separately)

General Description

The Atlas Sound F6 Amplifier Mainframe System is the industry's most versatile multi-channel amplifier. An innovative, modular input and 6-bay output section allows the F6 to be easily configured for most 4/8 ohm or 70.7V zone amplification applications. Each module has 250W of output power and each features a defeatable limiter and high pass filter. The F6 FM250 series power modules are designed to be 90% efficient allowing the amplifier to run cooler and consume less energy than conventional commercial amplifiers. Analog mixer and DSP input cards will also be available. Within the F6 frame, a high-current robust global power supply is routed to each output module through quad-ganged connector contacts minimizing the impedance path and allowing for maximum current delivery. Both front and back panels feature intuitive metering and security covers are included on front input attenuators to prevent tampering.

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Specifications

General

| | |
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| Description | Six Channel Main Frame Amplifier Modules FM250-4 & FM250-70 Class D Topology |
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Output Power FM250-4

Burst Power 1kHz, Ultra Fast Recovery Power Supply

| | |
|------------|----------------|
| 8Ω | |
| 1 Channel | 150 Watts |
| 2 Channels | 140 Watts Each |
| 6 Channels | 125 Watts Each |

| | |
|------------|----------------|
| 4Ω | |
| 1 Channel | 300 Watts |
| 2 Channels | 280 Watts Each |
| 6 Channels | 250 Watts Each |

Continuous Power 1kHz

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|------------|----------------|
| 8Ω | |
| 1 Channel | 135 Watts |
| 2 Channels | 125 Watts Each |
| 6 Channels | 95 Watts Each |

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|------------|----------------|
| 4Ω | |
| 1 Channel | 270 Watts |
| 2 Channels | 250 Watts Each |
| 6 Channels | 170 Watts Each |

Output Power FM250-70

Burst Power 1kHz, Ultra Fast Recovery Power Supply

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|------------|----------------|
| 1 Channel | 300 Watts |
| 2 Channels | 280 Watts Each |
| 6 Channels | 250 Watts Each |

Continuous Power 1kHz, 30 Min

| | |
|------------|----------------|
| 1 Channel | 270 Watts |
| 2 Channels | 250 Watts Each |
| 6 Channels | 170 Watts Each |

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| THD + Noise | 30Hz - 20kHz, +0/-1.5 dB Typically < 0.2%, 1kHz, at Rated Output 0.15%, Typical Residual Note: Characteristic Distortion is almost Entirely 2nd Harmonic |
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|-----------------------------|---|
| Front Panel Features | 6 Detented Level Controls, Mains Power LED, Temp LED |
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| Frequency Response | 30Hz - 20kHz (±1dB) Fixed 30Hz High Pass Filter |
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| Protection Circuits | AC Fuse 12A 250V Thermal, Short Circuit, Limiter, Inrush |
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|------------------------------|-------------------------------------|
| Signal to Noise Ratio | -90dB Below Rated Output (Weighted) |
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| Input Sensitivity | Selectable Per Channel 1V or 2V |
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| Voltage Gain | 30dB Per Channel |
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| Input Impedance | Balanced 20k |
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| Cooling | Fan Assist, Rear Intake, Front Exhaust |
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| Power Delay On | 1 - 2 Sec |
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| Power Requirement | 120VAC, 60Hz |
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Power Consumption (at 120VAC)

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| Standby | 5 Watts |
| F6-MF (6 Channels Loaded) | |
| Max | 1650 Watts, 14A, 5630 BTU |
| Average | 550 Watts, 4.5A, 1876 BTU |
| Idle | 16 Watts, 130mA, 54 BTU |

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| FM250-4 and FM250-70 | |
| Max | 275 Watts, 2.33A, 938 BTU |
| Average | 91 Watts, 0.77A, 310 BTU |

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| Main Frame Dimensions | W 19" x H 3" x D 15.5" (483mm x 76mm x 394mm) |
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|--------------------------|---------------------|
| Main Frame Weight | 21 lbs (9.5kg) Unit |
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|-------------------------|--|
| FM250 Dimensions | W 3.4" x H 3" x D 10.4" (86mm x 76mm x 264mm) |
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| FM250 Weight | 0.8 lbs (0.36kg) |
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Architect & Engineer Specifications

The multi-impedance modular amplifier system shall be Atlas Sound model F6-MF or approved equal. The F6 amplifier mainframe system shall include modular input and 6-bay output section to be configured into a variety of designs. Both 4Ω/8Ω and 70V amplifier cards shall be available. Each amplifier card shall be 250W of output power and shall feature a defeatable limiter and high pass filter.

The F6 mainframe shall include a high-current robust global power supply that is routed to each output module through quad-ganged connector contacts. Front and back panels shall have intuitive metering and signal indicators. Security covers shall be included for front input attenuators to prevent tampering. Power requirements shall be 120VAC at 60Hz with protection circuit from a 12A, 250V AC Fuse. Frequency response shall be 30Hz-20kHz with THD plus noise typically less than 0.2% at 1kHz at rated output. The F6 mainframe dimensions shall be 19" (483mm) W x 3" (76mm) H x 15.5" (394mm) D and shall weigh 21 lbs (9.5kg). Finish and material shall be black powder coated sheet steel.

The amplifier mainframe shall be Atlas Sound model F6-MF. The 4Ω/8Ω amplifier card shall be Atlas Sound model FM250-4.

The 70.7V amplifier card shall be Atlas Sound model FM250-70.

