



“M-Series” Basic Solid State “Class A”RF Power Amplifiers

10 kHz – 220 MHz • 10 to 200 watts, Minimum Rated Power

Instruments for Industry, M-series Amplifiers provide outstanding RF performance. Our “M-Series” products are state-of-the-art solid-state power amplifiers specifically designed for laboratory and all testing applications. These products are available in a wide range of power levels from 10 watts to 200 watts in the 10 kHz - 220 MHz frequency range.

IFI RF amplifiers are very conservatively designed to operate below maximum ratings for ruggedness and long term reliability. Sixth generation LDMOS Transistors provide reliable brute-power performance at frequencies up to 220 MHz.

Our RF power amplifiers feature individually shielded assemblies for the module level. This concept of shielded modular design minimizes internally produced EMI signal leakage and provides easy access for field service and rapid turnaround at depot level repair facilities.

From the ground up, the “M-SERIES” products are structurally engineered to withstand operation in mechanically hostile environments. Ruggedized versions are available for applications that will be exposed to very harsh environments.

Features:

- Solid State LDMOS Designs
- Instantaneous Broadband Frequency range
- Modular Design Construction
- Rugged construction & High Reliability
- Integrated Force Air Cooling



Models & General Specifications:

Model Number	Frequency Range (MHz)	Rated Power (watts minimum)	P1dB Power (watts minimum)	Gain (dB min)	Mains (kVA)	Weight (Pounds)	Size (Inches)
M10*	10kHz–220 MHz	10	10	40	0.2	22	19”W x 19.5”D x 5.25”H
M25*	10kHz–220 MHz	25	25	44	0.3	24	19”W x 19.5”D x 5.25”H
M50*	10kHz–220 MHz	50	50	47	0.5	25	19”W x 19.5”D x 5.25”H
M75*	10kHz–220 MHz	75	75	48	0.8	27	19”W x 19.5”D x 5.25”H
M100*	10kHz–220 MHz	100	80	50	1.0	35	19”W x 19.5”D x 5.25”H
M150*	10kHz–220 MHz	150	100	52	1.5	40	19”W x 19.5”D x 5.25”H
M200*	10kHz–220 MHz	200	150	53	2.0	88	19”W x 27.0”D x 14.0”H

* These models have No front panel display and No GPIB interface.



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Standard Features for IFI M-Series Solid State Amplifiers

Standard Features:	VSWR Reflected Power Protection, the unit operates without damage or oscillation into any magnitude of phase or load impedance, Open & Short Circuit Protection.
	* Alternate Prime Power (specify at time of order)
	Internal Pre-amplification to obtain rated output power with an input level of 0 dBm or less.
	Gain Control Local, 15dB range
	RF Input/Output Connectors on the Front Panel, 118R for rear panel

IFI M-Series Solid State Amplifier Specifications

Frequency Range:	As Specified in Model Table
Rated Output Power:	As Specified in Model Table
Gain @ Rated Power:	As Specified in Model Table
Prime Power:	As Required (Some are listed below)
Input/output Impedance:	50 ohms
RF Input/ Sample Connectors:	Type N Female, unless specified otherwise
RF Output Connector:	Type N Female Other connectors available by request or specification
Input VSWR:	2.0:1
Output VSWR:	2.5:1 with full power
Operating Temp:	0° to 50° C
Non-operating Temp:	-40° to 70° C (50,000 feet max)
Humidity:	95% without condensation
Altitude:	10,000 feet
Cooling System:	Air cooled, self-contained
Modulation:	AM,FM, Pulse
Configuration:	Rack Mount as specified in Model Table
Spurious Outputs:	<-60 dBc nominal
Harmonics:	-20dBc minimum @ Linear Power

Standard Prime Powers:

100, 110, 115, 120 VAC ±10% 50/60 Hz, single phase

200, 220, 230, 240VAC ±10% 50/60 Hz, single phase

[Special Prime Powers other then listed are subject to availability](#)

Some Available Options for IFI M-Series Solid State Amplifiers

Option 112F:	RF Sample Port on the Front Panel, 112R for rear panel
Option 113:	Chassis slides for a 19" rack mounting
Option 118A:	RF Input On Front Output on Rear
Option 118B:	RF Input On Rear Output on Front
Option 128:	RF Safety Interlock

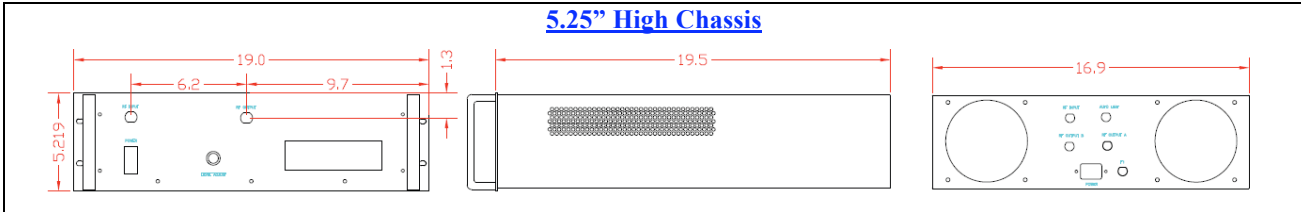


“M-Series” Basic Solid State “Class A” RF Power Amplifiers

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Outline Configurations:

5.25” High Chassis



14” High Chassis

