SMXE-2G Series Solid State Amplifiers

10KHz - 2.0GHz • 10 Watts to 200 Watts Minimum Rated Power

Instruments for Industry, SMXE-2G Series Amplifiers provide outstanding RF performance. These products are available in a wide range of power levels from 10 watts to 200 watts in the 10KHz – 2.0GHz frequency range. These state-of-the-art solid-state power amplifiers are specifically designed for laboratory and all testing applications.

IFI RF amplifiers are very conservatively designed to operate below maximum ratings for ruggedness and long term reliability. Sixth generation LDMOS & GAN Transistors provide reliable brute-power performance at frequencies up to 2.0GHz.

Our RF power amplifiers feature individually shielded aluminum assemblies for the module level. This concept of a 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 "SMXE-2G 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 Design
- Rugged Construction & High Reliability
- Instantaneous Broadband Frequency range
- Backlit screen
- Modular Design Construction
- Integrated Force Air Cooling
- Self-diagnostic circuitry
- IEEE-488 interface & RS232 Remote







Models & General Specifications							
Model Number	Frequency Range	Rated Power (Watts) Minimum	P1dB Power Watts Minimum	Gain (dB) Minimum		Weight In Pounds	Size In Inches
SMXE-2G-10	10KHz-2.0GHz	10	10	40	.1KVA	35 Lbs	7.00" H x 19" W x 24" D
SMXE-2G-25	10KHz-2.0GHz	25	20	44	.2KVA	40 Lbs	7.00" H x 19" W x 24" D
SMXE-2G-50	10KHz-2.0GHz	50	40	47	.4KVA	75 Lbs	7.00" H x 19" W x 24" D
SMXE-2G-100	10KHz-2.0GHz	100	60	50	.8KVA	80 Lbs	10.5" H x 19" W x 25.12" D
SMXE-2G-150	10KHz-2.0GHz	150	100	52	1.0KVA	120 Lbs	10.5" H x 19" W x 25.12" D
SMXE-2G-200	10KHz-2.0GHz	200	150	53	1.5KVA	150 Lbs	2x 10.5" H x 19" W x 25.12" D

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Standard Features for IFI SMXE-2	Series Solid State Amplifiers
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Standard VSWR Reflected Power Protection, the unit operates without damage or oscillation into any magnitude of phase or load impedance,

Features: Open & Short Circuit Protection.

* Alternate Prime Power (specify at time of order)

GPIB IEEE 488 & RS232 Remote Control

RF Sample Port on the Front Panel, 112R for rear panel

Internal Pre-amplification to obtain rated output power with an input level of 0 dBm or less.

Gain Control Local & Remote, 30dB range

RF Input/Output Connectors on the Front Panel, 118R for rear panel

Internal Systems Diagnostics & Status Indicators

Total/Operate Elapsed Time Metering in hours

RF Safety Interlock

Forward/Reflected Power Indication simultaneously on Front Panel display

IFI SMXE-2G 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, 2.0:1 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, or Rack/Cabinet Integrated				
Spurious Outputs:	<-60 dBc nominal				
Harmonics:	-20dBc minimum @ Linear Power				

Standard Prime Powers:

100, 115, 120 VAC $\pm 10\%$ 50/60 Hz, single phase

220, 230, 240VAC $\pm 10\%$ 50/60 Hz, single phase

120/208 or 200/220/230/240 VAC $\pm 10\%$ 50/60 Hz, three phase Wye or Delta power is available

200/220/230/240VAC $\pm 10\%$ 50/60 Hz, three phase Wye or Delta power is available

Special Prime Powers other then listed are subject to availability

Some Available Options for IFI SMXE-2G Series Solid State Amplifiers				
Option 110-1E:	GPIB IEEE-488, RS232 and Ethernet Remote Control			
Option 110-2:	GPIB IEEE-488 and RS 422 Remote Control			
Option 110-3	GPIB IEEE-488 and RS 485 Remote Control			
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			

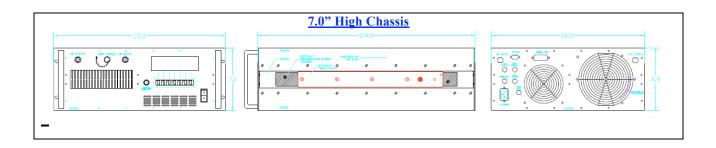
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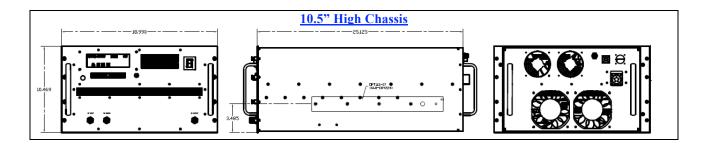
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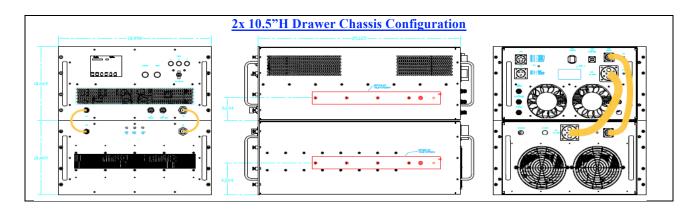
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Outline Configurations:







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