AMPLIFIERS

S61 Series Solid State Microwave Power Amplifiers

1.0 - 6.0 GHz • 5 Watts to 250 Watts

Instruments for Industry, S61 Series Solid State amplifiers are state-of-the-art amplifiers and provide outstanding RF performance. The S61 Series amplifiers operate over the frequency range from 1.0-6.0 GHz and can be supplied at power levels from 5 watts to 250 watts offering all the control and communication features needed for today's automated test systems. From the ground up, the S61 Series amplifiers are built to withstand rugged handling, whether it's being shipped to you or hauled around from site to site. They feature heavy-duty aluminum chassis construction with a modular approach for easy access and service.

Operation safety and ease of use are paramount in *IFI* product designs. The IFI S61 Series include a full complement of RF and hardware protection circuits including high VSWR, over-current, voltage protection, redundant thermal and airflow sensors for the module and the system level. In addition, the S61 series includes a state-of-the-art interface that is sophisticated, comprehensive, and yet simple to use.

The backlit LCD screen shows forward/reverse power indication, system status and self-diagnostic information. All the amplifiers operating parameters are simultaneously available in the amplifier front panel display as well as over the remote bus. Selection switches allow you to switch the amplifier to the desired mode of operation for local control if the unit is not being operated remotely.

For computer automation both an RS-232 and IEEE interface are provided as standard. To meet individual application needs, the S61 Series amplifiers can be easily customized with other options. With this capability and its reliable elegant design, the S61 series amplifiers are the perfect system for your applications.

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







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Models & General Specifications:							
Model	Frequency	Rated Power	P1dB Power	Gain	Mains	Weight	Size
Number	Range (GHz)	(watts minimum)	(watts minimum)	(dB min)	(kVA)	(Pounds)	(Inches)
S61-5	1.0-6.0	5	5	37	.10	40 Lbs	5.25" H x 19" W x 24" D
S61-10	1.0-6.0	10	8	40	.10	45 Lbs	5.25" H x 19" W x 24" D
S61-20	1.0-6.0	20	15	43	.20	50 Lbs	7.00" H x 19" W x 24" D
S61-25	1.0-6.0	25	20	44	.25	60 Lbs	7.00" H x 19" W x 24" D
S61-40	1.0-6.0	40	30	46	.30	75 Lbs	8.75" H x 19" W x 24" D
S61-50	1.0-6.0	50	40	47	.40	90 Lbs	10.5" H x 19" W x 25" D
S61-75	1.0-6.0	75	60	49	.60	100 Lbs	10.5" H x 19" W x 25" D
S61-100	1.0-6.0	100	80	50	0.8	180 Lbs	2x 10.5" H x 19" W x 25" D
S61-150	1.0-6.0	150	130	52	1.2	200 Lbs	2x 10.5" H x 19" W x 25" D
S61-200	1.0-6.0	200	150	53	1.5	400 Lbs	Rack Integrated
S61-250	1.0-6.0	250	200	54	2.0	450 Lbs	Rack Integrated

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Standard Features for IFI S61	Series Solid State A	mplifiers
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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)

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 S61 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			
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 ±10% 50/60 Hz, single phase

220, 230, 240VAC ±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 ±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 S61 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	

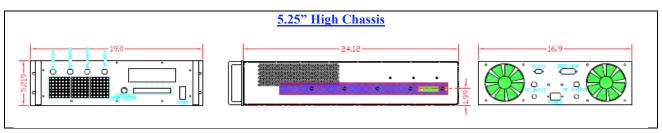
Instruments For Industry

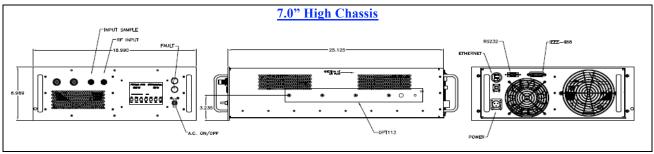
AMPLIFIERS

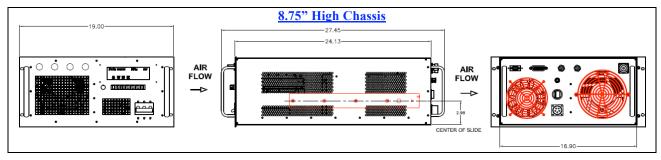
S61 Series Solid State Microwave Power Amplifiers

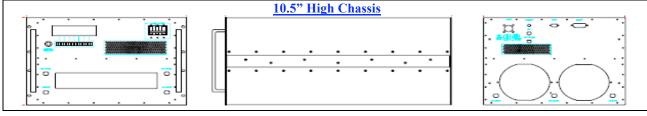
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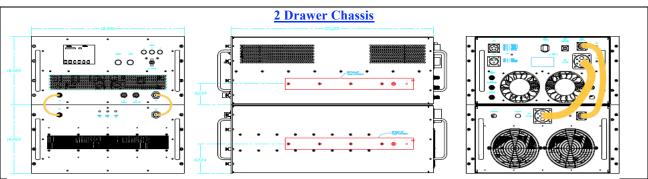
Outline Configurations:











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Rack Outline Configurations:

