

Advanced Test Equipment Rentals www.atecorp.com 800-404-ATEC (2832)



S31-500-900P Dual Mode CW / Pulse Solid State Microwave Power Amplifier 0.8 – 3.1 GHz • 500 Watts CW • 900 Watts Pulse

General Specifications:								
Model	Frequency	Rated Power	P1dB Power	Gain	Mains	Weight	Size	
Number	Range (GHz)	(watts minimum)	(watts minimum)	(dB min)	(kVA)	(Pounds)	(Inches)	
S31-500-900	? 0.8-3.1	500 CW 900+ Pulse	400 CW	60	3 CW	120 Lbs.	7" H x 19" W x 24" D PS 10.5" H x 19" W x 24" D PA	
Standard Features for IFI S31-500-900P Dual Mode Solid State Amplifier								
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 							
I	RF Safety Interlock Forward/Reflected Power Indication simultaneously on Front Panel display							

IFI S31-500-900P Series Solid State Amplifier Specifications					
Frequency Range:	0.8 – 3.1 GHz				
Rated Output Power:	500 Watts CW / 900 Watts Pulse				
Gain @ Rated Power:	60 dB				
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				
Pulse Input:	BNC Female Front Panel {+ 5 volts into 50 ohms}				
Pulse Width:	100 ns – 100 µsec				
PRF Range:	0-100 KHz Standard, Higher PRF ranges available				
Duty Cycle:	10% Standard.				
Rise & Fall Time:	15 ns nominal; 25 ns maximum				
Pulse to Pulse Jitter:	<0.1 dB				
Pulse Width Jitter:	+/- 5 ns maximum				
Pulse Delay:	500 ns maximum / 300 ns typical				
Pulse Droop:	0.5 dB/100usecs, 0.1dB/10usec				
Pulse On/Off Ratio:	80 dB				
Pulse to Pulse Stability:	0.2 dB				

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RF Input On Front Output On Rear

RF Input On Rear Output On Front

Option 118A:

Option 118B:

Microwave

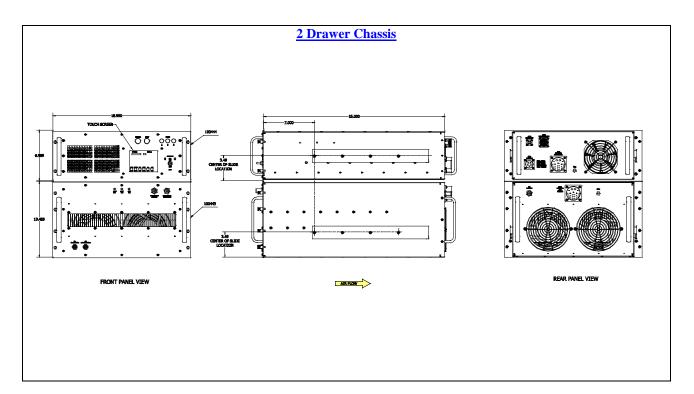
The Power Of Choice

AMPLIFIERS

S31-500-900P Dual Mode CW / Pulse Solid State Microwave Power Amplifier 0.8 – 3.1 GHz • 500 Watts CW • 900 Watts Pulse

Standard Pri	me Powers:				
100, 115, 120 VA	00, 115, 120 VAC ±10% 50/60 Hz, single phase				
220, 230, 240VAC ±10% 50/60 Hz, single phase					
120/208 or 200/220/230/240VAC ±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 S31-500-900P 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				

Outline Configuration:



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