



### **IFI SOLID STATE AMPLIFIERS**

Wide instantaneous frequency range  
Gain control  
Backlit LCD display  
Total/Operate Elapsed Time Metering  
Self-diagnostic circuitry  
VSWR protection  
Safety Requirement of IEC-348  
Unconditionally stable against load mismatches  
Forward /Reflected Power Indication  
IEEE 488 GPIB Remote Control  
RF Door Safety Interlock  
Air-cooled (Integrated Forced Air – self-contained)  
Open Circuit and Short Circuit Protection  
Modulation, AM, FM & PULSE  
Front Panel Controls and Indicators  
Standby/Operate  
Local/Remote  
EMI Filter built-in

**Amplifiers are supplied with an AC line cord to accommodate the power source; an operation & maintenance manual; and amplifier performance test data.**


**The Front Panel is standard for RF Connectors and RF Sample Port. If this is not convenient, please advise the location at the time of order. We will be happy to serve you. Thank you!**

### **\*GPIB IEEE-488 Remote Control is standard.**

If this is not convenient, please review & advise the GPIB option at the time of order. These other available options are at no charge. Thank you!

- a. GPIB IEEE-488 Remote Control
- b. GPIB IEEE-488 and RS 232 Remote Control
- c. GPIB IEEE-488 and RS 422 Remote Control
- d. GPIB IEEE-488 and RS 485 Remote Control



<b>IFI Model ST81-50 Solid State/TWT (CW) Combination Amplifier Specifications</b>	
Frequency Range:	<b>1-8 GHz</b> ( <i>operable down to 0.8 GHz – specify if desired at time of order</i> ) Bnd 1: 1-2 GHz (Solid State) Bnd 2: 2-8 GHz (TWT)
Rated Power:	50 Watts minimum (70W typical)
Gain @ rated power:	47 dB
Prime Power:	100-240 VAC +/-10%, 50/60 Hz, Single Phase*
Input/Output Impedance:	50 ohms (VSWR 2.0:1)
RF Input/Output Connectors:	Type N Female
Temperature:	0° to 50° C (40° C @ 10,000 feet)
Non-operating Temp:	-20° 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:	19" Rack Mount; 19"W x 25.25"L x 10.5"H
Spurious:	-50dBc
**Harmonics (nominal):	Band 1: 0.8-2.0 GHz, -20 dBc @ linear power (35-40 Watts) Band 2: 2-3GHz: -3 to -8 dBc @ Rated Power 3-6GHz: -8 to -15 dBc @ Rated Power 6-8GHz: -15 to -25 dBc @ Rated Power
Features:  	VSWR Protection against an output mismatch
	* Alternate Prime Power ( <i>specify at time of order</i> )
	* GPIB IEEE 488 Remote Control
	Forward RF Sample Port on the Front Panel, type N-F ( <i>specify front or rear at time of order</i> )
	Internal Pre-amplification to obtain rated output power with an input level of 0dBm or less.
	RF Input/Output Connectors on the Front Panel ( <i>Specify front or rear at time of order</i> )
	Internal Systems Diagnostics
	Elapsed Time Metering in hours
	RF Safety Interlock, type BNC
	Forward/Reflected Power Indication simultaneously on Front Panel display

*\*\* -20dBc harmonics available with filters at an additional charge. The Filters can be external or band selectable via switches internal to the amplifier. The control can be via the front panel or over the GPIB remote bus.*