**AMPLIFIERS** 

#### SCCX3500 Solid State RF Power Amplifier

10kHz - 220 MHz • 3.5kW • Rack Integrated • Solid State Reliability

The Instruments for Industry, SCCX3500 Solid State amplifier is state-of-the-art and provides outstanding RF performance. The SCCX3500 amplifier operates over the frequency range from 10kHz - 220 MHz and supplies >3.5kW of CW Power. From the ground up, the SCCX3500 amplifier is built to withstand rugged handling. This series features heavy-duty aluminum chassis construction rack-integrated with a modular approach for easy access and service. The SCCX3500 is perfectly suited for all Military / Avionic and EMC testing as well as general purpose industrial applications.

Operation safety and ease of use are paramount in IFI product designs. The SCCX3500 amplifier includes 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 SCCX3500 includes a state-of-the-art user interface that is sophisticated, comprehensive, and yet simple to use.

The backlit Color Touchscreen shows forward/reverse power indication in watts & dBm, system status and self-diagnostic information. Peak power metering is incorporated to measure forward and reflected power while producing pulse power. All the amplifier 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 an RS-232 and IEEE interface are provided as standard as well as USB & Ethernet. To meet individual application needs, the SCCX3500 Series amplifiers can be easily customized with other options. With this capability and its reliable elegant design, the SCCX3500 series amplifiers are the perfect system for your applications.

#### **Features**

- Solid State Design
- Rugged Construction & High Reliability
- Instantaneous Broadband Frequency range
- Color Touchscreen
- Modular Design Construction
- Integrated Force Air Cooling
- Self-diagnostic circuitry
- IEEE-488 interface, RS232, USB & Ethernet Remote
- Whisper Mode: lower acoustic noise (Temperature controlled variable speed)
- Peak power metering





#### Instruments For Industry

903 South Second Street · Ronkonkoma, NY 11779 · 631-467-8400 · 631-467-8558 · sales@ifi.com · www.ifi.com

## SCCX3500 Solid State RF Power Amplifier

10kHz - 220 MHz • 3.5kW • Rack Integrated • Solid State Reliability

General Specifications:								
Model	Frequency	Rated Power	Gain	Mains	Weight	Size		
Number	Range	(watts minimum)	(dB min)	(kVA)	(Pounds)	(Inches)		
SCCX3500	10kHz – 220MHz	3500	66	16.0	700 Lbs.	Rack Integrated		
Standard Features for IFI SCCX3500 Solid State Amplifier								
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, USB & Ethernet 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 SCCX3500 Solid State Amplifier Specifications				
Frequency Range:	10kHz - 220 MHz			
Rated Output Power:	3500W min. 3750 nominal			
P1dB Power:	1500W min. 1700 nominal			
Gain @ Rated Power:	66 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 716 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:	Pulse, AM, FM			
Configuration:	Rack Mountable			
Spurious Outputs:	<-60 dBc nominal			
Harmonics:	-20dBc nominal @ Linear Power			

## Instruments For Industry

903 South Second Street · Ronkonkoma, NY 11779 · 631-467-8400 · 631-467-8558 · sales@ifi.com · www.ifi.com

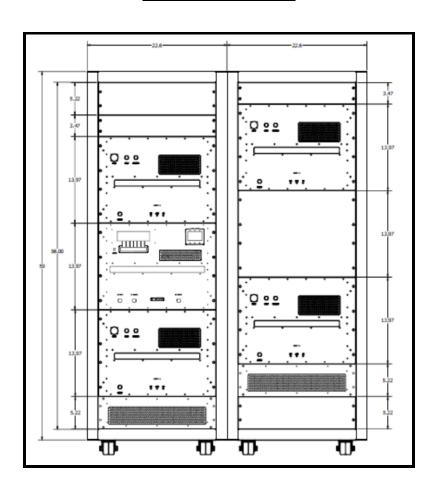
## SCCX3500 Solid State RF Power Amplifier

10kHz - 220 MHz • 3.5kW • Rack Integrated • Solid State Reliability

Standard Prime Powers:
20/208VAC ±10% 50/60 Hz, three phase
20/240 VAC ±10% 50/60 Hz, three phase Wye
00/220/230/240VAC ±10% 50/60 Hz, three phase Delta power
pecial Prime Powers other then listed are subject to availability

Some Available Options for IFI SCCX3500 Series Solid State Amplifiers				
<b>Option 110-2:</b>	GPIB IEEE-488 and RS 422 Remote Control			
Option 110-3	GPIB IEEE-488 and RS 485 Remote Control			
Option 118A:	RF Input On Front Output On Rear			
Option 118B:	RF Input On Rear Output On Front			
Option LC:	Liquid Cooled			

#### **Outline Configuration**



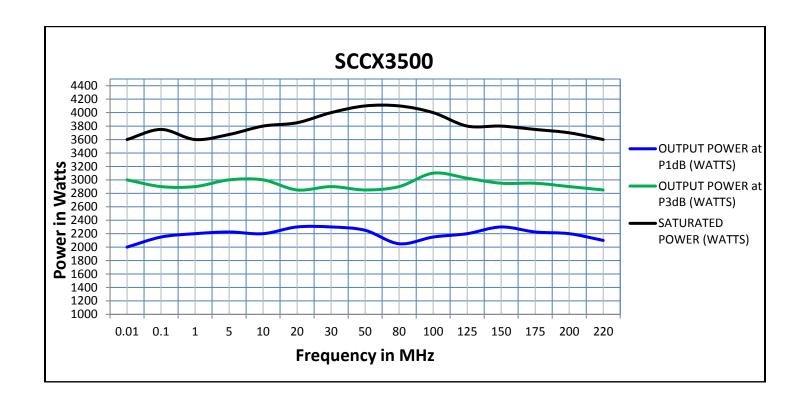
## **Instruments For Industry**

903 South Second Street · Ronkonkoma, NY 11779 · 631-467-8400 · 631-467-8558 · sales@ifi.com · www.ifi.com

AMPLIFIERS

# SCCX3500 Solid State RF Power Amplifier

10kHz - 220 MHz • 3.5kW • Rack Integrated • Solid State Reliability



## Instruments For Industry