Instruments For Industry

The Power Of Choice

AMPLIFIERS

TCCX Series Tetrode Tube Amplifiers 10 KHz – 220 MHz • 500 Wattsto 12000 Watts

Instruments for Industry, TCCX-Series Amplifiers provide outstanding RF performance. Our "TCCX-Series" products are a mature design but incorporate the latest features with respect to control and monitoring. These amplifiers have field proven reliability and unsurpassed performance as best of the breed. They were specifically designed for laboratory testing applications into the worst mismatch conditions. These products are available in a wide range of power levels from 500 watts to 12000 watts in the 10KHz-220MHz frequency range.

IFI Tetrode Tube amplifiers are very conservatively designed to operate below maximum ratings for ruggedness and long term reliability. The Amplifier system integrates a Solid State Power supply to provide reliable brute-power performance at frequencies up to 220MHz.

Our RF power amplifiers feature modular heavy duty construction. This concept of 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 "TCCX-SERIES" products are structurally engineered to withstand operation into complete mismatch conditions without folding back. A product and design built to last!

IFI RF Power Amplifier Features:

- Instantaneous Broadband Frequency range
- Modular Design Construction
- Rugged Construction & High Reliability
- Backlit LCD Display
- Integrated Force Air Cooling
- Self-diagnostic circuitry
- IEEE-488 Interface, RS232 & Ethernet
- Tetrode Tube Design
- Solid State Power Supply





Models & General Specifications:								
Model	Frequency	Rated Power		P1dB Power	Gain	Mains	Weight	Size
Number	Range	(watts minimum)		(watts minimum)	(dB min)	(kVA)	(Pounds)	(Inches)
TCCX500	10KHz-220 MHz	500		400	57	4.0	600	Rack Integrated
TCCX1000	10KHz-220 MHz	1000		800	60	8.0	750	Rack Integrated
TCCX2000	10KHz-200 MHz	2000		1500	63	15.0	1000	Rack Integrated
TCCX2200	10KHz-200 MHz	2200		1600	64	16.0	1200	Rack Integrated
TCCX2500	10KHz-200 MHz	2500		1800	64	20.0	1250	Rack Integrated
TCCX3500	10KHz-100 MHz	3500		2000	66	25.0	1600	Rack Integrated
Pulse Model Number		Rated Pulse Power	Rated CW Power					
TCCX500P	10KHz-220 MHz	1500	500	400	57	4.0	600	Rack Integrated
TCCX1000P	10KHz-220 MHz	3000	1000	800	60	8.0	750	Rack Integrated
TCCX2000P	10KHz-200 MHz	6000	2000	1500	63	15.0	1000	Rack Integrated
TCCX2200P	10KHz-200 MHz	6500	2200	1600	64	16.0	1200	Rack Integrated
TCCX2200ULP	10KHz-200 MHz	12000	2200	1600	64	16.0	1600	Rack Integrated
TCCX2500P	10KHz-200 MHz	7500	2500	1800	64	20.0	1250	Rack Integrated

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Standard	Standard Features for IFI TCCX Series Tetrode Tube Amplifiers				
Standard Features:	VSWR Reflected Power Protection, the unit operates without damage or oscillation into any magnitude of phase or load impedant Open & Short Circuit Protection. Does not FOLDBACK!				
i cucui est	* 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,				
	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 TCCX Series Tetrode Tube Amplifier Specifications					
FrequencyRange:	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 up to 1KW amps, SC or 7/16 available, 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/Cabinet Integrated				
Spurious Outputs:	<-60 dBc nominal				
Harmonics:	-20dBc nominal @ Linear Power				

Standard Prime Powers: 120/208 ±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 TCCX Series Tetrode Tube 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 118A:	RF Input On Front Output On Rear		
Option 118B:	RF Input On Rear Output On Front		

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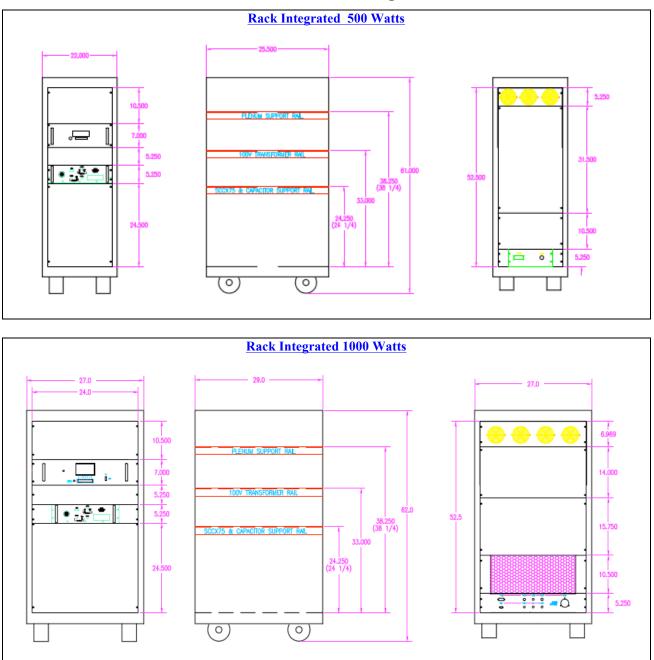
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Rack Outline Configurations:



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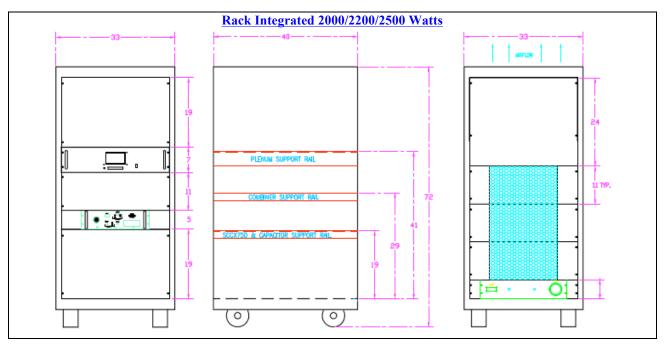
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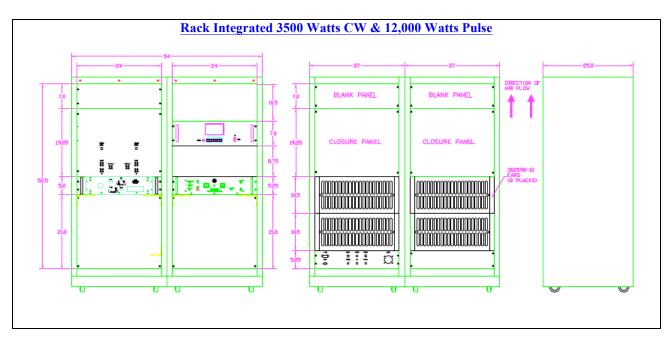
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