RADITEK

SATCOM
Ku-Band SSPA

SSPA Booster Standard Ku Band / Extended Ku Band, 125 or 150 Watts, Indoor Unit, Rack Mount

RoHS COMPLIANT

Features

- High RF output power
- Low Spurious levels
- Various output power rating
- Easy installation and configuration
- RF Output monitor port
- RF Input monitor port
- Built-in Redundancy (optional external Redundancy unit)
- Surge Protection
- Built-in M&C
- Built-in Isolator & Harmonic reject filter

Description:

RADITEK Ku-Band SSPA (Solid State Power Amplifier) Boosters offer premium performance and reliable microwave power amplification for satellite hub and remote terminals. Based on state-of-the-art technology, RADITEK SSPA provides high RF power and gain stability for uplink applications. It is highly linear with guaranteed output power suitable for multi-carriers operation.

Applications:

- Broadcast
- Video conferencing
- Rural Telephony
- Emergency Link restoration
- Point-of-sales

Hub and VSAT Terminals

Quality Assurance:

RADITEK indoor SSPA go through intensive active electrical stress screening with performance being monitored during screening.

Reliability:

Field proven under harsh environment conditions. RADITEK indoor SSPA can withstand temperature ranging from 0°C to +50°C with up to 100% humidity.

Enhanced Monitor and Control

RADITEK SSPA offers M&C via RS485/RS232 and optional Ethernet interface. It features full remote M&C through Windows using PC.

These include:

- TX level monitoring
- Temperature monitoring
- RF inhibit selection
- Gain Control
- Automatic fault identification & alarm

Frequency Range (GHz):

Standard Ku	**14.0-14.5 GHz**
Extended Kue	**13.75-14.5 GHz**

Transmit Specs:

Power	Power Output (dBm)	Small Signal Gain (dB) min	Typ AC Power Consumption (VA)
125W	51	45	1400
150W	51.8	45	1400

Order Examples: **RSSPA-Kue(13.75-14.5)-Nf-WR75-150W-IDU-g11**

Description: *(Solid State Power Supply, Ku Extended-Band(13.75-14.50GHz), N-Type Female Input Connector, WR75 Output Connector, 150 Watts, Indoor Unit)*

Options: **Ku(14.0-14.5)** **125W**

WORLD HQ: 1702L Meridian Ave. Suite 127, San Jose, Ca 95125, U.S.A.
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Specifications			Units	
Gain Flatness over full BW		±2.0	dB max	
Gain Flatness over any 40MHz		±1.0	dB max	
Gain Variation		±1.0	dB max	
Input VSWR		1.3:1	(Max)	
Output VSWR		1.3:1	(Max)	
Inter Modulation		-25	dBc max (Relative to combine power of two carriers at 3dB total power backoff from Rated Output power)	
Harmonics (@P1dB)		-60	dBc max	
Spurious (@P1dB)		-55	dBc max	
Residual AM	(0-10kHz)	-45	dBc max	
	(10kHz-500kHz)	-20	(1.0+lohF*) dBc max	
	(500kHz-1MHz)	-80	dBc max	
Group Delay (in any 40MHz band)	Linear	±0.03	nsec/ MHz max	
	Parabolic	±0.003	nsec/ max	
	Ripple	1.0	nsec p-p max	
Maximum Input Power		+10	dBm (without damage)	
Noise Figure at Gain max		10	dB max	
Display		24 x 2 LCD Display		
Power Supply		220 Vac, 1 phase ±10.0%		
Frequency Voltage		47Hz ~63Hz		
Interface				
RF Input		50 Ω N-Type Female		
RF Output monitor		50 Ω N-Type @ 40dB coupling factor		
RF Output		50 Ω WR75		
Monitor and Control				
Monitor		SSPA Temperature Status Alarm RF Output Power Reflected Power		
Control		SSPA On/Off		
Protection		Over temperature SSPA shutdown Reflected power shutdown		
Interface		RS485/ RS232 Optional – Ethernet RJ-45 (SNMP + HTTP)		
Environmental				
Operating Temperature		0 to + 50 °C		indoor SSPA
Relative Humidity		up to 95°C		non-condensing
Cooling		Forced Air cooling		
Mechanical				
Size		19” rack , 5RU height		
Weight		30.0 kg		
Color		Grey		

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Compliance Standards	
IEC 60950C	International Safety Standard for Information Technology Equipment
ETSI EN 300 673	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) Standard for Very Small Aperture Terminal (VSAT)
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electro Magnetic Compatibility Standard for Radio Equipment and Services

Additional Specs

Gain Slope	0.6dB
Gain Adjust	0.5dB

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