

200 Watt Linear Ku-Band Outdoor High Power SSPA



FEATURES

- *200W linear output power*
- *High efficiency GaN design*
- *Compact, rugged 50 lb. package for mobile applications*
- *Operates over -40°C to +60°C environment*

The **XTSLIN-200K** High Power Solid State Amplifiers are a series of compact fully integrated antenna mount units designed for low cost operation and longevity. This unit generates over 200W of linear power, providing the most linear output power available in a package this size. By using the latest in high efficiency GaN technology this linear power can be achieved with a prime power consumption of only 1600 VA.

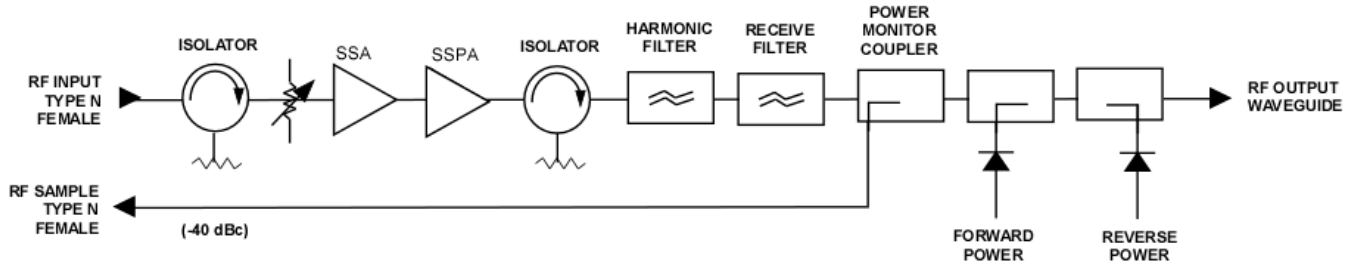
Intended for outdoor operation in challenging environments, the **XTSLIN-200K** weighs only 50 lbs. Forced air cooling is implemented in the package to allow reliable operation over extended temperature ranges. The monitor and control (M&C) interface provides a component system status via Ethernet or RS-485 and RS-232.



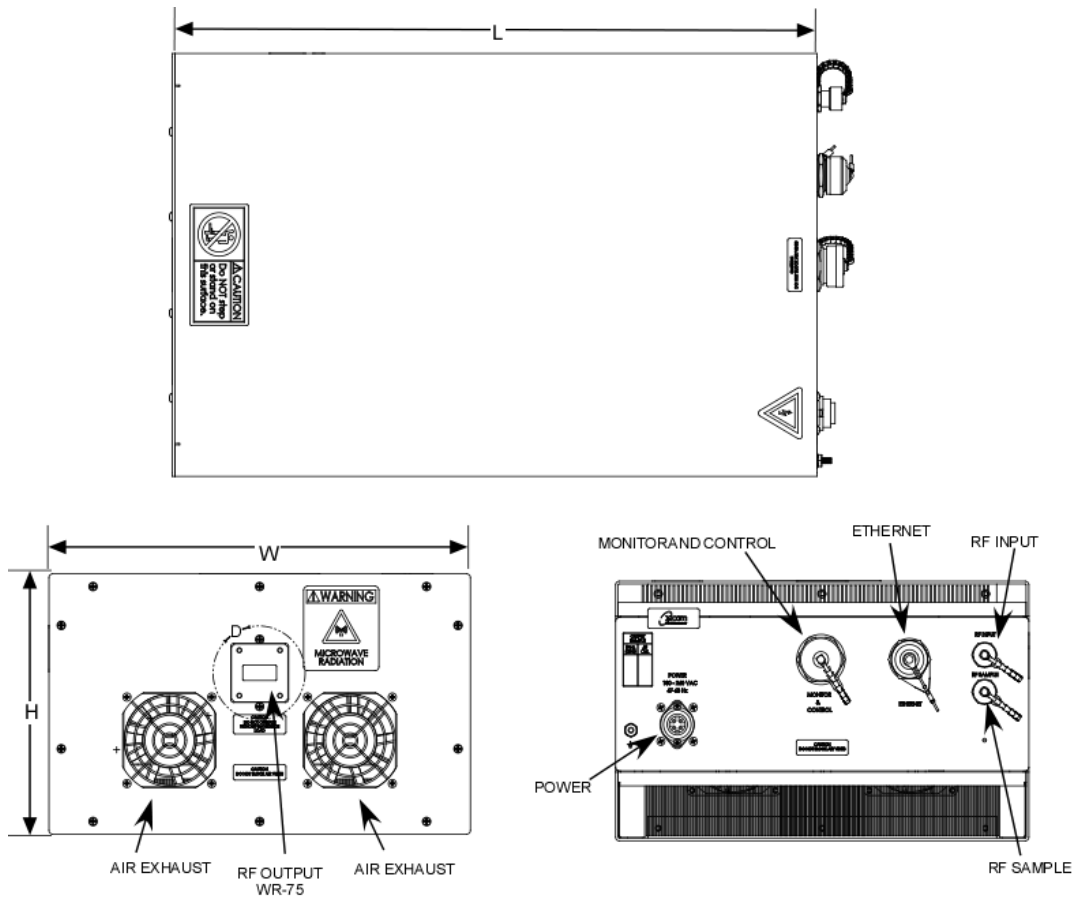
PERFORMANCE SPECIFICATION

Parameters	XTSLIN-200K
FREQUENCY RANGE	13.75 to 14.5 GHz
OUTPUT POWER	
Linear Power (minimum)	53.0 dBm
GAIN	
Factory configurable small-signal gain	55 dB to 60 dB
Field-user adjustable attenuation range	25 dB min, 0.1 dB steps
Maximum SSG Variation Over	
Narrow Band	±0.5 dB Pk-Pk/40 MHz
Full Band	3.0 dB Pk-Pk
Slope (maximum)	0.05 dB/MHz
Stability, 24 hr. (maximum)	± 0.25 dB
Stability, Temperature (maximum)	± 2.0 dB over temperature range at any frequency
INTERMODULATION (maximum) WRT to sum of two equal carriers @ Linear Power (2.6 MHz separation)	-25 dBc
SPECTRAL REGROWTH @ Linear Power (symbol rate 2.0 MHz)	-26 dBc, 1 SR, OQPSK
HARMONIC OUTPUT (maximum)	-60 dBc
AM/PM CONVERSION (maximum)	2.0 deg/dB at Linear Power
NOISE POWER (maximum)	
Transmit Band	-75 dBW/4 kHz
Receive Band (10.75 to 12.75 GHz)	-150 dBW/4 kHz
IN-BAND DISCRETE SPURIOUS	
AC Power Line	Sum of fundamental and harmonic < -30 dBc
Single Sideband	Sum of all other spurs < -36 dBc
OUTPUT SPURIOUS @ P _{LIN}	-60 dBc
VSWR	
Input (maximum)	1.3:1
Output (maximum)	1.3:1

BLOCK DIAGRAM



DIMENSIONS



DIMENSIONS		
	Inches	Centimeters
H	8.0	20.32
W	14.0	36.56
L	19.0	48.26
WEIGHT = 50 lbs typical (22.68 kg)		

PRIME POWER

180 to 260 VAC
47 to 63 Hz, Single Phase
1600 VA Typical @ P_{LN}

ENVIRONMENT

NONOPERATING TEMPERATURE RANGE	-50°C to +70°C
OPERATING TEMPERATURE RANGE	-40°C to +60°C (2°C/1000 Feet Derating)
HUMIDITY	Up to 100% Condensing
ALTITUDE	12,000 Feet MSL Max.
SHOCK AND VIBRATION	Normal Transportation
COOLING	Forced Air

INTERFACE

Type	Function	
REMOTE CONTROL	Transmit ON/OFF	RF Inhibit
	RF Attenuation	Fault Reset
	Summary Fault	
REMOTE STATUS	Transmit ON	Temperature
	RF Output Power	Fault Identification
	Reflected Power	
Solid State Relay	Summary Fault	
COMPUTER	Hardware Interface:	2 Ports: RS-232 & RS-422/485 Ethernet
SERIAL PORT	Xicom Command Set	ASCII Commands
RF MONITOR PORT	-40 dB Coupling Value (Nominal)	

OPTIONS

- Built-in L-Band Block Upconverter
- SNMP

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