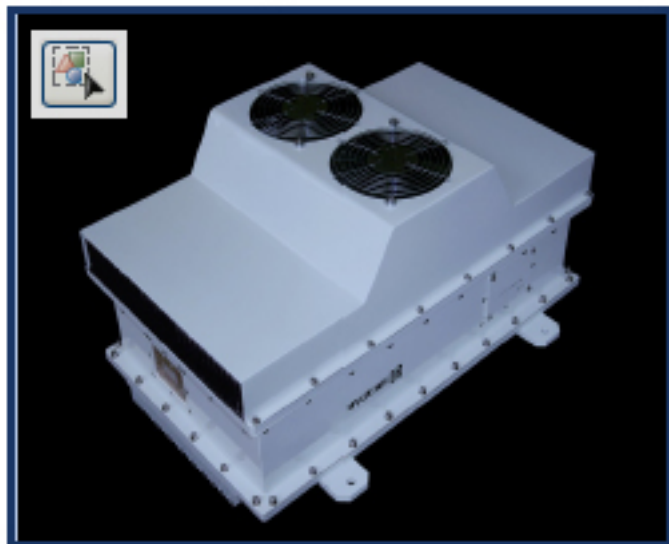
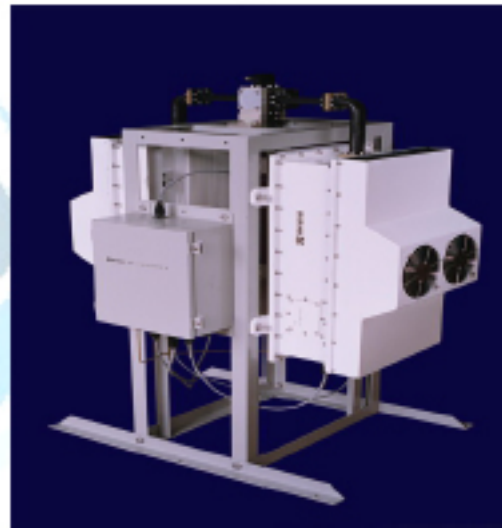


## TLKu 1012 Series Ku High-power Broadband Transmitter



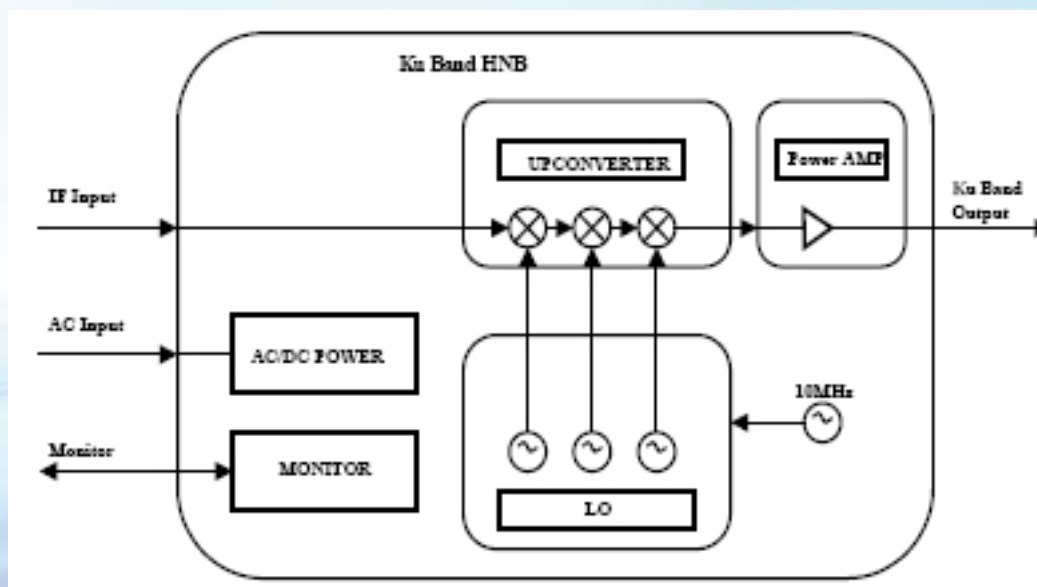
(Single Transmitter)



(1:1 Backup Transmitter)A



The Theory of Transmitter:





## FEATURES:

Full range of output power 1W,5W,10W,20W,40W  
 High linearity  
 Full M&C capability via RS232/485  
 Forward and Reflected power monitoring  
 Output Sample Port  
 Infinite VSWR protection with automatic high reflected power shutdown  
 Simple installation and Easy maintenance



## SPECIFICATION

### Model Frequency Power and Gain(FE:40W)

Band Model	RF Band (GHz)	Power			Gain	
		W	P_sat(dBW)	P_sat(dBW)	SSPA	+BUC module
1020	10.00-10.20	40	16.5	16	57	67
1220	12.00-12.20					

### Environment

Temperature	Operating - 40 ~ +50	°C
	Storage -55 ~ +85	°C
Humidity	100%	
Altitude	10000' AMSL derated by 2 oC/1000' from AMSL	

### Local Oscillator Specification

Phase Noise	-60 dBc/Hz at 10Hz
	-65 dBc/Hz at 100Hz
	-75 dBc/Hz at 1000Hz
	-85 dBc/Hz at 10KHz
	-95 dBc/Hz at 100KHz
Reference Frequency	10 MHz
External Reference Frequency Phase Noise	-115 dBc/Hz at 10Hz
	-135 dBc/Hz at 100Hz
	-148 dBc/Hz at 1000 Hz
	-150 dBc/Hz at 10 KHz
	-160 dBc/Hz at 100 KHz

### General Specification

Gain Flatness	Full Band	$\pm 1.2$	dB
	per 40MHz	$\pm 0.3$	
Gain Stability	24 hrs	$\pm 0.5$	dB
Gain Adjust	at 1dB step	20	dB
IM3	at P1dB-3dB	$\leq -25$	dBc
AM/PM Conversion	at P1dB-3dB	1.5	°/dB
Sperious	at P1dB	-60	dBc
Noise Figure	Optional	8	dB
VSWR	Input	1.35 (Max 1.5)	
	Output	1.25 (Max 1.35)	
Group Delay (per 40MHz)	Linear	0.03	nS/MHz
	Parabolic	0.003	nS/MHz <sup>2</sup>
	Ripple	1	nSp-p
Interface	RF Input	N-type / SMA Female	
	Reference Input	N-type / SMA Female	
	RF output	WR75	
	RS232/485	Circular connector(6pin/14pin)	
Power Requirements	AC	180-264 VAC,	
		Option 90-132V, DC48	

## Option

1:1 redundant system.

1:2 redundant system.

Internal 10MHz reference

Ethernet Interface for monitor and control