

14Ghz satellite uplink indoor transmitter PAC 1400R Series Rack Mount Ku Band SSPA/SSPB



INTRODUCTION:

TELE Ku-band Amplifier and BUCs are intended for satellite uplink application. PAC Series 19" Rackmount SSPA/SSPB is available in output power from 40W to 120W. It is based on TELE's proven techniques resulting in high linearity and power efficiency, conservative thermal design contributes to the high MTBF.



FEATURES:

Full range of output power from 40W to 120W

High linearity
 Full M&C capability via RS485
 Forward and Reflected power monitoring
 Output Sample Port
 Infinite VSWR protection with automatic high reflected power shutdown
 Built-in Receive Reject Filter
 Simple installation and Easy maintenance.



SPECIFICATION:

Model Frequency Power and Gain

Band Model	RF Band (GHz)	Power			Gain	
		W	P _{sat} (dBW)	P ₁ (dBW)	SSPA	+BUC module
1415	14.00-14.50	40	16	15	+56	+66
1315	13.75-14.50	50	17	16	+57	+67
		60	18	17	+58	+68
		80	19	18	+59	+69
		100	20	19	+60	+70
		120	21	20	+61	+71

BUC Local Oscillator Frequency :

Model	RF Band	Lo	L-band Input (MHz)	
	(GHz)	(GHz)	Start	End
1415	14.00-14.50	13.05	950	1450
1315	13.75-14.55	12.80	950	1700

Other Frequency band is available, please consult factory

General Specification :

Gain Flatness	Full Band	± 1.2	dB
	Per 40 MHz	± 0.3	
Gain Stability	24 hrs	± 0.5	dB
Gain Adjust	At 1dB step	20	dB
IM₃	At P1dB-3dB	$\cong -25$	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)	
	Ouput	1.25(Max 1.35)	
Group Delay(per 40MHz)	Linear	0.03	nS/MHz
	Parabolic	0.003	nS/M Hz ²
	Ripple	1	nS _{p-p}
Interface	RF Input	N-type /SMA Female	
	Input Sample	N-type Female	
	Output Sample	N-type Female	
	RF output	WR75	
	AC Line	IEC 320 Inlet	
	RS232/465	D-Sub 9 (S)	
	Ethernet (Option)	RJ45	
Power Requirements	AC	180-264 VAC, Option 90-132V,DC48	

Environment :

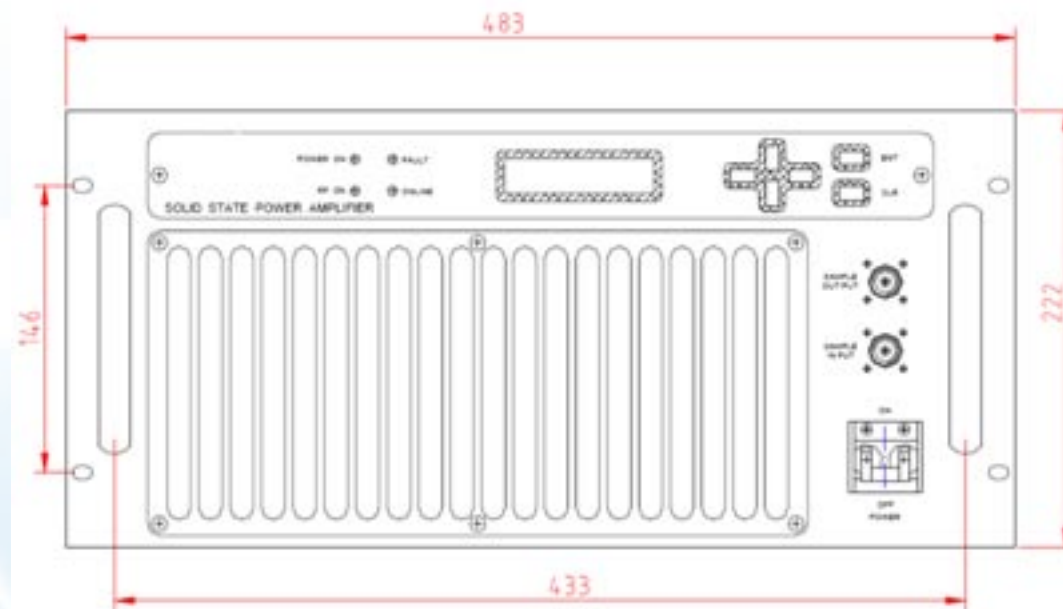
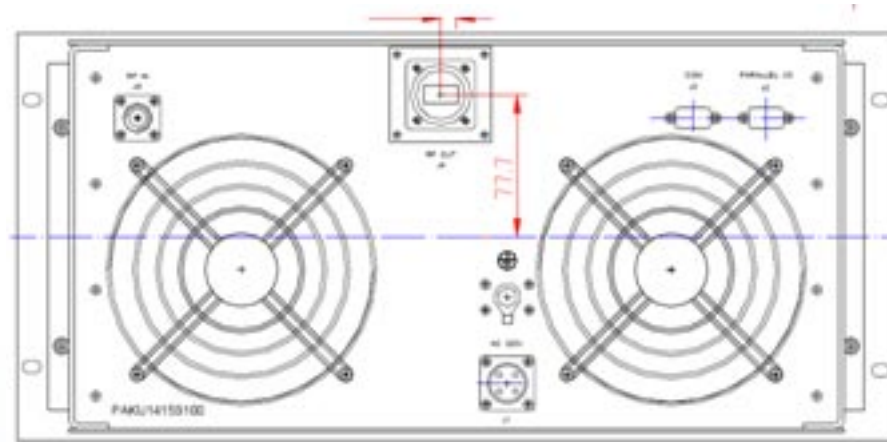
Temperature	Operating 0 ~ +50	°C
	Storage -55 ~ +85	°C
Humidity	5% ~ 95% Non-condensing	
Altitude	100000' AMSL derated by 2 °C/1000' from AMSL	

Local Oscillator Specification :

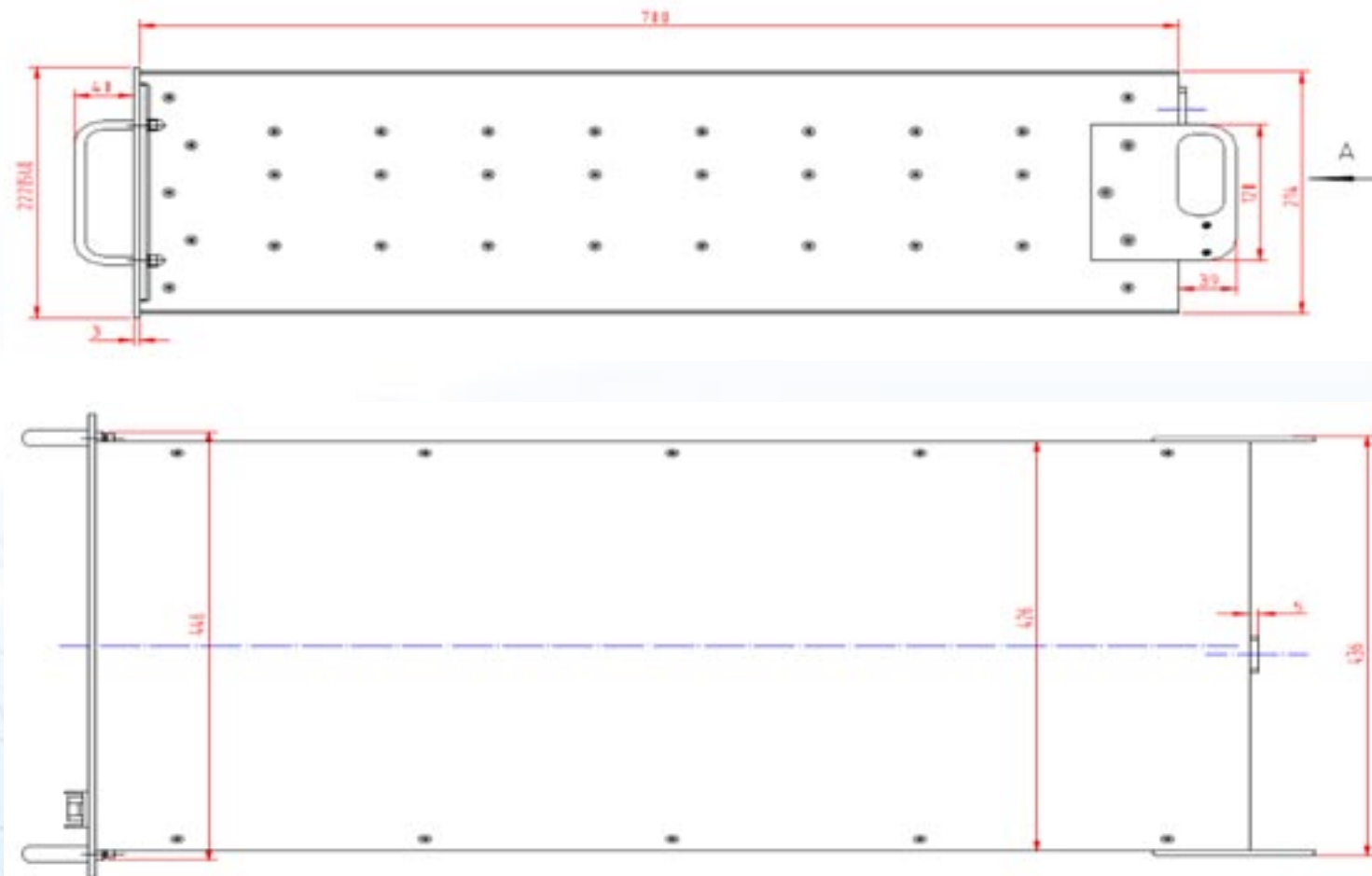
Reference	10MHz (Internal Reference)
Phase Noise	-60 dBc/Hz at 10Hz
	-65 dBc/Hz at 100Hz
	-75 dBc/Hz at 1000Hz
	-85 dBc/Hz at 10KHz
	-95dBc/Hz at 100KHz
External Reference Frequency Phase Noise	-115 dBc/Hz at 10Hz
	-135 dBc/Hz at 100Hz
	-148 dBc/Hz at 1000Hz
	-150 dBc/Hz at 10KHz
	-160 dBc/Hz at 100KHz

Outline and Dimension :

Power	Chassis	W x H x L
40	3U	483*133*533
50		
80		
100	4U	483*177*163
125		
150		
200	5U	483*222*700
250		



The picture following is Chassis of 5U



Option :

L-band Interface for BUC function

1:1 redundant system

1:2 redundant system

Ethernet Interface for monitor and control