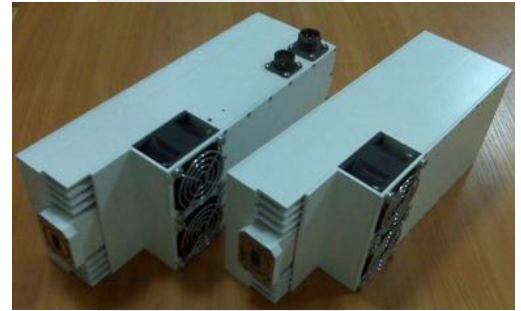




50 W BUC KU BAND

Model Type: **50KU001A**

This device is suitable for satellite video and data applications.
The BUC performs the translation of the input signal from L Band to Ku Band and the inside SSPA amplifiers do the amplifies of the signal up to 50W.



LED ALARM (to LEDs installed)

LED 1 indicator	●	LO mode 13050
LED 1 indicator	☀	LO mode 12800
LED 2 indicator	●	ALL OK
LED 2 indicator	☀	Output Muted
LED 3 indicator	●	SUMMARY FAULT, No PLL Lock to ext. REF 10MHz, SSPA OUT DISABLED
No LED illumination		No power supply voltage

CONNECTOR PIN ASSIGNMENT

Connector Name	Type	Pin #	Signal	Parameter
J1 "IF IN"	N-type female field replace-able	N/A	IF Input 10 MHz Ref. IN	5 dBm, max -5 +5 dBm
J2 "RF OUT"	WR-75	N/A	RF Output	46 dBm max
J3 "AC POWER IN"	97-3100A-14S-7P 3 pin male	A	Line (AC)	90 - 240 VAC
		B	Ground	
		C	Line (AC)	
J4 "M&C Interface" <i>optional</i>	PT02E12-10P-027 10 pin male	A	Rx+ In	RS-485
		B	Rx- In	
		C	Tx+ Out	
		D	Tx- Out	
		E	Detector	0-1V (<i>optional</i>)
		F	Alarm Out	Low when alarm
		G	GND	
		H	Mute In	Muted when Low
		J	Rx In	RS-232
		K	Tx Out	



TECHNICAL SPECIFICATION

INPUT CHARACTERISTICS

Frequency	950 ÷ 1700 MHz or on request 1450 MHz
Impedante	50 Ohm
Return loss	15 dBmin

OUTPUT CHARACTERISTICS

Frequency	13.75 ÷ 14.50 GHz
Impedance	50 Ohm
Return loss	15 dB min
Power output	47 dBm @ 1 dB compression point

TRANSFER CHARACTERISTICS

Gain flatness	±0.8 dB max (40MHz BW) ±1dB over any 80 MHz band
---------------	---

SPURIOUS OUTPUTS

Carrier independent	-60 dB max
Carrier dependent	-80 dBc min
LO leakage	-40 dBm max
Local Oscillator	12.8 GHz or on request 13.050 GHz

Phase Noise	@100Hz/(-65dBc/Hz max)	- 76 dBc/Hz
	@1KHz/(-75dBc/Hz max)	- 84 dBc/Hz
	@10KHz/(-85dBc/Hz max)	- 89 dBc/Hz
	@100KHz/(-95dBc/Hz max)	- 98 dBc/Hz
	@1MHz/(-105dBc/Hz max)	- 111 dBc/Hz

GENERAL

Reference signal frequency	10 MHz sine-wave
Reference signal level	-5 to 5dBm @50ohm
Gain stability	±0.5dB / day @ constant temperature
Group delay	<10 ns over any 80MHz band max
Spurious in TX band	-55 dBc @<1MHz -60 dBc >1MHz