



Ku Band

Medium Power BUCs



Belcom Microwaves' Ku series of medium power BUCs provide a simple, robust and compact size solution for applications in the Ku band. The Ku series delivers top performance and reliability at impressive prices.

The Ku Series features a built-in redundancy system controller and Monitoring and Control features (M&C) including gain control, output power, gain monitoring and PLL lock fault alarm.

The Ku series has been designed with over 20 years of engineering and production experience of BUCs and other microwave products.

Further to the standard Ku Series range, Belcom Microwaves engineering team can adapt a Ku BUC to your specific needs, while implementing our efficient, short design cycle and production processes, to provide a unique product within the shortest lead time.

Highlights

- M&C TCP/IP HTTP functionality with embedded Web pages via RJ-45 connector
- Built-in redundancy system controller
- Output power: 16W, 20W, 25W
- Low weight: 2.5Kg
- Available in Ku and extended Ku bands.
- Extended Ku band with switchable LO
- DC or AC operated
 - AC wide range: 90 to 250V
 - DC wide range: 15 to 60V
- Operating temperatures: -40°C to +55°C
- Synthesized LO
- 21 day repair cycle guaranteed
- Covered by a full three-year warranty
- Competitive pricing

Ku Models Overview

Model	Output Power (1dB compression point)		Gain (Nominal) dB	Power Consumption Watt
	Watt	dBm		
BLKU-16	16	42	62	120
BLKU-20	20	43	63	170
BLKU-25	25	44	63	190

Electrical

Input		
Input Impedance		50Ω
Input VSWR		2.0:1 max
Input Frequency		950-1450MHz
LO Frequency		13.05GHz
Output:		
Output Frequency		14.0-14.5GHz
Output Power (at 1 dB gain compression point)		See table overleaf
Output VSWR		2.0:1 max
Gain:		
Nominal Gain		See table overleaf
Minimum Gain		Nominal gain -3dB
Maximum Gain		Nominal gain +3dB
Gain Flatness		
Over any 36 MHz		1dB PTP max
Over Frequency band		4dB PTP max
Gain stability(Over temp)		4dB PTP max
Phase Noise:		
@100Hz offset		-65dBc/Hz
@1KHz offset		-72dBc/Hz
@10KHz offset		-82dBc/Hz
@100KHz offset		-92dBc/Hz
@1MHz offset		-102dBc/Hz
Spectral Purity:		
Spurious up to 1 dB compression point		-55dBc max
LO Leakage		-25dBm max
3rd Order Intermodulation (2 tones) at 3dB backoff		-25dBc max
Free Oscillations - Under any combination of load, temperature and supply		None
Transmit Band Noise		-85dBm/Hz max
Receive Band Noise (10.95-12.75GHz)		-150dBm/Hz max
Receive Spurious		-120dBm max
Power Supply:		
DC Voltage		15-60 Volt
Power Consumption		See table overleaf
External Reference Requirements:		
Power		-10 to 0dBm
Frequency		10MHz

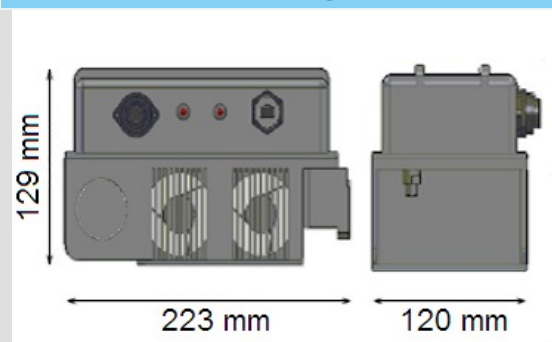
Environmental

Operating Temperature	-40°C to +55°C
Storage Temperature	-50°C to +85°C
Sealing	IP-54
Vibration:	
3-350Hz	0.0015g ² /Hz
350-500Hz	6dB/Oct
500Hz	0.00074g ² /Hz
Shock	10g@10mSec(½ sine)

Mechanical

Weight	2.5Kg
Dimensions (LxWxH)	223 x 120 x 129 mm

Outline Drawing



Specifications subject to change without prior notice