C FLAME

Belcom Microwave's FLAME series of medium power BUCs provides a groundbreaking solution for increased speed and bandwidth.

The FLAME series was crafted with 20 years of engineering experience and is backed by a dedicated support team.

The Belcom team incorporates innovative design with efficient, high turnover manufacturing processes to provide top-caliber products with impressive lead times.

Designed to be simple and robust, FLAME series delivers top performance and is cost effective and reliable.

FLAME Highlights

Competitive pricing

Output power: 10W, 20W, 25W, 40W, 50W

Available in C, Extended C and Palapa Bands

Covered by a full three-year warranty plan

21-day repair cycle guarantee

Operating Voltage: AC or DC

Operating temperatures: -40°C to +55°C

Synthesized L.O.

FLAME Models Overview

Model	Output Power (W)	Operating Voltage	Nominal Gain (dB)	Power Consumption(W)		Weight(Kg)		Outline(*)	
				DC	AC	DC	AC	DC	AC
BLX-10	10	48V / 24V	60	80	NA	6.5	NA	A	
BLX-20	20	48V / AC	63	170	185	7.0	10.2	B	C
BLX-25	25	48V / AC	63	220	240	7.0	10.2	B	C
BLX-40	40	48V / AC	66	N/A	380	11.5	11.5	C	C
BLX-50	50	48V / AC	67	N/A	400	11.5	11.5	C	C

(*) See outline drawings

Belcom MICROWAVES
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Electrical

Input impedance			Ω50
Input VSWR			2:1
Available Bands			
	C-Band	**Ext.C**	**Palapa**
Input frequency	950-1525MHz	975-1275MHz	1075-1435MHz
Output frequency	5.85-6.425GHz	6.725-7.025GHz	6.365-6.725GHz
L.O frequency	4.900GHz	5.750GHz	5.290GHz
Output power (at 1 dB GC)			See table overleaf
Gain (Nominal)			See table overleaf
Gain Flatness			
	Over any 1 MHz band		±0.2 dB max
	Over any 36 MHz band		±0.75 dB max
	Over full Band		4 dB PTP max
Gain stability over temperature (at constant frequency)			4 dB PTP max
Reference signal - External 10MHz			-10dBm to +7dBm
Spectrum sense			Non Inverting
Frequency accuracy (PPM)			Same as Reference
Phase Noise			
	At 1 KHz offset		75 dBc/Hz
	At 10 KHz offset		81 dBc/Hz
	At 100 KHz offset		95 dBc/Hz
Leakage and Spurious Signals (Up to 1dB compression point)			
	In-band		-55 dBc max, -60dBc typical
	Harmonics		-20 dBm max
	In RX band		-140 dBm/4KHz max
	Wideband noise in RX band		-160 dBm/Hz max
	3rd order intercept point (IP3)		P1dB +7 dB min
Stability	The unit will not oscillate under any condition of load, temperature or DC supply		
Protection			
	-Thermal runaway protection		
	-No damage by any combination of load reflections		
	-DC supply spike protection		
	-Missing 10MHz reference shuts transmitter to -60dBc min		
Power supply voltage (at the input of the BUC)			
	DC		37-60V (18-30V optional)
	AC		90-250V (50-60 Hz)
	Power consumption		See table overleaf

Mechanical

IF + reference input.	N type (female)
RF output	CPR137 grooved
Weight	See table overleaf
Finish	White polyurethane paint

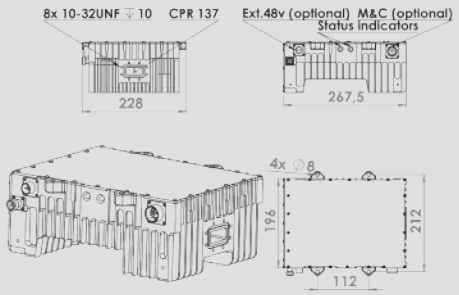
Specifications are subject to change without prior notice

Environmental

Operating Temperature	-40°C to +55°C
Sealing	Moisture sealing by O-ring
	Weather-proof
Vibration	5-350Hz 0.0015g2/Hz
	350-500Hz -6dB/oct
	500Hz 0.00074g2/Hz
Shock	10g @ 10m s(half sine)

Outline Drawing

All dimensions are in mm.



How To Order

BLX-P-V-D-C

X- Frequency Band

C- C Band
PA- Palapa
IN- Ext. C (Insat)

P- Output Power

10 - 10W
20 - 20W
25 - 25W
40 - 40W
50 - 50W

V- Operating Voltage

24 - 18-30V (10W only)
48 - 37-60V
AC - AC

D- Input Power Connector

I- DC Supply via IFL Cable
E- DC/AC via external connector

C- M&C Option

Blank -No M&C (Standard)
C- M&C via Ext. Connector (RS-485) (Optional)

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