



Belcom's SPARK series of low power BUCs have been trusted by the world's largest VSAT companies for over 20 years with a proven reputation for reliability.

Built to be robust and reliable, SPARK BUCs are rugged enough to withstand extreme outdoor conditions. Belcom's high-level development experience along with large volume manufacturing capabilities, provide clients with unmatched cost savings.

SPARK products are covered by a complete two-year warranty and backed by a dedicated service team that ensures a full repair cycle in no more than 21 days.

SPARK Highlights

- Available in C, Extended C and Palapa bands
- Output power: 1W, 2W, 5W, 8W
- Covered by a complete two-year warranty plan
- Guaranteed 21-day repair cycle
- Low power consumption
- Lightweight: 1.85 Kg

SPARK Models Overview

Model	Output Power (W)		Nominal Gain (dB)	Power Consumption (W)
	(W)	(dBm)		
mBLX-1	1	30	53	16
mBLX-2	2	33	55	28
NEW! mBLX-2-LP	2	33	55	16
mBLX-5	5	37	58	48
mBLX-8	8	39	60	55

Electrical

Input impedance 75 (50 optional)

Input VSWR 2:1

Available Bands

	C-Band	Ext.C	Palapa
Input freq.	950-1525MHz	975-1275MHz	1075-1435MHz
Output freq.	5.85-6.425GHz	6.725-7.025GHz	6.365-6.725GHz
L.O freq.	4.900GHz	5.750GHz	5.290GHz

Output power (at 1 dB GC) See Table on page 1

Gain (Nominal) See Table on page 1

Gain Flatness

Over any 1 MHz band ±0.2 dB max

Over any 36 MHz band (25°C) ±0.6 dB max

Over full Band ±2.0 dB max

Gain Stability over temp. (at constant freq.) 4 dB max

Ref. signal - External 10MHz -3dBm to +7dBm

Spectrum sense Non Inverting (Inverting-Option)

Total Frequency Accuracy Controlled by 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 comp.)

In-Band 55 dBc max, -60dBc typ.

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 for any combination of load reflections

-DC supply spikes protection

-Missing 10MHz Ref. shuts transmitter to -60dBc min

Power supply voltage (at the input of the BUC) +15 to +24V DC

Mechanical

IF + DC + reference input. F type (f) (N type optional)

RF output CPR137 Grooved

Weight 1.85 Kg (1, 2, 5W)

2.1 Kg (8W)

Finish White polyurethane paint

Specifications subject to change without prior notice

Environmental

Operating Temperature -40°C to +55°C

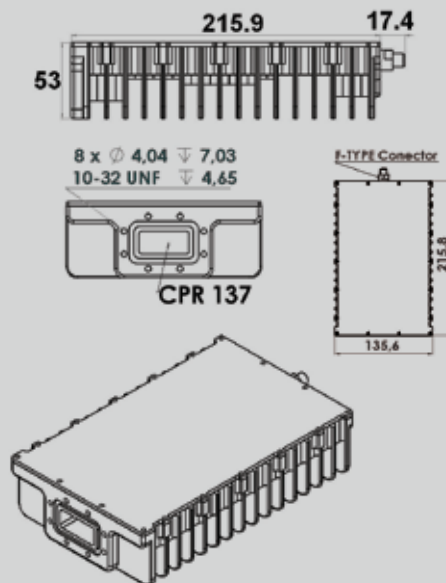
Sealing Moisture sealing by O-ring
Weather-proof

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

mBLX-P-C

X- Band Selection:

C- Standard C Band

PA- Palapa band

IN- Insat band

P- Output power @ 1 db GC

1 - 1W

2 - 2W

5 - 5W

8 - 8W

C - Input Connector

F- F type (f) Standard

N- N Type (f) Optional

Special configurations are available