

RADITEK

SATCOM L-C Band BUC

Block Up Converter L to C Band F or N-Type Female Connector, 10MHz Ext Reference, 1-8 Watts Output Power



Special Features

- Available in C, Extended C and Palapa bands
- Output power: 1W, 2W, 3W, 5W, 8W
- Covered by a full two-year warranty plan
- Low power consumption
- Lightweight - 1.85 Kg
- Rugged to withstand extreme outdoor condition



RF Power		Nominal Gain	Power Consumption
(W)	(dBm)		
1	30	53	16
2	33	55	28
2	33	55	16
3	34.5	55	28
5	37	58	48
8	39	60	55

Order Examples: RBUC-L(950-1525M) to C(5.85-6.425)- Ff -ER10M-2W-v7b

Description: (Block Up Converter, L Band(950-1525MHz) to C(5.85-6.425GHz), F-Type Female Connector, 10MHz External Reference, 2 Watts)

Additional Options: L(975-1275M) C(6.725-7.025) N-Type or F Female 1, 2, 3, 5 or 8 Watts
L(1075-1435M) C(6.365-6.725) N-Type or F Female 1, 2, 3, 5 or 8 Watts

Available Bands	C-Band	Ext'd C-Band	Palapa
Input frequency	950-1525MHz	975-1275MHz	1075-1435MHz
Output frequency	5.85-6.425GHz	6.725-7.025GHz	6.365-6.725GHz
Low frequency	4.900GHz	5.750GHz	5.290GHz

Specifications		Units
L-Band Input		
Impedance	75 , (50Ω option)	Ohm
Input VSWR	2:1	
Interface	N-Type (std.) or F-Type (via adapter)	
Gain Flatness		
Over any 1 MHz band	±0.2	dB max
Over any 36 MHz band (25°C)	±0.6	
Over full Band	4 dB PTP max	
Gain stability over temperature (at constant frequency)	4 dB PTP max	dB max
Reference signal - External 10MHz	-10 to +7	dBm
Spectrum sense	Non Inverting (Inverting-Option)	
Frequency accuracy (PPM)	Same as Reference	

RBUC-LBand to C-NF-ER10M-1-8W-v7b

Specifications may be subject to change

11/18/12

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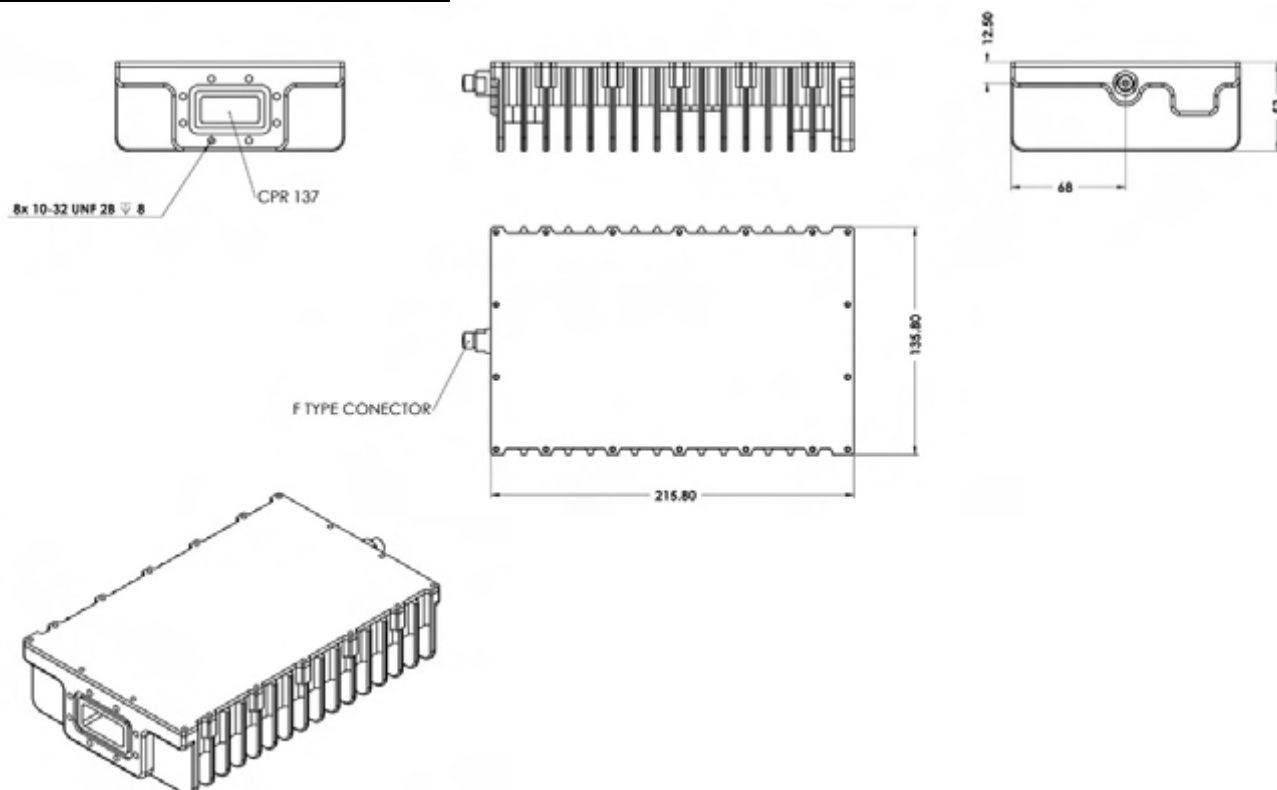
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Block Up Converter L to C Band F or N-Type Female Connector, 10MHz Ext Reference, 1-8 Watts Output Power

Specifications		Units
Phase Noise		
At 1 KHz offset	75	dBc/Hz
At 10 KHz offset	81	
At 100 KHz offset	95	
Leakage and Spurious Signals (Up to 1dB compression point)		
In-band	-55 dBc max, -60dBc typical	dBc
Harmonics	-20	dBm max
In RX band	-140 dBm/kHz max	dBm 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 (at the input of the BUC)	+15 to +24V DC	VDC
Power consumption	See table overleaf	
Mechanical		
IF + DC + reference input.	F type (female) (N type optional)	
RF Output	CPR137 Grooved	
Weight	1.85 Kg (1, 2, 5W)	2.1 Kg (8W)
Finish	White polyurethane paint	
Environmental		
Operating Temperature	-40 ~ +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)	

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Outline Drawing (Dimensions in mm)



Block Diagram

