



# Block Up Converter L to C Band (Intelsat/ Insat/ Palapa/ Full C), 10MHz External Reference, N or F Connector, 100 Watts, 150 Watts or-200Watts, Outdoor Unit



This small and lightweight BUC is ideal for mobile and satellite uplink applications. The BUC has excellent efficiency and consumes less than 1300W for 200W RF Power C-Band BUC. Innovative and efficient thermal design makes this BUC one of the smallest in the industry.

Built-in redundancy-ready feature eliminates the use of an external controller for 1:1 redundancy operation. This eliminates messy cabling at the antenna making this a very elegant solution

**Order Examples:** **RBUC-L(950-1825M)-C(5.850-6.725)-Nf-WR137G-ER10M-150W-ODU-g11**

**Description:** (Block Up Converter, L Band(950-1825MHz) to C(5.850-6.725GHz), N-Female Input Connector, WR137G Waveguide Output, 10MHz External Reference, 150 Watts, Outdoor Unit)

**Additional Options:** **Input** **Output** **Ff(F-Female)** **Nf(N-Female)** **100, 150 or 200 Watts**  
**See Table Below** **See Table Below** **Input** **Output**

## Features

- Compact and lightweight
- Available for all C-Band frequencies
- Forward & reverse power detection facility
- Input power detection facility
- Intuitive monitoring & control through RS232/485, Ethernet (SNMP & HTTP)
- Automatic fault identification & alarm generation
- Temperature compensation facility
- Built-in redundancy facility
- Built-in 10MHz reference with auto-detection
- Built-in harmonics reject filter
- Sample port for output monitoring
- Wide operating temperature range -40°C to +60°C
- RoHS Compliant
- Waterproof

## Quality Assurance

All BUCs go through stringent quality checks in addition to well defined Electrical Stress Screening to ensure operation in harsh outdoor environments. Our BUCs are also subjected to seal test for water ingress verification

## Reliability

Field proven under harsh environment conditions, Our ODU's can withstand temperature ranging from -40°C to +60°C with up to 100% humidity.

Frequency		TX (GHz)	IF (MHz)	LO (MHz)
Intelsat/ (Standard)	CInt	5.850 to 6.425	950 to 1525	7375 /4900
Insat	CIn	6.725 to 7.025	1100 to 1400	8125 / 5625
Palapa / ST1	CPal	6.425 to 6.725	1150 to 1450	7875 / 5275
Full C	C	5.850 to 6.725	950 to 1825	7675 / 4900
Extended	Ce	5.725 to 6.725	950 to 1725	4750 / 5000

RBUC-L-C-Nf-WR137G-ER10M-100-200W-ODU-g11

Specifications may be subject to change

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RF Specifications		
Transmit Frequency		Intelsat / Full C / Insat / Palapa C / Extended
IF Frequency Range		Refer to table pg 1
Output Power @ Psat		50dBm (100W) / 51.8dBm (150W) / 53dBm (200W)
Small Signal Gain		70dB min
Gain Flatness		±2dB over the O/P frequency band
Gain Variation		±1.5dB over the operating temperature range
Gain Control		30dB in steps of 0.1dB
Inter Modulation		-25dBc @ Relative to combine power of two carriers at 3dB total power back off from Rated Output power
O/P Spurious		According to EN301443
Phase Noise @ Offset		
1 KHz		-80dBc/Hz
10 KHz		-90dBc/Hz
100 KHz		-100dBc/Hz
I/P VSWR		1.5:1
O/P VSWR		1.5:1
Noise Power density	Tx BD	70dBm/4KHz
	Rx BD	142dBm/4KHz
DC Power Requirement		
Prime Power		90 – 264VAC, 50 – 60Hz
Power Consumption		600W (Typical for 100W)
		800W (Typical for 150W)
		1000W (Typical for 200W)
Interfaces		
IF Input Interface		50 Ohms N female
Output Interface		CPRG 137G
External Reference Requirement		
Frequency		10MHz
Power		-5dBm to +5dBm
Internal 10MHz Ref		Built-in (auto-detection )
External reference phase noise requirement @ frequency offset	1KHz	-150dBc/Hz
	10KHz	-155dBc/Hz
	100KHz	-160dBc/Hz
Monitor & Control		
Monitor	BUC Temperature	
	Status alarm	
	RF Output Power / RF Input Power	
	RF Reflected Output Power	
	LED status indicator	
Control	Adjustable	
	RF output mute	
Interface		RS232/RS485 Ethernet (SNMP & HTTP) and WiFi(Optional)
Tx Redundancy		Built in

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Environmental	
Operating Temperature	-40°C to +60°C
Humidity	Up to 100% Weather protection sealed to IP65
Mechanical	
Size	284L x 209W x 164H mm / (11.2 x 7.9 x 6.45 inches)
Weight	9.0kg / (19.9lbs)
Color	White Powder Coat
Compliance Standard	
IEC 609501-2nd Edition	International Safety Standard for Information Technology Equipment
ETSI EN 301 489-12	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility (EMC) Standard for radio equipment and services; Part 12: Specific conditions for Very Small Aperture Terminal, Satellite Interactive Earth Stations operated in the frequency ranges between 4 GHz and 30 GHz in the fixed Satellite Service (FSS)
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility. Standard for Radio Equipment and Services
FCC Part 15 Class B	Two levels of radiation and conducted emissions Limits for unintentional radiators (FCC Mark)