RADITEK

SATCOM
L-Ku Band BUC

Block Up Converter L to Ku-Band(Std/Extd), N-Type Female Connector, 10MHz Ext Reference, 80, 100, 150 and 200 Watt Options, Outdoor Unit

80/100W

150/200W

This small and lightweight BUC is ideal for mobile and satellite uplink applications.

Our BUC has “Best in Class” efficiency and “lowest power consumption.” The unit works on a wide range AC power supply of 96VAC to 264VAC. Innovative and efficient thermal design makes this BUC one of the smallest, robust, reliable and rugged enough to withstand outdoor conditions in the industry.

Built-in redundancy 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.

Extensive M/C interface with RS232/RS485/Ethernet (SNMP & HTTP), Bluetooth and Wifi.

Order Examples: RBUC-L(950-1700M) to Ku(13.75-14.50)-Nf-ER10M-80W-ODU-g11

Description: *(Block Up Converter, L Band(950-1700MHz) to Ku(13.75-14.50GHz), N-Type female Connector, 10MHz External Reference, 80 Watts, Outdoor Unit*

Additional Options: L(950-1450M) Ku(14.00-14.50) 80, 100W, 150W, 200W

Features

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

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 ODUs can withstand temperature ranging from -40ºC to +60ºC with up to 100% humidity

Frequency Ranges

	RF Transmit (GHz)	IF (MHz)	LO (GHz)
Ku Standard	14.0-14.5	950 -1450	13.05
Ku Extended	13.75-14.5	950-1700	12.8

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RF Specifications				
Output Power	**80 Watt**	**100 Watt**	**150 Watt**	**200 Watt**
(Psat/ Plinear) (dBm)	49 / 46	50 / 47	51.8 / 48.8	53 / 50
Spectral Re-growth	30dBc @ p-linear			
Third Order Intermod (two tone)	-25dBc @ two signal 2MHz apart at PLinear			
Small Signal Gain				
80W/100W	70dB Min			
150W/ 200W	75dB Min			
Gain Flatness/ Full Band	±2dB			
Gain Slope over 40MHz	±1dB			
Gain Variation	±2dB over the operating temperature range			
Gain Control	20 dB in step of 0.5 dB			
O/P spurious	According to EN301428			
Phase Noise @ Offset				
1KHz	-73dBc/Hz			
10KHz	-83dBc/Hz			
100KHz	-93dBc/Hz			
I/P VSWR	1.3:1			
O/P VSWR	1.25:1			
Noise Power Density Tx BD	70dBW/ 4KHz			
Rx BD	142dBW/ 4KHz			
DC Power				
Prime Power	230VAC (range 96V to 264VAC)			
Power Consumption				
80W/ 100W	550VA Typical			
150W	1150VA			
200W	1250VA			
Interfaces				
IF Input Interface	50 Ohms N-type Female			
Output Interface	WR 75G			
External Reference				
Frequency	10MHz			
Power	-5dBm to +5dBm			
Internal reference	Built-in (Auto detection)			
External reference phase noise requirement @ frequency offset				
1KHz	-150dBc/Hz			
10KHz	-155dBc/Hz			
100KHz	-160dBc/Hz			

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Monitor And Control	
Monitor	BUC temperature Status alarm Output Power Reverse Power Input power LED status indication
Control	Attenuation RF output mute
Interface	RS232/485 & Ethernet (SNMP & HTTP) via external MS connector
Tx Redundancy	External RCU (optional for 1+1 redundancy system requirement)
Environmental	
Operating Temperature	-40ºC to +60ºC
Humidity	Up to 100% Weather protection sealed to IP65
Mechanical	
Dimensions	
80W / 100W	360L x 200W x 145H mm
150W - 200W	495L x 440W x 175H mm
Weight	3.7kg / 8.14lbs
80W / 100W	9.5kg
150W - 200W	23kg
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 SpectrumMatters (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 thefrequency ranges between 4GHz and 30GHz 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)

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