



Block Up-Converter, Ka Band (29-30GHz)



This small and light weight new Ka-Band BUC is ideal for mobile and satellite uplink applications. Designed to be mounted on the feed horn, the BUC has excellent efficiency. The unit works on a wide range input DC power supply from 38V to 60V. Innovative and efficient thermal design makes this BUC one of the smallest, lightest and most reliable in the industry.

With redundancy-ready feature, the unit can be easily configured to work in 1:1 redundant mode.

Features

- Compact and lightweight
- Excellent linearity
- Extremely reliable
- High power efficiency
- Excellent phase noise characteristics
- Low spurious
- Forward power detection function
- Remote monitor & control through RS232/RS485 and Ethernet (SNMP & HTTP)
- Wide input DC voltage range
- Automatic fault identification & alarm generation
- Automatic temperature compensation feature
- Redundancy option
- Wide operating temperature range -40°C to +60°C
- RoHS compliant
- Waterproof
- LED indicator for BUC status

Reliability

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

Quality Assurance

100% of all BUCs go through stringent quality checks in addition to well defined Electrical Stress

Screening to ensure operation in harsh outdoor environments. The BUCs are also subjected to seal test for water ingress verification.

Order Examples: RBUC-IF(950-1450M) to Ka(29-30)-WR28-ER50M-5W-g11

Description: (Block Up Converter, L Band (950-1450MHz) to Ka (29-30GHz), WR28, 50MHz External Reference, 5 Watts

Additional Options: L(950-1700M) 2 Watts

Block Up-Converter, Ka Band (29-31GHz) or (28-30GHz)

Specifications			Units
Transmit Frequency			29.0GHz to 30.0GHz
LO Frequency			28.05GHz
IF Frequency Range			950MHz to 1950MHz
Output Power @ MOP			33dBm (2W) / 37dBm (5W)
Small Signal Gain			58dB (2W) / 62dB (5W)
Gain Flatness			±2.0dB typ
Gain Variation			±2dB over the operating temperature range
Inter Modulation			-25dBc @ Relative to combine power of two carriers at 3dB total power back off from Rated Output power.
Phase Noise	@ 1KHz Offset	-75dBc/Hz typ	
	@ 10KHz Offset	-85dBc/Hz typ	
	@ 100KHz Offset	-95dBc/Hz typ	
Spurious			-60dBc typ
I/P VSWR			1.5:1 max
O/P VSWR			2.0:1 max
DC Power	Prime Power	48VDC (range 18 to 50VDC)	
	Power Consumption	33W @ 48VDC input (2W); 60W @ 48VDC input (5W)	
Interfaces	IF Input Interface	50Ohms N-type Female / 75Ohms F-type Female (optional)	
	Output Interface	WR28 grooved	
External Reference	Frequency	50 MHz	
	Power	-5dBm to +5dBm	
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 detection LED indication
Control			Adjustable gain with 0.5dB step size RF output mute
Interface			RS232/RS485, Ethernet (SNMP & HTTP)
Tx Redundancy			Redundancy-ready (with external RCU)
Environmental			
Operating Voltage			-40°C to +60°C
Power Supply Interface			Up to 100% Weather protection sealed to IP65
Mechanical	Size	Weight	Color
	185L x 100W x 51H mm	1.5kg	White Powder Coat
Compliance Standard	IEC 609501-2nd Edition		
	ETSI EN 301 489-12		
	ETSI EN 301 489-1		
	FCC Part 15 Class B		