



Block Up Converter L to Ku-Band N-Type Female Connector, 10MHz Ext Reference, 2, 4, 8, 16 or 20Watts Options



- ▶ Lower terminal cost
- ▶ Simplified 1+1 configuration
- ▶ Point-and-click installation/configuration
- ▶ Complete set of diagnostic tools



Order Examples: RBUC-L(950-1450M) to Ku(14.00-14.50)-Nf-ER10M-20W-t5

Description: (Block Up Converter, L Band(950-1450MHz) to Ku(14.00-14.50GHz), N-Type Female Connector, 10MHz External Reference, 20 Watts

Additional Options: L(950-1450M) Ku(13.75-14.25) 2, 4, 8, 16 or 20 Watts
L(950-1700M) Ku(13.75-14.50) 2, 4, 8, 16 or 20 Watts

Specifications:

L-Band Input Frequency range	
Extended Ku-Band (13.75 to 14.25 GHz)	950 to 1450 MHz
Standard Ku-Band (14.00 to 14.50 GHz)	950 to 1450 MHz
Super Extended Ku-Band (13.75 to 14.50 GHz)	950 to 1700 MHz
VSWR / Impedance	1.5:1 max / 50 ohms
Connector	Type N female
Input power detector range	-55 to -20 dBm
Absolute accuracy	+/- 0.5 dB (CSM) +/- 1.0 dB (Burst)
Gain Small Signal Gain (L-Band to RF) with attenuator set to 0 dB	
2W	64 dB min
4W	67 dB min
8W	70 dB min
16W	73 dB min
20W	74 dB min
Attenuator range	10 dB variable in 0.1 dB steps
Gain flatness	
Full band	3 dB p-p max
36 MHz	1 dB p-p max
1 MHz	0.25 dB p-p max
Gain variation over temperature	
Open loop	3 dB p-p max
With AGC	1 dB p-p max

RBUC-LBand-Ku-Nf-ER10M-2-20W-t5

Specifications may be subject to change

11/18/12

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RF Output Frequency Range	
Extended Ku-Band	13.75 to 14.25 GHz
Standard Ku-Band	14.00 to 14.50 GHz
Super Extended Ku-Band	13.75 to 14.50 GHz
Interface	WR75 UG cover with groove
VSWR	1.5:1 max
Rated output power (P1dB across temperature range and operating band)	
2W	+33 dBm min
4W	+36 dBm min
8W	+39 dBm min
16W	+42 dBm min +43 dBm min
20W	
IMD3 (2 carriers, 30 kHz apart, each at rated power minus 9 dB)	-30 dBc max
Level stability with ALC	+/- 0.5 dB
Output power detector range	Rated power to -20 dB
Absolute accuracy	+/- 0.5 dB (CSM) +/- 1.0 dB (Burst)
Spurious	Complies with EN 301 428
SSB Phase Noise	
Offset	External Reference :: IBUC
10 Hz	-120 dBc/Hz :: -35 dBc/Hz
100 Hz	-130 dBc/Hz :: -65 dBc/Hz
1 kHz	-143 dBc/Hz :: -75 dBc/Hz
10 kHz	-152 dBc/Hz :: -85 dBc/Hz
100 kHz	-155 dBc/Hz :: -95 dBc/Hz
1 MHz	-155 dBc/Hz :: -110 dBc/Hz
External Reference(multiplexed on TX IFL)	
Frequency	10 MHz
Level	-8 to +3 dBm
Local Oscillator Frequency	
Standard and Extended Ku-Band	13050 MHz
Super Extended Ku-Band	12800 MHz
Sense	Non-inverting

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IBUC DC Supply		
Multiplexed on TX IFL	2W, 4W, 8W	
Connector	Amphenol T3106 000 (all units)	
Voltage / Current		
	+24 +/- 4 VDC	+48 +/- 11 VDC
2W	1.8A max @ 24VDC	1.0A max @ 48VDC
4W	3.0A max @ 24VDC	1.5A max @ 48VDC
8W	na	3.0A max @ 48VDC
16W	na	6.5A max @ 48VDC
20W	na	7.5A max @ 48VDC
Monitor and Control		
FSK (multiplexed on TX IFL)		
Transmitter		
Frequency	650 kHz +/- 5%	
Deviation	+/- 60 kHz	
Output Level	-5 to -15 dBm (50 ohms)	
Receiver		
Nominal Frequency	650 kHz	
Locking range	+/- 32.5 kHz	
Input sensitivity	-15 dBm (50 ohms)	
Interfaces (RS232, RS485, TCP/IP and Handheld Terminal)		
Connector	MS3112E-14-19S	
RS232/485 (2-wire)		
Data rate		
Data format	Selectable 1200 to 115,200 bps 8 data bits, no parity, 1 stop bit, ASCII protocol	
Handheld terminal data rate	9600 bps	
TCP/IP	Telnet, HTTP	
Environmental		
Operating temperature range	-40°C to +60°C	
Relative humidity	100% non-condensing	

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Mechanical	
Size	
2W, 4W	12.2" (L) x 7.2" (W) x 3.65" (H)
8W	13.7" (L) x 7.2" (W) x 3.65" (H)
16W, 20W	13.7" (L) x 7.2" (W) x 7.96" (H)
Weight	
2W, 4W	12 lbs
8W	12 lbs
16W, 20W	18 lbs



Transmit Redundancy Configuration –

Tx Redundancy Kit Includes 1:1 BUC Interface Unit, Waveguide Switch, 3 Waveguide Elbows, Termination, Mounting Plates to Support BUCs, Power Supplies and Switch System, Cabling between protection unit and BUCs, and TCP/IP Test Cable

Receive Redundancy Configuration –

Receive Redundant Kit Includes 1:1 Rx Interface with Mounting Bracket, Waveguide Switch, Waveguide Termination, Cables (2 RF & 1 Control) between interface unit and LNBs (10 ft), DC Y-Cables (2) for connecting the power supplies to the RX Interface unit (10 ft) and the IBUCs (5 ft).