



Block Up Converter-L to C Band N or F Type Female Connector, 10MHz Ext Reference, 1mW-500Watts, Outdoor Unit

Applications Designed for:

SCPC (Single Channel per Carrier)
MCPC (Multi-Channel per Carrier)
DAMA
(Demand Assigned Multiple Access)
Or TDMA
(Time Division multiple Access)



Order Examples: RBUC-L(950-1525M) to C(5.850-6.425)- Nf -ER10M-100W-IDU-g11

Description: (Block Up Converter, L Band(950-1525MHz) to C(5.850-6.425GHz), N-Type Female Connector, 10MHz
External Reference, 100 Watts)

Additional Options: **Input** **Output** **N-Type or F Female** **Transmit Power**
 See Table Below See Table Below See Table Below

Features

- Available for all C-Band frequencies
- L-Band Interface
- Low cost, compact
- Direct antenna mount
- Easy installation
- Temperature compensation
- High power options
- Redundancy option
- RS 232/485, FSK & SNMP M&C option
- Excellent phase noise characteristics
- Low spurious
- Low power consumption
- Wide input D.C. voltage range

Reliability

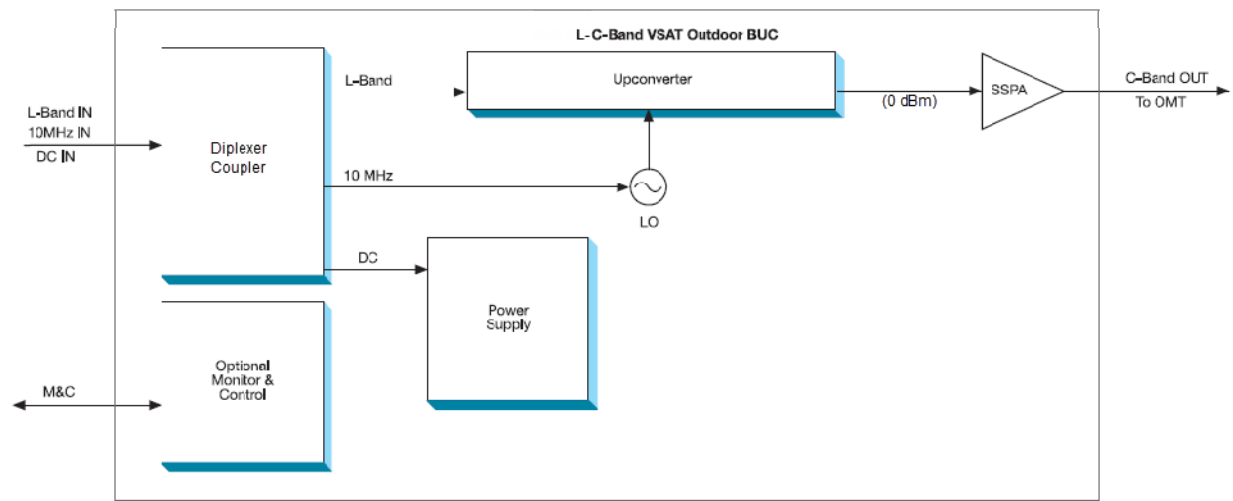
Field proven under harsh environment conditions.
ODUs can withstand temperature ranging from -40°C to
+60°C with up to 100% humidity.

Monitoring and Control (Optional)

- SSPA On/Off control
- Automatic level control with level stability accuracy
better than ± 0.5 dB
- Adjustable gain
- Temperature sensor reading
- LO unlocked alarm
- Input Power Detection
- Output Power Detection
- SNMP
- FSK

Quality Assurance

All ODUs go through intensive active electrical stress
screening with performance being monitored during
screening. In addition, all outdoor units undergo 100%
waterproof test equivalent to IP65 to ensure normal
operation during tropical, cold and harsh environment.



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Frequency Range (MHz)			
	Input	Output	LOW LO
Intelsat	950 to 1525	5850 to 6425	4900
Insat	1100 to 1400	6725 to 7025	5625
Measat 3	950 to 1750	5925 to 6725	4975
ST-1/Palapa-C	1150 to 1450	6425 to 6725	5275
Full C	950 to 1825	5850 to 6725	4900

Mechanical	
Dimensions	187L x 131W x 56H mm (1mW,2W) 248L x 145W x 56H mm (5W) 248L x 145W x 94H mm (10W) 210L x 150W x 90H mm (20W, 25W) 235L x 175W x 90H mm (40W, 50W) 430L x 278W x 260H mm (60W) 525L x 285W x 275H mm (80W to 150W) 610L x 328W x 251H mm (200W) 474L x 464W x 416H mm (250W to 500W)
Weight	1.8 kg (1mW to 2W) 2.8 kg (5W) 3.0 kg (10W) 3.0 kg (20W) 3.9 kg (40W to 50W) 16.0 kg (60W) 23.5 kg (80W to 150W) 55 kg (250W to 500W)
Color	White powder coat

Power Supply	
Operating Voltage	+18Vdc to +36Vdc (1mW to 2W) +18Vdc to +60Vdc (5W to 10W)
AC Input Voltage for Booster	220Vac or 110Vac (Factory preset)
DC Input Voltage for BUC 20W Above	+48 Vdc (Optional)
Monitor And Control (optional)	
Interface	RS 232/485, FSK & SNMP
SSPA Output Power Detect	Yes
SSPA On/Off Control	Yes

Environmental	
Operating Temperature	-40°C to + 60°C
Relative Humidity	up to 100% Weather Protection sealed to IP65
External Reference	
Frequency	10 MHz
Phase Noise	External Reference Dependent
Power	-5 to +5 dBm @ 50I

Trasmit			
Power	Output P1dB (dBm) min	Gain (dB)	Power Consumption (Typ)
1mW	0	26 – 34	4.5W
2W	33	55 – 63	24W
5W	37	56 – 64	38W
10W	40	63 – 71	77W
20W	43	66 – 74	120W
25W	44	66 – 74	150W
40W	46	69 – 77	200W
50W	47	69 – 78	230W
60W*	47.8	76 – 80	350VA
80W*	49	78 – 82	500VA
100W**	50	79 – 83	700VA
150W**	52	81 – 85	1000VA
200W**	53	82 – 86	1200VA
250W**	54	83 – 87	1600VA
300W**	54.8	83 – 87	1800KVA
400W**	56	83 – 87	2000KVA
500W**	57	83 – 87	2400KVA

Input Power @P1dB Output	-25 dBm (Typ)
Gain Flatness over Full Bandwidth	4 dB max
Gain stability Over Temp	4 dB max
Spurious @ P1dB Output	-55 dBc max
Phase Noise @ 100Hz offset @ 1kHz offset @ 10kHz offset @ 100kHz offset	-63 dBc/Hz -73 dBc/Hz -83 dBc/Hz -93 dBc/Hz
Intermodulation Product	
(with 2 carriers, 1MHz apart, at 6dB back off from Output @P1dB)	-27 dBc max (below 100W) -25 dBc max (100W & above)
Frequency Inversion	Non inverting
Input VSWR	2:0:1 typ
Input Interface	50I N-Type Female / F- Type
Output Interface	Female (Optional) 50I N-Type Female (1mW) WR137G (2W to 500W)

RBUC-LBand to C-NF-ER10M-1mW -500W-ODU-g11

Specifications may be subject to change

11/18/12

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Compliance Standard	
IEC 60950	International Safety Standard for Information Technology Equipment
ETSI EN 301 489-1	Electromagnetic Compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) Standard for Very Small Aperture Terminal (VSAT)
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) Environmental Testing Standard
IEC 60068 MIL-STD-810F	Environmental Testing Standard Environmental Engineering Considerations and Laboratory Tests