

BU500 Series C-band Block upconverters

INPUT SPECIFICATION		Options
1. Frequency range:	950 to 2,000MHz (check model table)	
2. Connector:	SMA	N-type
3. Impedance:	50Ω	
4. Return loss:	15dB typical	≥20dB (*)
OUTPUT SPECIFICATION		
5. Frequency range:	5.725 to 7.05GHz (check model table)	
6. Connector:	SMA	N-type
7. Impedance:	50Ω	
8. Return loss:	≥20dB	
9. 1dB compression point:	+10dBm	
10. Third order intercept:	+20dBm	
TRANSFER CHARACTERISTICS		
11. Gain:	15dB	15dB, 25dB
12. Gain ripple:	over ±20MHz: over input band:	≤1dB p.t.p. ≤1.5dB p.t.p
13. Gain stability, 0°C to 50°C:		±1dB
14. Gain slope:		≤0.02dB/MHz
15. Noise figure:		20dB typical
LOCAL OSCILLATOR		
16. Local oscillator frequency:	4.9GHz, 5.8GHz, 7.70GHz (check model table)	
17. Frequency stability, 0°C to 50°C:	2 x 10 ⁻⁷	Option 1: 10 ⁻⁷ Option 2: 10 ⁻⁸ Option 3: 3 x 10 ⁻⁹
18. External reference:	10MHz, 0dBm	5MHz, 0dBm
Spurii		
19. Image rejection:	>75dB	
20. In-band spurii (at 0dBm output):	<-60dBc	
21. Out of band Spurii:	≤-40dBm	
PHASE NOISE		
22. 10Hz:	<-50dBc/Hz	
23. 100Hz:	<-70dBc/Hz	
24. 1kHz:	<-85dBc/Hz	
25. 10kHz:	<-105dBc/Hz	
26. 100kHz:	<-110dBc/Hz	
27. 1MHz:	<-116dBc/Hz	
28. Mains related:	<-60dBc	
MISCELLANEOUS		
29. Power supply:	115V/230V ±10% 50/60Hz ±10%, 25VA	
30. Mechanical:	1U 19" frame, 400mm deep	
31. Temperature:	Operating:	0° to 50°C
	Storage:	-40° to 85°C
32. Relative humidity:	Operating:	0 to 90%
	Storage:	0 to 95%
33. Summary alarm:	NO and NC dry relay contacts via rear mounted connector	
34. Summary alarm indication:	Front panel LED	

(*) Noise figure increases by 3dB and overall gain decreases by 3dB.

MODEL TABLE

	Input Frequency	Output Frequency	Local Oscillator
BU501	950 - 1,525MHz	5.85 - 6.425GHz	4.90GHz
BU561	975 - 1,850MHz	6.725 - 5.85GHz	7.70GHz (*)
BU571	975 - 1,975MHz	6.725 - 5.725GHz	7.70GHz (*)
BU584M	950 - 1,250MHz	6.75 - 7.05GHz	5.80GHz

(*) These units use "high side LO" and therefore invert signal spectrum. This is necessary to avoid high level spurii.