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:	≤1dB p.t.p.	
	over input band:	≤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:		2×10^{-7}	Option 1: 10^{-7} Option 2: 10^{-8} Option 3: 3×10^{-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.