

BU600 Series X-band Block upconverters

INPUT SPECIFICATION		Options
1. Frequency range:	950 to 1,450MHz	
2. Connector:	SMA	N-type
3. Impedance:	50Ω	
4. Return loss:	15dB typical	≥20dB (*)
OUTPUT SPECIFICATION		
5. Frequency range:	7.9 to 8.4GHz	
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:	13dB	
12. Gain ripple:	over ±20MHz: ≤1dB p.t.p. over input band: ≤3dB 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:	6.95GHz or 9.35GHz (check model table)	
17. Frequency stability, 0°C to 50°C:	2 x 10 ⁻⁷	Option 1: 10 ⁻⁷ Option 2: 5 x 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:	<-45dBc/Hz	
23. 100Hz:	<-70dBc/Hz	
24. 1kHz:	<-80dBc/Hz	
25. 10kHz:	<-85dBc/Hz	
26. 100kHz:	<-95dBc/Hz	
27. 1MHz:	<-110dBc/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
BU651	950 - 1,450MHz	7.9 - 8.4GHz	6.95GHz
BU651	950 - 1,450MHz	7.9 - 8.4GHz	9.35GHz (*)
BU65	RF specifications identical to BU651. Unit fitted inside IP67 box, dimensions 220x145x55mm. DC power (17 to 24V), 10MHz locking reference and alarm pulses via L-band interface connector.		
BU66	RF specifications identical to BU661. Unit fitted inside IP67 box, dimensions 220x145x55mm. DC power (17 to 24V), 10MHz locking reference and alarm pulses via L-band interface connector.		

(*) These units use "high side LO" and therefore invert signal spectrum.