

BU700 Series

Ku-band block upconverters in 1U 19" chassis with independent PSU and 10MHz reference

INPUT SPECIFICATION

1. Frequency range:	950MHz to 1,750MHz (check model table)
2. Connector:	SMA
3. Impedance:	50Ω
4. Return loss:	≥15dB typical

OUTPUT SPECIFICATION

5. Frequency range:	12.75GHz to 14.5GHz (check model table)
6. Connector:	SMA
7. Impedance:	50Ω
8. Return loss:	≥18dB
9. 1dB compression point:	+10dBm

TRANSFER CHARACTERISTICS

10. Gain:	12dB (±1dB), fixed	25dB (±1dB), fixed
11. Gain stability: from -25°C to +50°C: over 24 hours, constant temp.	≤ 3dB ≤ 0.4dB	
12. Gain ripple: over any 40MHz transponder: over 500/750MHz output band:	≤1dB p.t.p. ≤3dB p.t.p	
13. External reference:	10MHz, 0dBm nominal	
14. Local Oscillator:	11.8GHz, 12.8GHz, 13.05GHz (check model table)	
15. Noise figure:	<20dB	

Spurii

16. From 0 to 15GHz (at 0dBm output):	≤-60dBm
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PHASE NOISE	Max.	Typical	IESS308/309 mask
17. 10Hz:	<-40dBc/Hz	-45dBc/Hz	-30dBc/Hz
18. 100Hz:	<-65dBc/Hz	-70dBc/Hz	-60dBc/Hz
19. 1kHz:	<-75dBc/Hz	-90dBc/Hz	-70dBc/Hz
20. 10kHz:	<-85dBc/Hz	-100dBc/Hz	-80dBc/Hz
21. 100kHz:	<-95dBc/Hz	-100dBc/Hz	-90dBc/Hz
22. 1MHz:	<-100dBc/Hz	-115dBc/Hz	-70dBc/Hz
23. Mains related:	<-50dBc/Hz	-60dBc/Hz	-35dBc/Hz

MISCELLANEOUS

24. Power supply:	115V/230V ±10%, 50/60Hz ±10%, 40VA.
25. Mechanical:	1U 19" frame, 400mm deep
26. Temperature:	Operating: -20° to +50°C Storage: -50° to +70°C
27. Summary alarm:	NO and NC dry relay contacts via rear mounted connector
28. Summary alarm indication:	Through front panel LED
29. Remote interface:	None
30. Compatibility:	Compatible with U350 Series of upconverters

MODEL TABLE

Model	Input band, MHz	Output band, GHz	LO, GHz
BU701	950 to 1,450	14.00 to 14.50	13.05
BU711	950 to 1,450	12.75 to 13.75	11.80
BU731	950 to 1,700	13.75 to 14.50	12.80
BU751 ⁽¹⁾	950 to 1,450 plus 950 to 1,750	12.75 to 13.25 plus 13.75 to 14.50	11.80 plus 12.80

⁽¹⁾ Dual band, single input, single output, active band selectable via front panel.

Note: Specification subject to change at any time without prior notice.

BU70 Series

Ku-band block upconverters in IP67 boxes for outside mounting

INPUT SPECIFICATION		
1. Frequency range:	950MHz to 1,750MHz (check model table)	
2. Connector:	N-type	
3. Impedance:	50Ω	
4. Return loss:	≥15dB typical	
OUTPUT SPECIFICATION		
5. Frequency range:	12.75GHz to 14.5GHz (check model table)	
6. Connector:	N-type	
7. Impedance:	50Ω	
8. Return loss:	≥18dB	
9. 1dB compression point:	+10dBm	
TRANSFER CHARACTERISTICS		
10. Gain:	12dB (±1dB), fixed	25dB (±1dB), fixed
11. Gain stability: from -25°C to +50°C:	≤ 3dB	
over 24 hours, constant temp.	≤ 0.4dB	
12. Gain ripple: over any 40MHz transponder:	≤1dB p.t.p.	
over 500/750MHz output band:	≤3dB p.t.p.	
13. External reference:	10MHz, multiplexed with L-band signal, DC power and alarm signals, level -5dBm to +10dBm	
14. Local Oscillator:	11.8GHz, 12.8GHz, 13.05GHz (check model table)	
15. Noise figure:	<20dB	
Spurii		
16. From 0 to 15GHz (at 0dBm output):	≤-60dBm	
PHASE NOISE		
	Typical	IESS308/309 mask
17. 10Hz:	-40dBc/Hz	-30dBc/Hz
18. 100Hz:	-65dBc/Hz	-60dBc/Hz
19. 1kHz:	-75dBc/Hz	-70dBc/Hz
20. 10kHz:	-85dBc/Hz	-80dBc/Hz
21. 100kHz:	-95dBc/Hz	-90dBc/Hz
22. 1MHz:	-100dBc/Hz	-90dBc/Hz
23. Mains related:	-50dBc/Hz	-35dBc/Hz
MISCELLANEOUS		
24. Power supply:	+17V DC, 500mA, via L-band input, multiplexed with L-band signal, 10MHz reference and alarm signals.	
25. Mechanical:	Metal box, IP67 rating, 220x145x55mm	
26. Temperature:	Operating:	-20° to +50°C
	Storage:	-50° to +70°C
27. Compatibility:	Compatible with U350 Series of upconverters	

MODEL TABLE

Model	Input band, MHz	Output band, GHz	LO, GHz
BU70	950 to 1,450	14.00 to 14.50	13.05
BU71	950 to 1,450	12.75 to 13.25	11.80
BU73	950 to 1,700	13.75 to 14.50	12.80
BU75 ⁽¹⁾	950 to 1,450	12.75 to 13.25	11.80
	plus 950 to 1,750	plus 13.75 to 14.50	plus 12.80

⁽¹⁾ Dual band, single input, single output, active band selectable via control cable.

Note: Specification subject to change at any time without prior notice.