

U350 Series L-band Upconverters

INPUT SPECIFICATION	Options
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1. Frequency range:	Check model table	
2. Connector:	BNC	
3. Impedance:	50Ω	
4. Return loss:	≥15dB	≥20dB (*)

OUTPUT SPECIFICATION	
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5. Frequency range:	Check model table	
6. Connector:	N-type	SMA
7. Impedance:	50Ω	
8. Return loss:	≥15dB	
9. 1dB compression point:	+10dBm	
10. Third order intercept::	+20dBm	

TRANSFER CHARACTERISTICS	
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11. Gain:	0 to 30dB, adjustable in 0.1dB steps	
12. Gain ripple: over ±20MHz:	≤1dB p.t.p.	
over input band:	≤3dB p.t.p.	
13. Group delay distortion: over ±5MHz	<2ns	
over ±20MHz	<5ns	
14. Gain stability, 0°C to 50°C:	±1dB	
15. Frequency stability	0°C to +50°C: 5 x 10 ⁻⁸ - High Stability option 2 x 10 ⁻⁸	
	At constant temperature over 24h	5 x 10 ⁻⁹
	Aging per year:	5 x 10 ⁻⁷
16. External reference:	10MHz, 0dBm	5MHz, 0dBm
17. Synthesiser step size:	1kHz	
18. Noise figure (full gain):	<20dB	

Spurii	
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19. Image rejection:	>60dB	
20. In-band spurii (at 0dBm output):	<-60dBc	

PHASE NOISE	
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21. 10Hz:	<-60dBc/Hz	
22. 100Hz:	<-75dBc/Hz	
23. 1kHz:	<-80dBc/Hz	
24. 10kHz:	<-85dBc/Hz	
25. 100kHz:	<-95dBc/Hz	
26. 1MHz:	<-110dBc/Hz	
27. Mains related:	<-60dBc	

MISCELLANEOUS	
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28. Power supply:	115V/230V ±10%	
	50/60Hz ±10%, 30VA	
29. Mechanical:	1U 19" frame, 400mm deep	
30. Temperature:	Operating: 0° to 50°C	
	Storage: -40° to 85°C	
31. Relative humidity:	Operating: 0 to 90%	
	Storage: 0 to 95%	
32. Summary alarm:	NO and NC dry relay contacts via rear mounted connector	
33. Summary alarm indication:	Front panel LED	
34. Monitoring and remote control:	<ul style="list-style-type: none"> ● RS232 or RS422/RS485, connector D-type 9P F ● Serial emulation over TCP/IP, connector RJ-45 ● SNMP and HTTP over TCP/IP Ethernet, connector RJ-45 	

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

MODEL TABLE

Output Frequency	Input frequency and bandwidth		
	70 ± 20MHz	140 ± 40MHz	70 ± 20MHz, 140 ± 20MHz and ±40MHz
950 - 1,750MHz	U350	U355	U370
950 - 2,150MHz	U351	U356	U371
U320-1	Input: 305 ± 20MHz		Output: 950 – 1,700MHz