

D350 Series

L-band Downconverters

INPUT SPECIFICATION		Options
1. Frequency range:	950 to 2,150MHz (check model table)	
2. Connector:	N-type	SMA
3. Impedance:	50Ω	
4. Return loss:	≥16dB typical	≥20dB ⁽¹⁾

OUTPUT SPECIFICATION		
5. Frequency range:	70 ± 20MHz or 140 ± 40MHz (check model table)	
6. Connector:	BNC	TNC
7. Impedance:	50Ω	75Ω ⁽²⁾
8. Return loss:	≥16dB typical	≥20dB ⁽³⁾
9. 1dB compression point:	+10dBm	
10. Third order intercept::	+20dBm	

TRANSFER CHARACTERISTICS			
11. Gain:	20 to 40dB, adjustable in 0.1dB steps	⁽⁴⁾	
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:	2 x 10 ⁻⁷		Option 1: 10 ⁻⁷ Option 2: 10 ⁻⁸ Option 3: 3 x 10 ⁻⁹
16. External reference:	10MHz, 0dBm		5MHz, 0dBm
17. Synthesiser step size:	1kHz		
18. Noise figure (full gain):	<17dB		

Spurii		
19. Image rejection:	>75dB	
20. In-band spurii (at 0dBm output):	<-60dBc	

PHASE NOISE		
21. 10Hz:	<-60dBc/Hz	⁽⁴⁾
22. 100Hz:	<-75dBc/Hz	⁽⁴⁾
23. 1kHz:	<-80dBc/Hz	⁽⁴⁾
24. 10kHz:	<-85dBc/Hz	⁽⁴⁾
25. 100kHz:	<-95dBc/Hz	⁽⁴⁾
26. 1MHz:	<-110dBc/Hz	⁽⁴⁾
27. Mains related:	<-60dBc	

MISCELLANEOUS		
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. Remote control:	<ul style="list-style-type: none"> ● RS232 or RS422/RS485, connector D-type 9P F ● Serial emulation over TCP/IP, connector RJ45 ● SNMP and HTTP over TCP/IP Ethernet, connector RJ45 	

⁽¹⁾ Gain decreases by 3dB, noise figure increases by 3dB.

⁽²⁾ Gain and output compression point decrease by 3dB.

⁽³⁾ Gain and output compression point decrease by 3dB.

⁽⁴⁾ These are typical values subject to ±3dB spec and measurement uncertainties.

MODEL TABLE

Input Frequency	Output frequency and bandwidth		
	70 ± 20MHz	140 ± 40MHz	70 ± 20MHz, 140 ± 20MHz and ±40MHz
950 - 1,750MHz	D350	D355	D370
950 - 2,150MHz	D351	D356	D371