

T660 and T661 X-band Test Loop Translators

Input Specification		Options
1. Frequency range:		7.9 to 8.4GHz
2. Level:		0dBm maximum
3. Connector:		N-type
4. Impedance:		50Ω
5. Return loss:		>15dB
Output specification		
6. Frequency range:		T660: 7.250 to 7.750GHz T661: 7.175 to 7.675GHz
7. Connector:		N-type
8. Impedance:		50Ω
9. Return loss:		≥15dB
10. 1dB compression point:		-10dBm
Transfer characteristics		
11. Gain:		-15dB
12. Gain adjustment:		none
13. Gain ripple:	Over ±20MHz:	<1dB p.t.p.
	Over output band:	<3dB p.t.p.
14. Frequency translation:		T660: Single translation, LO = 650MHz T661: Dual translation via L-band with “co-related” LOs: Downconversion LO: 6.900GHz Upconversion LO: 6.175GHz Overall frequency translation: 725MHz (*)
15. LO stability:		2 x 10 ⁻⁷ from 0°C to 50°C Ageing: 1 x 10 ⁻⁶ per year
16. Phase noise:		
	10Hz	-50dBc/Hz
	100Hz	-70dBc/Hz
	1kHz	-80dBc/Hz
	10kHz	-90dBc/Hz
	100kHz	-95dBc/Hz
	1MHz	-105dBc/Hz
	Mains related	-60dBc
17. External reference:		10MHz, 0dBm
18. In-band spurious (at 0dBm input):		<-70dBm
		5MHz, 0dBm
Miscellaneous		
19. Power supply:		115V/230V ±10% 50/60Hz ±10%, 30VA
20. Mechanical:		1U 19” frame, 400mm deep
21. Temperature:	Operating:	0° to 50°C
	Storage:	-40° to 85°C
22. Relative humidity:	Operating:	0 to 90%
	Storage:	0 to 95%
23. Summary alarm:		Usually none available. Option: NO and NC dry relay contacts via rear mounted connector
24. Summary alarm indication:		Through front panel LED
25. Remote Monitoring & Control:		None

(*) This frequency translation when made with a single low side LO of 725MHz generates in-band spurious signals which cannot be avoided, eliminated or filtered.
Dual conversion is used to obtain a non-inverted spectrum clean output