

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

<b>OUTPUT SPECIFICATION</b>
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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            |     |

<b>TRANSFER CHARACTERISTICS</b>
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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 <sup>-8</sup> - High Stability option 2 x 10 <sup>-8</sup> |                      |
|  | At constant temperature over 24h  | 5 x 10 <sup>-9</sup> |
|  | Aging per year:   | 5 x 10 <sup>-7</sup> |
| 16. External reference:                | 10MHz, 0dBm   | 5MHz, 0dBm           |
| 17. Synthesiser step size:             | 1kHz  |                      |
| 18. Noise figure (full gain):          | <20dB   |                      |

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

<b>PHASE NOISE</b>
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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     |

<b>MISCELLANEOUS</b>
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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"> <li>● RS232 or RS422/RS485, connector D-type 9P F</li> <li>● Serial emulation over TCP/IP, connector RJ-45</li> <li>● SNMP and HTTP over TCP/IP Ethernet, connector RJ-45</li> </ul> |  |

(\*) 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