

Rigid Rectangular Waveguide Dimension, Tolerance and Frequency

Waveguide Designation			Rectangular Waveguide Dimension								Frequency Band	Recommended Frequency	Material	Wall Thickness
			Inner			Outer			Radius					
EIA	UK Code	IEC	a	b	Ti(+/-)	X	Y	Te(+/-)	Inner Radius	Outer Radius				
WR-650	WG6	R14	165.1	82.55	0.2	169.16	86.61	0.2	1.7	2.0-2.5	L Band	1.14 - 1.73 GHz	C103/C10100/CW009A/TU00 CZ106/C26000/CuZn30/C2600/H68; CZ101/C22000/CuZn10/C2200/H90; C101/C11000/SE-Cu/C1100/T2; CZ109/C27400/CuZn40/C2720/H62;	2.03
WR-510	WG7	R18	129.54	64.77	0.2	133.6	68.83	0.2	1.7	2.0-2.5	/	1.45 - 2.20 GHz		2.03
WR-430	WG8	R22	109.22	54.61	0.2	113.28	58.67	0.2	1.7	2.0-2.5	R Band	1.72 - 2.61 GHz		2.03
WR-340	WG9A	R26	86.36	43.18	0.17	90.42	47.24	0.17	1.5	1.4-2.0	S Band	2.17 - 3.30 GHz		2.03
WR-284	WG10	R32	72.14	34.04	0.102	76.2	38.1	0.102	1.2	1.0-1.5	S Band	2.60 - 3.95 GHz		2.032
WR-229	WG11A	R40	58.17	29.083	0.0762	61.42	32.33	0.0762	1.016	0.762-1.397	E Band	3.22 - 4.90 GHz		1.625
WR-187	WG12	R48	47.55	22.149	0.0635	50.8	25.4	0.0762	0.762	0.762 - 1.27	G Band	3.94 to 5.99 GHz		1.625
WR-159	WG13	R58	40.39	20.193	0.0508	43.64	23.44	0.0508	0.762	0.762 - 1.143	F Band	4.64 - 7.05 GHz		1.625
WR-137	WG14	R70	34.85	15.799	0.0508	38.1	19.05	0.0508	0.762	0.762 - 1.016	C Band	5.38 - 8.18 GHz		1.625
WR-112	WG15	R84	28.499	12.624	0.0508	31.75	15.88	0.0508	0.762	0.762 - 1.016	H Band	6.58 - 10 GHz		1.625
WR-90	WG16	R100	22.86	10.16	0.0254	25.4	12.7	0.0254	0.762	0.635 - 0.889	X Band	8.20 - 12.40 GHz		1.27
WR-75	WG17	R120	19.05	9.525	0.0254	21.59	12.06	0.0254	0.762	0.635 - 0.890	X-Ku Band	9.84 - 15 GHz		1.27
WR-62	WG18	R140	15.799	7.899	0.02032	17.83	9.93	0.0254	0.4	0.5 - 0.762	Ku Band	11.90 - 18 GHz		1.016
WR-51	WG19	R180	12.954	6.477	0.02032	14.99	8.51	0.0254	0.4	0.5 - 0.762	K Band	14.50 - 22 GHz		1.016
WR-42	WG20	R220	10.668	4.318	0.02032	12.7	6.35	0.0254	0.4	0.5 - 0.762	K Band	17.60 - 26.70 GHz		1.016
WR-34	WG21	R260	8.636	4.318	0.02032	10.67	6.35	0.0254	0.4	0.5 - 0.762	K-Ka Band	21.70 - 33 GHz		1.016
WR-28	WG22	R320	7.112	3.556	0.02032	9.14	5.59	0.0254	0.4	0.5 - 0.762	Ka Band	26.40 - 40.1 GHz		1.016
WR-22	WG23	R400	5.69	2.845	0.02032	7.72	4.88	0.0254	0.4	0.5 - 0.762	B Band	33.20 - 50.1 GHz		1.016
WR19	WG24	R500	4.7752	2.3876	0.02	6.81	4.42	0.05	0.3	0.5-1.0	U Band	39.30 - 59.70 GHz		1.015
WR15	WG25	R620	3.7592	1.8796	0.02	5.79	3.91	0.05	0.2	0.5-1.0	V Band	49.90 - 75.8 GHz		1.015
WR12	WG26	R740	3.0988	1.5494	0.0127	5.13	3.58	0.05	0.15	0.5-1.0	E Band	60 - 92 GHz		1.015
WR10	WG27	R900	2.54	1.27	0.0127	4.57	3.3	0.05	0.15	0.5-1.0	W Band	73.8 - 112 GHz		1.015
WR8	WG28	R1200	2.032	1.016	0.0076	3.556	2.54	0.025	0.15	0.5-0.8	F Band	92.3 - 140 GHz		0.76
WR6	WG29	R1400	1.651	0.8255	0.0064	3.175	2.35	0.025	0.038	0.5-0.8	D Band	110 - 170 GHz		0.76
WR5	WG30	R1800	1.2954	0.6477	0.0064	2.819	2.172	0.025	0.038	0.5-0.8	G Band	140 - 220 GHz		0.76
WR4	WG31	R2200	1.0922	0.5461	0.0051	2.616	2.07	0.025	0.038	0.5-0.8	H Band	172 - 260 GHz		0.76
WR3	WG32	R2600	0.8636	0.4318	0.0051	2.388	1.956	0.025	0.038	0.5-0.8	J Band	220 - 330 GHz		0.76