

Linear Tapered Mode Transitions

FEATURES:

- ❖ Minimum VSWR
- ❖ Minimum Insertion Loss
- ❖ Optional Pressurized Models Available
- ❖ Efficient Conversion from TE₁₀ Mode Rectangular Waveguide to TE₀₁ Mode Circular Waveguide

APPLICATIONS:

- ❖ Radar Systems
- ❖ Test Setup
- ❖ Power Loads
- ❖ Frequency converters



CWW Series

DESCRIPTION:

Cernex's CWW series TE₀₁ mode transitions are available for operation from 10.0 to 110.0 GHz. These tapered transitions are 2-3 inch sections of tapered waveguides.

SPECIFICATIONS:

Model	Frequency GHz (Input)	Waveguide (input)	Flange (Input)	Frequency GHz (Output)	Waveguide (output)	Flange (Output)	VSWR	Insertion Loss dB
CWW907503	8.2-12.4	WR-90	UG39/U	10.0-15.0	WR-75	UBR120	1.15	≤0.3
CWW906203	8.2-12.4	WR-90	UG39/U	12.4-18.0	WR-62	UG419/U	1.15	≤0.3
CWW905103	8.2-12.4	WR-90	UG39/U	17.0-21.0	WR-51	Cover	1.15	≤0.3
CWW904203	8.2-12.4	WR-90	UG39/U	18.0-26.5	WR-42	UG595/U	1.15	≤0.3
CWW903403	8.2-12.4	WR-90	UG39/U	22.0-33.0	WR-34	UG1530/U	1.15	≤0.3
CWW902803	8.2-12.4	WR-90	UG39/U	26.5-40.0	WR-28	UG599/U	1.15	≤0.3
CWW902203	8.2-12.4	WR-90	UG39/U	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW901903	8.2-12.4	WR-90	UG39/U	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW901503	8.2-12.4	WR-90	UG39/U	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW901203	8.2-12.4	WR-90	UG39/U	60.0-90.0	WR-12	UG387/U	1.15	≤0.3
CWW901003	8.2-12.4	WR-90	UG39/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW756203	10.5-15.0	WR-75	UBR120	12.4-18.0	WR-62	UG419/U	1.15	≤0.3
CWW755103	10.5-15.0	WR-75	UBR120	17.0-21.0	WR-51	Cover	1.15	≤0.3
CWW754203	10.5-15.0	WR-75	UBR120	18.0-26.5	WR-42	UG595/U	1.15	≤0.3



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Model	Frequency GHz (Input)	Waveguide (input)	Flange (Input)	Frequency GHz (Output)	Waveguide (output)	Flange (Output)	VSWR	Insertion Loss dB
CWW753403	10.5-15.0	WR-75	UBR120	22.0-33.0	WR-34	UG1530/U	1.15	≤0.3
CWW752803	10.5-15.0	WR-75	UBR120	26.5-40.0	WR-28	UG599/U	1.15	≤0.3
CWW752203	10.5-15.0	WR-75	UBR120	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW751903	10.5-15.0	WR-75	UBR120	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW751503	10.5-15.0	WR-75	UBR120	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW751203	10.5-15.0	WR-75	UBR120	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW751003	10.5-15.0	WR-75	UBR120	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW625103	12.4-18.0	WR-62	UG419/U	17.0-21.0	WR-51	Cover	1.15	≤0.3
CWW624203	12.4-18.0	WR-62	UG419/U	18.0-26.5	WR-42	UG595/U	1.15	≤0.3
CWW623403	12.4-18.0	WR-62	UG419/U	22.0-33.0	WR-34	UG1530/U	1.15	≤0.3
CWW622803	12.4-18.0	WR-62	UG419/U	26.5-40.0	WR-28	UG599/U	1.15	≤0.3
CWW622203	12.4-18.0	WR-62	UG419/U	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW621903	12.4-18.0	WR-62	UG419/U	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW621503	12.4-18.0	WR-62	UG419/U	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW621203	12.4-18.0	WR-62	UG419/U	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW621003	12.4-18.0	WR-62	UG419/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW514203	17.0-21.0	WR-51	Cover	18.0-26.5	WR-42	UG595/U	1.15	≤0.3
CWW513403	17.0-21.0	WR-51	Cover	22.0-33.0	WR-34	UG1530/U	1.15	≤0.3
CWW512803	17.0-21.0	WR-51	Cover	26.5-40.0	WR-28	UG599/U	1.15	≤0.3
CWW512203	17.0-21.0	WR-51	Cover	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW511903	17.0-21.0	WR-51	Cover	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW511503	17.0-21.0	WR-51	Cover	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW511203	17.0-21.0	WR-51	Cover	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW511003	17.0-21.0	WR-51	Cover	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW423403	18.0-26.5	WR-42	UG595/U	22.0-33.0	WR-34	UG1530/U	1.15	≤0.3
CWW422803	18.0-26.5	WR-42	UG595/U	26.5-40.0	WR-28	UG599/U	1.15	≤0.3
CWW422203	18.0-26.5	WR-42	UG595/U	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW421903	18.0-26.5	WR-42	UG595/U	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW421503	18.0-26.5	WR-42	UG595/U	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW421203	18.0-26.5	WR-42	UG595/U	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW421003	18.0-26.5	WR-42	UG595/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW342803	22.0-33.0	WR-34	UG1530/U	26.5-40.0	WR-28	UG599/U	1.15	≤0.3
CWW342203	22.0-33.0	WR-34	UG1530/U	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW341903	22.0-33.0	WR-34	UG1530/U	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3

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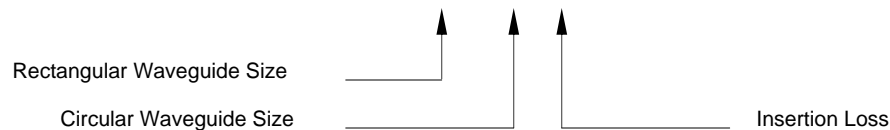
Model	Frequency GHz (Input)	Waveguide (input)	Flange (Input)	Frequency GHz (Output)	Waveguide (output)	Flange (Output)	VSWR	Insertion Loss dB
CWW341503	22.0-33.0	WR-34	UG1530/U	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW341203	22.0-33.0	WR-34	UG1530/U	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW341003	22.0-33.0	WR-34	UG1530/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW282203	26.5-40.0	WR-28	UG599/U	33.0-50.0	WR-22	UG383/U	1.15	≤0.3
CWW281903	26.5-40.0	WR-28	UG599/U	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW281503	26.5-40.0	WR-28	UG599/U	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW281203	26.5-40.0	WR-28	UG599/U	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW281003	26.5-40.0	WR-28	UG599/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW221903	33.0-50.0	WR-22	UG383/U	40.0-60.0	WR-19	UG383/U-M	1.15	≤0.3
CWW221503	33.0-50.0	WR-22	UG383/U	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW221003	33.0-50.0	WR-22	UG383/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW191503	40.0-60.0	WR-19	UG383/U-M	50.0-75.0	WR-15	UG385/U	1.15	≤0.3
CWW191203	40.0-60.0	WR-19	UG383/U-M	60.0-80.0	WR-12	UG387/U	1.15	≤0.3
CWW191003	40.0-60.0	WR-19	UG383/U-M	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW151203	50.0-75.0	WR-15	UG385/U	60.0-90.0	WR-12	UG387/U	1.15	≤0.3
CWW151003	50.0-75.0	WR-15	UG385/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3
CWW121003	60.0-90.0	WR-12	UG387/U	75.0-110.0	WR-10	UG387/U-M	1.15	≤0.3

Notes: CUSTOM TRANSITIONS ARE ALSO AVAILABLE BETWEEN ANY TWO WAVEGUIDE SIZES.

HOW TO ORDER:

Specify Model Number

CWW – WG WG IL-- XX ← To be specified by the factory



Example: To order WR-22 waveguide to WR19 mode transition with an insertion loss of 0.3db, specify CWW221903

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE