

Waveguide Sections, Bends, and Twist

FEATURES:

- ❖ Rugged Waveguide Configuration
- ❖ Full Band Operation
- ❖ Low Cost

APPLICATIONS:

- ❖ Test Equipment
- ❖ Subsystems
- ❖ Prototypes



DESCRIPTION:

CSS, CWB, & CTS Series

Cernex's **CSS, CWB, and CTS** Series offered various waveguide components line to cover frequency range of 1 to 325 GHz in seven waveguide bands. Other frequency bands are available per request.

Straight waveguide sections (**CSS**) offer the inter-connections between the waveguide ports and are available in 1" to 8" standard length in 1" increments as well as customer-specified lengths.

Waveguide bends (**CWB**) change the direction in the waveguide assembly and are available in H plane and E-plane version with bend angles of 30°, 45°, 60° and 90°.

Waveguide twists (**CTS**) allow changing the orientation of the waveguide port and are available with twisting angles of 45° or 90°.

SPECIFICATIONS:

| Waveguide Band | L | La | Sa | Sb | S | Cl | C | Cs | XI | XII | X | Xs | Ku | Kb | K |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|--------------|--------------|----------------|--------------|
| Frequency Range (GHz) | 1.12 to 1.70 | 1.70 to 2.60 | 2.20 to 3.30 | 2.60 to 3.95 | 3.30 to 4.90 | 3.95 to 5.85 | 4.90 to 7.05 | 5.85 to 8.20 | 7.05 to 10.0 | 7.00 to 11.00 | 8.20 to 12.40 | 10.0 to 15.0 | 12.4 to 18.0 | 15.00 to 22.00 | 18.0 to 26.5 |
| Waveguide Size | WR-650 | WR-430 | WR-340 | WR-284 | WR-229 | WR-187 | WR-159 | WR-137 | WR-112 | WR-102 | WR-90 | WR-75 | WR-62 | WR-51 | WR-42 |
| Flange Pattern | UG-417A/U | UG-435A | UG-435A | UG-53/U | - | UG-149A/U | - | UG-344/U | UG-51/U | UG-1493/U | UG-39/U | - | UG-419U | WR5-1 | UG-595/U |

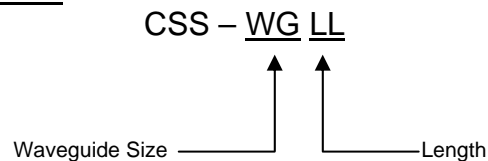
Waveguide Sections, Bends, and Twist

| Waveguide Band | Kc | Ka | Q | U | V | E | W | F | D | G | - | - | - | - |
|-----------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|------------|
| Frequency Range (GHz) | 22.0 to 33.0 | 26.5 to 40.0 | 33.0 to 50.0 | 40.0 to 60.0 | 50.0 to 75.0 | 60.0 to 90.0 | 75.0 to 100.0 | 90.0 to 140.0 | 140.0 to 180.0 | 180.0 to 220.0 | 170.0 to 260.0 | 220.0 to 325.0 | 325.0 to 400.0 | 400 to 500 |
| Waveguide Size | WR-34 | WR-28 | WR-22 | WR-19 | WR-15 | WR-12 | WR-10 | WR-8 | WR-6 | WR-5 | WR-4 | WR-3 | WR-2.8 | WR-2.2 |
| Flange Pattern | UG-1530/U | UG-599/U | UG-383/U | UG-383/U-M | UG-385/U | UG-387/U | UG-387/U | UG-387/U | UG-387/U-M | UG-387/U-M | UG-387/U-M | UG-387/U-M | UG-387/U-M | UG-387/U-M |

HOW TO ORDER:

- Straight Waveguide Sections**

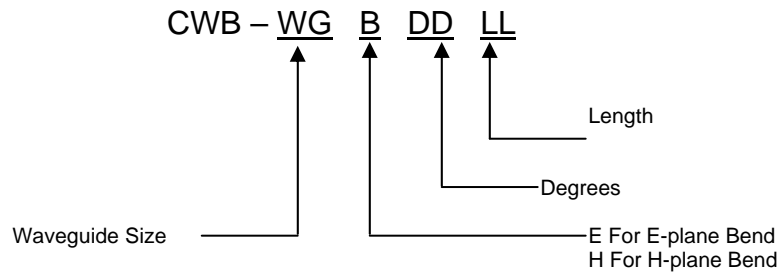
Specify Model Number



Example: To order a 2" long, WR-15 straight waveguide section, specify CSS-1502.

- Waveguide Bends**

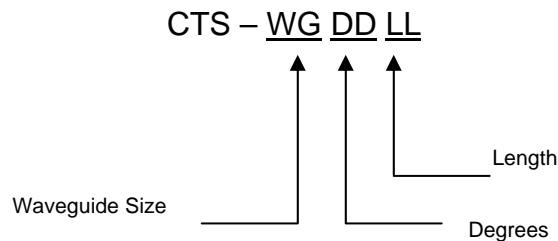
Specify Model Number



Example: To order a WR-28, E-plane, 30° waveguide bend, specify CWB-28E30.

- Waveguide Twists**

Specify Model Number



Example: To order a 45°, 1" long, WR-12 waveguide twist, specify CTS-120145.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE.