

## Waveguide to Coaxial Adapters

### FEATURES:

- ❖ Full waveguide band operation
- ❖ Low insertion loss
- ❖ Low VSWR
- ❖ Rugged mechanical construction

### APPLICATIONS:

- ❖ Test setups
- ❖ Instrumentation
- ❖ Subsystems
- ❖ Transceivers



### CWK Series

### DESCRIPTION:

**Cernex CWK Series** waveguide to coaxial line adapters are available in several waveguide bands covering the frequency range of 1.7 to 70GHz. These adapters are especially designed for full waveguide band operation with exceptional high performance. The adapters are ideal choices where a waveguide to coaxial transition is required.

### SPECIFICATIONS:

| Model Number    | Frequency (GHz) | Freq. Band | Waveguide Size | Flange Type | Coaxial Connector Type | Insertion Loss (dB max) | VSWR Max |
|-----------------|-----------------|------------|----------------|-------------|------------------------|-------------------------|----------|
| CWK430010203SF  | 1.7-2.6         | L          | WR-430         | CPR430      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK430010203SM  | 1.7-2.6         | L          | WR-430         | CPR430      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK430010203NF  | 1.7-2.6         | L          | WR-430         | CPR430      | N-F                    | 0.3                     | 1.25:1   |
| CWK430010203NM  | 1.7-2.6         | L          | WR-430         | CPR430      | N-M                    | 0.3                     | 1.25:1   |
| CWK340020303SF  | 2.3-3.3         | S          | WR-340         | UG1347/U    | SMA-F                  | 0.3                     | 1.25:1   |
| CWK340G020303SF | 2.3-3.3         | S          | WR-340         | GROOVE      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK340020303SM  | 2.3-3.3         | S          | WR-340         | UG1347/U    | SMA-M                  | 0.3                     | 1.25:1   |
| CWK340G020303SM | 2.3-3.3         | S          | WR-340         | GROOVE      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK340020303NF  | 2.3-3.3         | S          | WR-340         | UG1347/U    | N-F                    | 0.3                     | 1.25:1   |
| CWK340G020303NF | 2.3-3.3         | S          | WR-340         | GROOVE      | N-F                    | 0.3                     | 1.25:1   |
| CWK340020303NM  | 2.3-3.3         | S          | WR-340         | UG1347/U    | N-M                    | 0.3                     | 1.25:1   |
| CWK340G020303NM | 2.3-3.3         | S          | WR-340         | GROOVE      | N-M                    | 0.3                     | 1.25:1   |
| CWK284020303SF  | 2.6-3.95        | S          | WR-284         | CPR284      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK284G020303SF | 2.6-3.95        | S          | WR-284         | GROOVE      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK284020303SM  | 2.6-3.95        | S          | WR-284         | CPR284      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK284G020303SM | 2.6-3.95        | S          | WR-284         | GROOVE      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK284020303NF  | 2.6-3.95        | S          | WR-284         | CPR284      | N-F                    | 0.3                     | 1.25:1   |
| CWK284G020303NF | 2.6-3.95        | S          | WR-284         | GROOVE      | N-F                    | 0.3                     | 1.25:1   |

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|-----------------|-----------------|------------|----------------|-------------|------------------------|-------------------------|----------|
| CWK284020303NM  | 2.6-3.95        | S          | WR-284         | CPR284      | N-M                    | 0.3                     | 1.25:1   |
| CWK284G020303NM | 2.6-3.95        | S          | WR-284         | GROOVE      | N-M                    | 0.3                     | 1.25:1   |
| CWK229030403SF  | 3.6-4.2         | C          | WR-229         | CPR229      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK229G030403SF | 3.6-4.2         | C          | WR-229         | GROOVE      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK229030403SM  | 3.6-4.2         | C          | WR-229         | CPR229      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK229G030403SM | 3.6-4.2         | C          | WR-229         | GROOVE      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK229030403NF  | 3.6-4.2         | C          | WR-229         | CPR229      | N-F                    | 0.3                     | 1.25:1   |
| CWK229G030403NF | 3.6-4.2         | C          | WR-229         | GROOVE      | N-F                    | 0.3                     | 1.25:1   |
| CWK229030403NM  | 3.6-4.2         | C          | WR-229         | CPR229      | N-M                    | 0.3                     | 1.25:1   |
| CWK229G030403NM | 3.6-4.2         | C          | WR-229         | GROOVE      | N-M                    | 0.3                     | 1.25:1   |
| CWK187040503SF  | 4.4-5.8         | C          | WR-187         | CPR187      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK187G040503SF | 4.4-5.8         | C          | WR-187         | GROOVE      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK187040503SM  | 4.4-5.8         | C          | WR-187         | CPR187      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK187G040503SM | 4.4-5.8         | C          | WR-187         | GROOVE      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK187040503NF  | 4.4-5.8         | C          | WR-187         | CPR187      | N-F                    | 0.3                     | 1.25:1   |
| CWK187G040503NF | 4.4-5.8         | C          | WR-187         | GROOVE      | N-F                    | 0.3                     | 1.25:1   |
| CWK187040503NM  | 4.4-5.8         | C          | WR-187         | CPR187      | N-M                    | 0.3                     | 1.25:1   |
| CWK187G040503NM | 4.4-5.8         | C          | WR-187         | GROOVE      | N-M                    | 0.3                     | 1.25:1   |
| CWK159040703SF  | 4.9-7.05        | C          | WR-159         | CMR-159     | SMA-F                  | 0.3                     | 1.25:1   |
| CWK159G040703SF | 4.9-7.05        | C          | WR-159         | GROOVE      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK159040703SM  | 4.9-7.05        | C          | WR-159         | CMR-159     | SMA-M                  | 0.3                     | 1.25:1   |
| CWK159G040703SM | 4.9-7.05        | C          | WR-159         | GROOVE      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK159040703NF  | 4.9-7.05        | C          | WR-159         | CMR-159     | N-F                    | 0.3                     | 1.25:1   |
| CWK159G040703NF | 4.9-7.05        | C          | WR-159         | GROOVE      | N-F                    | 0.3                     | 1.25:1   |
| CWK159040703NM  | 4.9-7.05        | C          | WR-159         | CMR-159     | N-M                    | 0.3                     | 1.25:1   |
| CWK159G040703NM | 4.9-7.05        | C          | WR-159         | GROOVE      | N-M                    | 0.3                     | 1.25:1   |
| CWK137050803SF  | 5.8-8.2         | C          | WR-137         | CPR137      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK137G050803SF | 5.8-8.2         | C          | WR-137         | GROOVE      | SMA-F                  | 0.3                     | 1.25:1   |
| CWK137050803SM  | 5.8-8.2         | C          | WR-137         | CPR137      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK137G050803SM | 5.8-8.2         | C          | WR-137         | GROOVE      | SMA-M                  | 0.3                     | 1.25:1   |
| CWK137050803NF  | 5.8-8.2         | C          | WR-137         | CPR137      | N-F                    | 0.3                     | 1.25:1   |
| CWK137G050803NF | 5.8-8.2         | C          | WR-137         | GROOVE      | N-F                    | 0.3                     | 1.25:1   |
| CWK137050803NM  | 5.8-8.2         | C          | WR-137         | CPR137      | N-M                    | 0.3                     | 1.25:1   |
| CWK137G050803NM | 5.8-8.2         | C          | WR-137         | GROOVE      | N-M                    | 0.3                     | 1.25:1   |
| CWK112071004SF  | 7.05-10         | C          | WR-112         | CPR112      | SMA-F                  | 0.4                     | 1.25:1   |
| CWK112G071004SF | 7.05-10         | C          | WR-112         | GROOVE      | SMA-F                  | 0.4                     | 1.25:1   |
| CWK112071004SM  | 7.05-10         | C          | WR-112         | CPR112      | SMA-M                  | 0.4                     | 1.25:1   |

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|-----------------|-----------------|------------|----------------|-------------|------------------------|-------------------------|----------|
| CWK112G071004SM | 7.05-10         | C          | WR-112         | GROOVE      | SMA-M                  | 0.4                     | 1.25:1   |
| CWK112071004NF  | 7.05-10         | C          | WR-112         | CPR112      | N-F                    | 0.4                     | 1.25:1   |
| CWK112G071004NF | 7.05-10         | C          | WR-112         | GROOVE      | N-F                    | 0.4                     | 1.25:1   |
| CWK112071004NM  | 7.05-10         | C          | WR-112         | CPR112      | N-M                    | 0.4                     | 1.25:1   |
| CWK112G071004NM | 7.05-10         | C          | WR-112         | GROOVE      | N-M                    | 0.4                     | 1.25:1   |
| CWK90081204SF   | 8.2-12.4        | X          | WR-90          | UG39/U      | SMA-F                  | 0.4                     | 1.25:1   |
| CWK90G081204SF  | 8.2-12.4        | X          | WR-90          | GROOVE      | SMA-F                  | 0.4                     | 1.25:1   |
| CWK90081204SM   | 8.2-12.4        | X          | WR-90          | UG39/U      | SMA-M                  | 0.4                     | 1.25:1   |
| CWK90G081204SM  | 8.2-12.4        | X          | WR-90          | GROOVE      | SMA-M                  | 0.4                     | 1.25:1   |
| CWK90081204NF   | 8.2-12.4        | X          | WR-90          | UG39/U      | N-F                    | 0.4                     | 1.25:1   |
| CWK90G081204NF  | 8.2-12.4        | X          | WR-90          | GROOVE      | N-F                    | 0.4                     | 1.25:1   |
| CWK90081204NM   | 8.2-12.4        | X          | WR-90          | UG39/U      | N-M                    | 0.4                     | 1.25:1   |
| CWK90G081204NM  | 8.2-12.4        | X          | WR-90          | GROOVE      | N-M                    | 0.4                     | 1.25:1   |
| CWK75101504SF   | 10-15           | XKu        | WR-75          | UBR120      | SMA-F                  | 0.4                     | 1.25:1   |
| CWK75G101504SF  | 10-15           | XKu        | WR-75          | GROOVE      | SMA-F                  | 0.4                     | 1.25:1   |
| CWK75101504SM   | 10-15           | XKu        | WR-75          | UBR120      | SMA-M                  | 0.4                     | 1.25:1   |
| CWK75G101504SM  | 10-15           | XKu        | WR-75          | GROOVE      | SMA-M                  | 0.4                     | 1.25:1   |
| CWK75101504NF   | 10-15           | XKu        | WR-75          | UBR120      | N-F                    | 0.4                     | 1.25:1   |
| CWK75G101504NF  | 10-15           | XKu        | WR-75          | GROOVE      | N-F                    | 0.4                     | 1.25:1   |
| CWK75101504NM   | 10-15           | XKu        | WR-75          | UBR120      | N-M                    | 0.4                     | 1.25:1   |
| CWK75G101504NM  | 10-15           | XKu        | WR-75          | GROOVE      | N-M                    | 0.4                     | 1.25:1   |
| CWK62121803SF   | 12-18           | Ku         | WR-62          | UG419/U     | SMA-F                  | 0.3                     | 1.25:1   |
| CWK62G121803SF  | 12-18           | Ku         | WR-62          | GROOVE      | SMA-F                  | 0.3                     | 1.2:1    |
| CWK62121803SM   | 12-18           | Ku         | WR-62          | UG419/U     | SMA-M                  | 0.3                     | 1.2:1    |
| CWK62G121803SM  | 12-18           | Ku         | WR-62          | GROOVE      | SMA-M                  | 0.3                     | 1.2:1    |
| CWK62121805NF   | 12-18           | Ku         | WR-62          | UG419/U     | N-F                    | 0.5                     | 1.25:1   |
| CWK62G121805NF  | 12-18           | Ku         | WR-62          | GROOVE      | N-F                    | 0.5                     | 1.25:1   |
| CWK62121805NM   | 12-18           | Ku         | WR-62          | UG419/U     | N-M                    | 0.5                     | 1.25:1   |
| CWK62G121805NM  | 12-18           | Ku         | WR-62          | GROOVE      | N-M                    | 0.5                     | 1.25:1   |
| CWK51172105SF   | 17.7-21.2       | K          | WR-51          | UBR180      | SMA-F                  | 0.5                     | 1.30:1   |
| CWK51G172105SF  | 17.7-21.2       | K          | WR-51          | GROOVE      | SMA-F                  | 0.5                     | 1.30:1   |
| CWK51172105SM   | 17.7-21.2       | K          | WR-51          | UBR180      | SMA-M                  | 0.5                     | 1.30:1   |
| CWK51G172105SM  | 17.7-21.2       | K          | WR-51          | GROOVE      | SMA-M                  | 0.5                     | 1.30:1   |
| CWK51172105KF   | 17.7-21.2       | K          | WR-51          | UBR180      | K-F                    | 0.5                     | 1.30:1   |
| CWK51G172105KF  | 17.7-21.2       | K          | WR-51          | GROOVE      | K-F                    | 0.5                     | 1.30:1   |
| CWK42182405SF   | 18-24           | K          | WR-42          | UG595/U     | SMA-F                  | 0.5                     | 1.25:1   |
| CWK42G182405SF  | 18-24           | K          | WR-42          | GROOVE      | SMA-F                  | 0.5                     | 1.25:1   |

## Waveguide to Coaxial Adapters

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|----------------|-----------------|------------|----------------|-------------|------------------------|-------------------------|----------|
| CWK42182405SM  | 18-24           | K          | WR-42          | UG595/U     | SMA-M                  | 0.5                     | 1.25:1   |
| CWK42G182405SM | 18-24           | K          | WR-42          | GROOVE      | SMA-M                  | 0.5                     | 1.25:1   |
| CWK42182603F   | 18-26.5         | K          | WR-42          | UG595/U     | K-F                    | 0.35                    | 1.2:1    |
| CWK42G182603F  | 18-26.5         | K          | WR-42          | GROOVE      | K-F                    | 0.35                    | 1.2:1    |
| CWK42182603M   | 18-26.5         | K          | WR-42          | UG595/U     | K-M                    | 0.35                    | 1.2:1    |
| CWK42G182603M  | 18-26.5         | K          | WR-42          | GROOVE      | K-M                    | 0.35                    | 1.2:1    |
| CWK42182605F   | 18-26.5         | K          | WR-42          | UG595/U     | K-F                    | 0.5                     | 1.25:1   |
| CWK42G182605F  | 18-26.5         | K          | WR-42          | GROOVE      | K-F                    | 0.5                     | 1.25:1   |
| CWK42182605M   | 18-26.5         | K          | WR-42          | UG595/U     | K-M                    | 0.5                     | 1.25:1   |
| CWK42G182605M  | 18-26.5         | K          | WR-42          | GROOVE      | K-M                    | 0.5                     | 1.25:1   |
| CWK42182605M   | 18-26.5         | K          | WR-42          | UG595/U     | K-M                    | 0.5                     | 1.25:1   |
| CWK42G182605M  | 18-26.5         | K          | WR-42          | GROOVE      | K-M                    | 0.5                     | 1.25:1   |
| CWK42182603F4  | 18-26.5         | K          | WR-42          | UG595/U     | 2.4mm(F)               | 0.35                    | 1.25:1   |
| CWK42G182603F4 | 18-26.5         | K          | WR-42          | GROOVE      | 2.4mm(F)               | 0.35                    | 1.25:1   |
| CWK42182603M4  | 18-26.5         | K          | WR-42          | UG595/U     | 2.4mm(M)               | 0.35                    | 1.25:1   |
| CWK42G182603M4 | 18-26.5         | K          | WR-42          | GROOVE      | 2.4mm(M)               | 0.35                    | 1.25:1   |
| CWK34223305F   | 22-33           | Kb         | WR-34          | UG1530/U    | K-F                    | 0.55                    | 1.25:1   |
| CWK34G223305F  | 22-33           | Kb         | WR-34          | GROOVE      | K-F                    | 0.55                    | 1.25:1   |
| CWK34223305M   | 22-33           | Kb         | WR-34          | UG1530/U    | K-M                    | 0.55                    | 1.25:1   |
| CWK34G223305M  | 22-33           | Kb         | WR-34          | GROOVE      | K-M                    | 0.55                    | 1.25:1   |
| CWK34223303F   | 22-33           | Kb         | WR-34          | UG1530/U    | K-F                    | 0.35                    | 1.2:1    |
| CWK34G223303F  | 22-33           | Kb         | WR-34          | GROOVE      | K-F                    | 0.35                    | 1.2:1    |
| CWK34223303M   | 22-33           | Kb         | WR-34          | UG1530/U    | K-M                    | 0.35                    | 1.2:1    |
| CWK34G223303M  | 22-33           | Kb         | WR-34          | GROOVE      | K-M                    | 0.35                    | 1.2:1    |
| CWK28264005F   | 26.5-40         | Ka         | WR-28          | UG599/U     | K-F                    | 0.55                    | 1.25:1   |
| CWK28G264005F  | 26.5-40         | Ka         | WR-28          | GROOVE      | K-F                    | 0.55                    | 1.25:1   |
| CWK28264005M   | 26.5-40         | Ka         | WR-28          | UG599/U     | K-M                    | 0.5                     | 1.3:1    |
| CWK28G264005M  | 26.5-40         | Ka         | WR-28          | GROOVE      | K-M                    | 0.5                     | 1.3:1    |
| CWK28264003F   | 26.5-40         | Ka         | WR-28          | UG599/U     | K-F                    | 0.35                    | 1.2:1    |
| CWK28G264003F  | 26.5-40         | Ka         | WR-28          | GROOVE      | K-F                    | 0.35                    | 1.2:1    |
| CWK28264003M   | 26.5-40         | Ka         | WR-28          | UG599/U     | K-M                    | 0.35                    | 1.2:1    |
| CWK28G264003M  | 26.5-40         | Ka         | WR-28          | GROOVE      | K-M                    | 0.35                    | 1.2:1    |
| CWK28264003F4  | 26.5-40         | Ka         | WR-28          | UG599/U     | 2.4mm(F)               | 0.35                    | 1.2:1    |
| CWK28G264003F4 | 26.5-40         | Ka         | WR-28          | GROOVE      | 2.4mm(F)               | 0.35                    | 1.2:1    |
| CWK28264003M4  | 26.5-40         | Ka         | WR-28          | UG599/U     | 2.4mm(M)               | 0.35                    | 1.2:1    |
| CWK28G264003M4 | 26.5-40         | Ka         | WR-28          | GROOVE      | 2.4mm(M)               | 0.35                    | 1.2:1    |
| CWK22335005F   | 33-50           | Q          | WR-22          | UG383/U     | 2.4mm(F)               | 0.5                     | 1.25:1   |

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|-----------------|-----------------|------------|----------------|-------------|------------------------|-------------------------|----------|
| CWK22335005M    | 33-50           | Q          | WR-22          | UG383/U     | 2.4mm(M)               | 0.5                     | 1.25:1   |
| CWK22335005SQF  | 33-50           | Q          | WR-22          | SQ Flange   | 2.4mm(F)               | 0.5                     | 1.25:1   |
| CWK22G335005SQF | 33-50           | Q          | WR-22          | GROOVE      | 2.4mm(F)               | 0.5                     | 1.25:1   |
| CWK22335005SQM  | 33-50           | Q          | WR-22          | SQ Flange   | 2.4mm(M)               | 0.5                     | 1.25:1   |
| CWK22G335005SQM | 33-50           | Q          | WR-22          | GROOVE      | 2.4mm(M)               | 0.5                     | 1.3:1    |
| CWK22335005F18  | 33-50           | Q          | WR-22          | SQ Flange   | 1.85mm(F)              | 0.50                    | 1.3:1    |
| CWK22G335005F18 | 33-50           | Q          | WR-22          | GROOVE      | 1.85mm(F)              | 0.50                    | 1.3:1    |
| CWK19406004F    | 40-60           | U          | WR-19          | UG383/U     | 1.85mm(F)              | 0.45                    | 1.35:1   |
| CWK19406004M    | 40-60           | U          | WR-19          | UG383/U     | 1.85mm(M)              | 0.45                    | 1.35:1   |
| CWK15507505F ▲  | 50-75           | V          | WR-15          | UG385/U     | 1.85mm(F)              | 0.55                    | 1.4:1    |
| CWK155075051F   | 50-75           | V          | WR-15          | UG385/U     | 1mm(F)                 | 1.0 typ                 | 1.4:1    |
| CWK155075051M   | 50-75           | V          | WR-15          | UG385/U     | 1mm(M)                 | 1.0 typ                 | 1.4:1    |
| CWK15507505M ▲  | 50-75           | V          | WR-15          | UG385/U     | 1.85mm(M)              | 0.55                    | 1.4:1    |
| CWK12609006VF ▲ | 60-90           | E          | WR-12          | UG387/U     | 1.85mm(F)              | 0.65                    | 1.8:1    |
| CWK126090061F   | 60-90           | E          | WR-12          | UG387/U     | 1mm(F)                 | 1.0 typ                 | 2:1 typ  |
| CWK126090061M   | 60-90           | E          | WR-12          | UG387/U     | 1mm(M)                 | 1.0 typ                 | 2:1 typ  |
| CWK10751101F    | 75-110          | W          | WR-10          | UG387/U-M   | 1mm(F)                 | 1.0 typ                 | 2:1 typ  |
| CWK10751101M    | 75-110          | W          | WR-10          | UG387/U-M   | 1mm(M)                 | 1.0 typ                 | 2:1 typ  |

▲ DEGRADED PERFORMANCE > 70GHz

### IN LINE: (END LAUNCH)

| Model Number     | Frequency (GHz) | Bandwidth (GHz) | Waveguide Size | Flange Type | Coaxial Connector Type | Insertion Loss (dB max) | VSWR Max |
|------------------|-----------------|-----------------|----------------|-------------|------------------------|-------------------------|----------|
| CWKE187050501SG  | 5.0-5.8         | 0.20            | WR187          | CPR187      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE187G050501SG | 5.0-5.8         | 0.20            | WR187          | GROOVE      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE187050501NG  | 5.0-5.8         | 0.20            | WR187          | CPR187      | N-F                    | 0.1*                    | 1.15:1   |
| CWKE187G050501NG | 5.0-5.8         | 0.20            | WR187          | GROOVE      | N-F                    | 0.1*                    | 1.15:1   |
| CWKE137060701SG  | 6.0-7.8         | 0.20            | WR137          | PDR-70      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE137G060701SG | 6.0-7.8         | 0.20            | WR137          | GROOVE      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE137060701NG  | 6.0-7.8         | 0.20            | WR137          | PDR-70      | N-F                    | 0.1*                    | 1.15:1   |
| CWKE137G060701NG | 6.0-7.8         | 0.20            | WR137          | GROOVE      | N-F                    | 0.1*                    | 1.15:1   |
| CWKE112070801SG  | 7.7-8.5         | 0.20            | WR112          | CPR112      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE112G070801SG | 7.7-8.5         | 0.20            | WR112          | GROOVE      | SMA-F                  | 0.1*                    | 1.15:1   |

## Waveguide to Coaxial Adapters

| Model Number     | Frequency (GHz) | Bandwidth (GHz) | Waveguide Size | Flange Type | Coaxial Connector Type | Insertion Loss (dB max) | VSWR Max |
|------------------|-----------------|-----------------|----------------|-------------|------------------------|-------------------------|----------|
| CWKE112070801NG  | 7.7-8.5         | 0.20            | WR112          | CPR112      | N-F                    | 0.1*                    | 1.15:1   |
| CWKE112G070801NG | 7.7-8.5         | 0.20            | WR112          | GROOVE      | N-F                    | 0.1*                    | 1.15:1   |
| CWKE90081201SG   | 8.8-12.0        | 0.30            | WR90           | UG39/U      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE90G081201SG  | 8.8-12.0        | 0.30            | WR90           | GROOVE      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE75101601SG   | 10.0-16.0       | 0.30            | WR75           | UBR120      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE75G101601SG  | 10.0-16.0       | 0.30            | WR75           | GROOVE      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE62121801SG   | 12.7-18.0       | 0.50            | WR62           | UG419/U     | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE62G121801SG  | 12.7-18.0       | 0.50            | WR62           | GROOVE      | SMA-F                  | 0.1*                    | 1.15:1   |
| CWKE42182605F    | 18-26.5         | 2.00            | WR-42          | UG595/U     | 2.92mm-F               | 0.5                     | 1.35:1   |
| CWKE42G182605F   | 18-26.5         | 2.00            | WR-42          | GROOVE      | 2.92mm-F               | 0.5                     | 1.35:1   |
| CWKE180D184005F  | 18-40.0         | 18-40.0         | WRD-180        | UG1587      | 2.92mm-F               | 0.5                     | 1.6:1    |
| CWKE180DG184005F | 18-40.0         | 18-40.0         | WRD-180        | GROOVE      | 2.92mm-F               | 0.5                     | 1.6:1    |
| CWKE28264005F    | 26.5-40         | 2.00            | WR-28          | UG599/U     | 2.92mm-F               | 0.5                     | 1.35:1   |
| CWKE28G264005F   | 26.5-40         | 2.00            | WR-28          | GROOVE      | 2.92mm-F               | 0.5                     | 1.35:1   |

Cernex offers a full range of high rectangular end-launch adapters covering the waveguide sizes **WR-19** thru **WR-650**. Power handling can exceed 1000 watts depend on connector type and waveguide size.

\* Only for the specific narrow Bandwidth

### WRD ADAPTERS:

| Model Number    | Frequency (GHz) | Waveguide Size | Flange Type | Coaxial Connector Type | Insertion Loss (dB typ.) | VSWR Max |
|-----------------|-----------------|----------------|-------------|------------------------|--------------------------|----------|
| CWK200D020402F  | 2.0-4.8         | WRD200         | COVER       | SMA-F                  | 0.25                     | 1.25:1   |
| CWK200D020402M  | 2.0-4.8         | WRD200         | COVER       | SMA-M                  | 0.25                     | 1.25:1   |
| CWK200D020402NF | 2.0-4.8         | WRD200         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK250D020702F  | 2.6-7.8         | WRD250         | COVER       | SMA-F                  | 0.25                     | 1.25:1   |
| CWK250D020702M  | 2.6-7.8         | WRD250         | COVER       | SMA-M                  | 0.25                     | 1.25:1   |
| CWK250D020702NF | 2.6-7.8         | WRD250         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK350D030802F  | 3.5-8.2         | WRD350         | COVER       | SMA-F                  | 0.25                     | 1.25:1   |
| CWK350D030802M  | 3.5-8.2         | WRD350         | COVER       | SMA-M                  | 0.25                     | 1.25:1   |
| CWK350D030802NF | 3.5-8.2         | WRD350         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK475D041102F  | 4.75-11.0       | WRD475         | COVER       | SMA-F                  | 0.25                     | 1.25:1   |
| CWK475D041102M  | 4.75-11.0       | WRD475         | COVER       | SMA-M                  | 0.25                     | 1.25:1   |
| CWK475D041102NF | 4.75-11.0       | WRD475         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK750D071802NF | 7.5-18.0        | WRD750         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK750D071802NM | 7.5-18.0        | WRD750         | COVER       | N-M                    | 0.25                     | 1.25:1   |

## Waveguide to Coaxial Adapters

| Model Number    | Frequency (GHz) | Waveguide Size | Flange Type | Coaxial Connector Type | Insertion Loss (dB typ.) | VSWR Max |
|-----------------|-----------------|----------------|-------------|------------------------|--------------------------|----------|
| CWK500D051802NF | 5.0-18.0        | WRD500         | COVER       | N-F                    | 0.25                     | 1.3:1    |
| CWK580D051602F  | 5.8-16.0        | WRD580         | COVER       | SMA-F                  | 0.25                     | 1.25:1   |
| CWK580D051602M  | 5.8-16.0        | WRD580         | COVER       | SMA-M                  | 0.25                     | 1.25:1   |
| CWK580D051602NF | 5.8-16.0        | WRD580         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK650D061802F  | 6.5-18.0        | WRD650         | COVER       | SMA-F                  | 0.25                     | 1.25:1   |
| CWK650D061802M  | 6.5-18.0        | WRD650         | COVER       | SMA-M                  | 0.25                     | 1.25:1   |
| CWK650D061802NF | 6.5-18.0        | WRD650         | COVER       | N-F                    | 0.25                     | 1.25:1   |
| CWK110D142603M  | 14.0-26.0       | WRD110         | COVER       | K-M                    | 0.3                      | 1.4:1    |
| CWK180D184005F  | 18.0-40.0       | WRD180         | COVER       | K-F                    | 0.5                      | 1.35:1   |
| CWK180D184005M  | 18.0-40.0       | WRD180         | COVER       | K-M                    | 0.5                      | 1.35:1   |
| CWK180D184005F4 | 18.0-40.0       | WRD180         | COVER       | 2.4mm-F                | 0.5                      | 1.4:1    |
| CWK180D184005M4 | 18.0-40.0       | WRD180         | COVER       | 2.4mm-M                | 0.5                      | 1.4:1    |