

Broad Band High-Power Air-Cooled Loads

FEATURES:

- ❖ Frequency Range: 1.70-170GHz
- ❖ Low VSWR
- ❖ Power Rating: 50-2500W (CW)
- ❖ Operating Temperature Range: -55 to +65°C



CWL

DESCRIPTION:

Cernex's CWL Series air-cooled loads have great reliability and need minimum maintenance. The power rating is for free-air natural convection and increased by 30-50% if forced-air cooling is used. The loads are capable of operating at the rated power detailed in the table over the temperature range -55°C to +65°C.

SPECIFICATIONS:

| Model No. | Waveguide | Frequency Range (GHz) | VSWR | Power Rating (CW) |
|--------------|-----------|--------------------------|--------|-------------------|
| CWL43050X | WR430 | 1.70-2.60 | 1.15:1 | 50 |
| CWL430100X | WR430 | 1.70-2.60 | 1.15:1 | 100 |
| CWL430250X | WR430 | 1.70-2.60 | 1.15:1 | 250 |
| CWL430500X | WR430 | 1.70-2.60 | 1.15:1 | 500 |
| CWL4301000X | WR430 | 1.70-2.60 | 1.15:1 | 1000 |
| CWL4301500X | WR430 | 1.70-2.60 | 1.15:1 | 1500 |
| CWL4302000X | WR430 | 1.70-2.60 | 1.15:1 | 2000 |
| CWL 4302500X | WR430 | 1.70-2.60 | 1.15:1 | 2500 |
| CWL34050X | WR340 | 2.20-3.30 | 1.15:1 | 50 |
| CWL340100X | WR340 | 2.20-3.30 | 1.15:1 | 100 |
| CWL340250X | WR340 | 2.20-3.30 | 1.15:1 | 250 |
| CWL340500X | WR340 | 2.20-3.30 | 1.15:1 | 500 |
| CWL3401000X | WR340 | 2.20-3.30 | 1.15:1 | 1000 |
| CWL3401500X | WR340 | 2.20-3.30 | 1.15:1 | 1500 |
| CWL3402000X | WR340 | 2.20-3.30 | 1.15:1 | 2000 |
| CWL 3402500X | WR340 | 2.20-3.30 | 1.15:1 | 2500 |
| CWL28450X | WR284 | 2.6-3.95 | 1.15:1 | 50 |
| CWL284100X | WR284 | 2.6-3.95 | 1.15:1 | 100 |
| CWL284250X | WR284 | 2.6-3.95 | 1.15:1 | 250 |



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| CWL284500X | WR284 | 2.6-3.95 | 1.15:1 | 500 |
| CWL2841000X | WR284 | 2.6-3.95 | 1.15:1 | 1000 |
| CWL2841500X | WR284 | 2.6-3.95 | 1.15:1 | 1500 |
| CWL2842000X | WR284 | 2.6-3.95 | 1.15:1 | 2000 |
| CWL2842500X | WR284 | 2.6-3.95 | 1.15:1 | 2500 |
| CWL22950X | WR229 | 3.3-4.90 | 1.15:1 | 50 |
| CWL229100X | WR229 | 3.3-4.90 | 1.15:1 | 100 |
| CWL229250X | WR229 | 3.3-4.90 | 1.15:1 | 250 |
| CWL229500X | WR229 | 3.3-4.90 | 1.15:1 | 500 |
| CWL2291000X | WR229 | 3.3-4.90 | 1.15:1 | 1000 |
| CWL2291500X | WR229 | 3.3-4.90 | 1.15:1 | 1500 |
| CWL2292000X | WR229 | 3.3-4.90 | 1.15:1 | 2000 |
| CWL2292500X | WR229 | 3.3-4.90 | 1.15:1 | 2500 |
| CWL18750X | WR187 | 3.95-5.85 | 1.15:1 | 50 |
| CWL187100X | WR187 | 3.95-5.85 | 1.15:1 | 100 |
| CWL187250X | WR187 | 3.95-5.85 | 1.15:1 | 250 |
| CWL187500X | WR187 | 3.95-5.85 | 1.15:1 | 500 |
| CWL1871000X | WR187 | 3.95-5.85 | 1.15:1 | 1000 |
| CWL1871500X | WR187 | 3.95-5.85 | 1.15:1 | 1500 |
| CWL1872000X | WR187 | 3.95-5.85 | 1.15:1 | 2000 |
| CWL1872500X | WR187 | 3.95-5.85 | 1.15:1 | 2500 |
| CWL15950X | WR159 | 4.9-7.05 | 1.15:1 | 50 |
| CWL159100X | WR159 | 4.9-7.05 | 1.15:1 | 100 |
| CWL159250X | WR159 | 4.9-7.05 | 1.15:1 | 250 |
| CWL159500X | WR159 | 4.9-7.05 | 1.15:1 | 500 |
| CWL1591000X | WR159 | 4.9-7.05 | 1.15:1 | 1000 |
| CWL1591500X | WR159 | 4.9-7.05 | 1.15:1 | 1500 |
| CWL1592000X | WR159 | 4.9-7.05 | 1.15:1 | 2000 |
| CWL1592500X | WR159 | 4.9-7.05 | 1.15:1 | 2500 |
| CWL13750X | WR137 | 5.85-8.2 | 1.15:1 | 50 |
| CWL137100X | WR137 | 5.85-8.2 | 1.15:1 | 100 |
| CWL137250X | WR137 | 5.85-8.2 | 1.15:1 | 250 |
| CWL137500X | WR137 | 5.85-8.2 | 1.15:1 | 500 |
| CWL1371000X | WR137 | 5.85-8.2 | 1.15:1 | 1000 |
| CWL1371500X | WR137 | 5.85-8.2 | 1.15:1 | 1500 |

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| CWL1372000X | WR137 | 5.85-8.2 | 1.15:1 | 2000 |
| CWL1372500X | WR137 | 5.85-8.2 | 1.15:1 | 2500 |
| CWL11250X | WR112 | 7.05-10 | 1.15:1 | 50 |
| CWL112100X | WR112 | 7.05-10 | 1.15:1 | 100 |
| CWL112250X | WR112 | 7.05-10 | 1.15:1 | 250 |
| CWL112500X | WR112 | 7.05-10 | 1.15:1 | 500 |
| CWL1121000X | WR112 | 7.05-10 | 1.15:1 | 1000 |
| CWL1121500X | WR112 | 7.05-10 | 1.15:1 | 1500 |
| CWL1122000X | WR112 | 7.05-10 | 1.15:1 | 2000 |
| CWL1122500X | WR112 | 7.05-10 | 1.15:1 | 2500 |
| CWL9010X | WR90 | 8.2 - 12.4 | 1.15:1 | 10 |
| CWL9025X | WR90 | 8.2 - 12.4 | 1.15:1 | 25 |
| CWL9050X | WR90 | 8.2 - 12.4 | 1.15:1 | 50 |
| CWL90100X | WR90 | 8.2 - 12.4 | 1.15:1 | 100 |
| CWL90250X | WR90 | 8.2- 12.4 | 1.15:1 | 250 |
| CWL90500X | WR90 | 8.2 - 12.4 | 1.15:1 | 500 |
| CWL901000X | WR90 | 8.2 - 12.4 | 1.15:1 | 1000 |
| CWL901500X | WR90 | 8.2 - 12.4 | 1.15:1 | 1500 |
| CWL902000X | WR90 | 8.2 - 12.4 | 1.15:1 | 2000 |
| CWL902500X | WR90 | 8.2 - 12.4 | 1.15:1 | 2500 |
| CWL7510X | WR75 | 10-15 | 1.15:1 | 10 |
| CWL7525X | WR75 | 10-15 | 1.15:1 | 25 |
| CWL7550X | WR75 | 10-15 | 1.15:1 | 50 |
| CWL75250X | WR75 | 10-15 | 1.15:1 | 250 |
| CWL75500X | WR75 | 10-15 | 1.15:1 | 500 |
| CWL751000X | WR75 | 10-15 | 1.15:1 | 1000 |
| CWL751500X | WR75 | 10-15 | 1.15:1 | 1500 |
| CWL752000X | WR75 | 10-15 | 1.15:1 | 2000 |
| CWL752500X | WR75 | 10-15 | 1.15:1 | 2500 |
| CWL6210X | WR62 | 12-18 | 1.15:1 | 10 |
| CWL6225X | WR62 | 12-18 | 1.15:1 | 25 |
| CWL6250X | WR62 | 12-18 | 1.15:1 | 50 |
| CWL62100X | WR62 | 12-18 | 1.15:1 | 100 |
| CWL62250X | WR62 | 12-18 | 1.15:1 | 250 |
| CWL62500X | WR62 | 12-18 | 1.15:1 | 500 |
| CWL621000X | WR62 | 12-18 | 1.15:1 | 1000 |
| CWL621500X | WR62 | 12-18 | 1.15:1 | 1500 |



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|------------|-----------|--------------------------|--------|-------------------|
| CWL622000X | WR62 | 12-18 | 1.15:1 | 2000 |
| CWL5110X | WR51 | 15-22.9 | 1.15:1 | 10 |
| CWL5125X | WR51 | 15-22.9 | 1.15:1 | 25 |
| CWL5150X | WR51 | 15-22.9 | 1.15:1 | 50 |
| CWL51100X | WR51 | 15-22.9 | 1.15:1 | 100 |
| CWL51250X | WR51 | 15-22.9 | 1.15:1 | 250 |
| CWL51500X | WR51 | 15-22.9 | 1.15:1 | 500 |
| CWL511000X | WR51 | 15-22.9 | 1.15:1 | 1000 |
| CWL4210X | WR42 | 18-26.5 | 1.15:1 | 10 |
| CWL4225X | WR42 | 18-26.5 | 1.15:1 | 25 |
| CWL4250X | WR42 | 18-26.5 | 1.15:1 | 50 |
| CWL42100X | WR42 | 18-26.5 | 1.15:1 | 100 |
| CWL42250X | WR42 | 18-26.5 | 1.15:1 | 250 |
| CWL42500X | WR42 | 18-26.5 | 1.15:1 | 500 |
| CWL421000X | WR42 | 18-26.5 | 1.15:1 | 1000 |
| CWL2805X | WR28 | 26.5 - 40 | 1.15:1 | 5 |
| CWL2810X | WR28 | 26.5 - 40 | 1.15:1 | 10 |
| CWL2825X | WR28 | 26.5-40 | 1.15:1 | 25 |
| CWL2850X | WR28 | 26.5-40 | 1.15:1 | 50 |
| CWL28100X | WR28 | 26.5 - 40 | 1.15:1 | 100 |
| CWL28200X | WR28 | 26.5 - 40 | 1.15:1 | 200 |
| CWL28500X | WR28 | 26.5 - 40 | 1.15:1 | 500 |
| CWL281000X | WR28 | 26.5 - 40 | 1.15:1 | 1000 |
| CWL2205X | WR22 | 33 - 50 | 1.15:1 | 5 |
| CWL2210X | WR22 | 33 - 50 | 1.15:1 | 10 |
| CWL2225X | WR22 | 33 - 50 | 1.15:1 | 25 |
| CWL2250X | WR22 | 33 - 50 | 1.15:1 | 50 |
| CWL22100X | WR22 | 33 - 50 | 1.15:1 | 100 |
| CWL22200X | WR22 | 33 - 50 | 1.15:1 | 200 |
| CWL22500X | WR22 | 33 - 50 | 1.15:1 | 500 |
| CWL1905X | WR19 | 40 - 60 | 1.15:1 | 5 |
| CWL1910X | WR19 | 40 - 60 | 1.15:1 | 10 |
| CWL1925X | WR19 | 40 - 60 | 1.15:1 | 25 |
| CWL1950X | WR19 | 40 - 60 | 1.15:1 | 50 |
| CWL19100X | WR19 | 40 - 60 | 1.15:1 | 100 |
| CWL19200X | WR19 | 40 - 60 | 1.15:1 | 200 |

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| Model No. | Waveguide | Frequency Range (GHz) | VSWR | Power Rating (CW) |
|-----------|-----------|-----------------------|--------|-------------------|
| CWL19500X | WR19 | 40 - 60 | 1.15:1 | 500 |
| CWL1505X | WR15 | 50 - 75 | 1.15:1 | 5 |
| CWL1510X | WR15 | 50 - 75 | 1.15:1 | 10 |
| CWL1525X | WR15 | 50 - 75 | 1.15:1 | 25 |
| CWL1550X | WR15 | 50 - 75 | 1.15:1 | 50 |
| CWL15100X | WR15 | 50 - 75 | 1.15:1 | 100 |
| CWL15200X | WR15 | 50 - 75 | 1.15:1 | 200 |
| CWL15500X | WR15 | 50 - 75 | 1.15:1 | 500 |
| CWL1205X | WR12 | 60 - 90 | 1.15:1 | 5 |
| CWL1210X | WR12 | 60 - 90 | 1.15:1 | 10 |
| CWL1225X | WR12 | 60 - 90 | 1.15:1 | 25 |
| CWL1250X | WR12 | 60 - 90 | 1.15:1 | 50 |
| CWL12100X | WR12 | 60 - 90 | 1.15:1 | 100 |
| CWL12200X | WR12 | 60 - 90 | 1.15:1 | 200 |
| CWL12500X | WR12 | 60 - 90 | 1.15:1 | 500 |
| CWL1005X | WR10 | 75 - 110 | 1.15:1 | 5 |
| CWL1010X | WR10 | 75 - 110 | 1.15:1 | 10 |
| CWL1025X | WR10 | 75 - 110 | 1.15:1 | 25 |
| CWL1050X | WR10 | 75 - 110 | 1.15:1 | 50 |
| CWL10100X | WR10 | 75 - 110 | 1.15:1 | 100 |
| CWL10200X | WR10 | 75 - 110 | 1.15:1 | 200 |
| CWL10500X | WR10 | 75 - 110 | 1.15:1 | 500 |

OTHER FREQUENCIES AND POWER LEVELS ARE ALSO AVAILABLE. COAXIAL POWER LOADS ARE ALSO AVAILABLE.

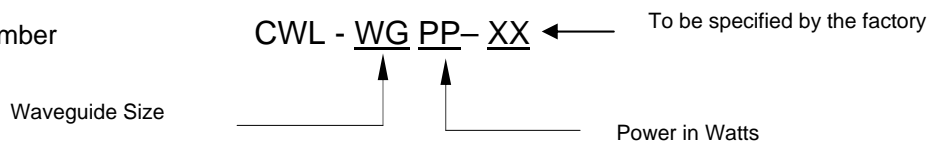
Double Ridge Power Loads

| Model No. | Waveguide | Frequency Range (GHz) | VSWR | Power Rating (CW) |
|------------|-----------|-----------------------|------------|-------------------|
| CWL750D180 | WRD750 | 7.5 - 18 | 1.2:1 | 180 |
| CWL180D250 | WRD180 | 18 - 40 | 1.15:1 Max | 250 |

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HOW TO ORDER:

Specify Model Number



Example: To order a WR28 Power Load with a frequency range of 26.5-40GHz, and a power handling of 50W, Specify CWL-2850-XX.



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CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE