

# Wide Tuning Bandwidth Mechanical Gunn Oscillators

## FEATURES:

- Frequency coverage:K,V and W Bands
- Tuning bandwidth near full waveguide band
- Low AM/FM noise and harmonics
- Micrometer

# **APPLICATIONS:**

- Test sources
- Lab test setups
- Broad band systems



#### **DESCRIPTION:**

#### **CMGW** Series

**Cerrnex CMGW** Series wide tuning bandwidth Gunn oscillators are offered in three waveguide bands, WR-28, WR-15 and WR-10. These oscillators utilize GaAs high performance Gunn diodes and proprietary cavity designs to yield near full waveguide band frequency coverage. Unlike the dual tuner oscillators offered in the industry, the frequency and power optimization are accomplished by single micrometer driver. Furthermore, these oscillators can be modified to electrical tunable oscillators by replacing the micrometer driver with an electrical actuator.

CMGW series broad tuning bandwidth Gunn oscillators are idea test sources for lab test setups and antenna ranges. Working with Gunn oscillator regulator/modulator, these oscillators can produce AM or FM modulated signals for many testing applications.

Frequency Band	Ка	V	W
Waveguide Size	WR-28	WR-15	WR-10
Frequency Range (GHz), Typical	28.0 to 38.0	56.0 to 72.0	80.0 to 110.0
Input Power (dBm), Typical	18.0 to 20.0	3.0 to 7.0	0.0 to 3.0
Harmonics (dBc), Typical	-20	-20	-20
Phase Noise (dBc/Hz @ 100KHz offset)	-90	-90	-90
Bias Voltage (Volts), Typical	5.0	5.0	5.0
Bias current (Amps), Typical	1.0	1.0	1.0

### SPECIFICATIONS:

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