

CERNEX, Inc.



**AMPLIFIERS, ANTENNAS, MULTIPLIERS,
SOURCES, WAVEGUIDE PRODUCTS
MILLIMETER-WAVE COMPONENTS
FERRITE PRODUCTS AND SUB-SYSTEMS**

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AMPLIFIERS

BROADBAND LOW NOISE AMPLIFIERS:

0.1-97Ghz (Octave and Multi-Octave) With Noise Figure As low As 2db.

0.5-2Ghz; 0.5-12Ghz; 0.5-20Ghz; 2-4Ghz; 2-8Ghz; 2-20Ghz;
2-26.5Ghz; 1-40Ghz; 3.7-12Ghz; 5-15Ghz; 6-18Ghz; 18-26.5Ghz;
18-40Ghz; 26.5-40Ghz; 57-65Ghz; 85-97Ghz.

BROADBAND MEDIUM POWER AMPLIFIERS:

0.1-65Ghz (Octave and Multi-Octave) With Output Power Up To 30dBm.

0.5-2Ghz, 0.5-4Ghz, 0.5-6Ghz, 0.5-8,Ghz 0.5-10Ghz, 0.5-12Ghz, 0.5-14Ghz, 0.5-20Ghz, 2-4Ghz, 2-8Ghz, 2-20Ghz, 3,7-12Ghz, 5-15Ghz, 6-18Ghz, 18-26.5Ghz, 18-40Ghz, 26.5-40Ghz.

BROADBAND HIGH POWER AMPLIFIERS:

0.5-26.5Ghz (Octave and Multi-Octave) With Output Power Up to 50dBm.

0.5-2Ghz; 2-4Ghz; 2-8Ghz; 4-8Ghz; 6-18Ghz; 3.7-12Ghz; 5-15Ghz
8-12Ghz; 12-18Ghz; 18-20Ghz; 18-26.5Ghz.

NARROWBAND LOW NOISE AMPLIFIERS:

0.5-97Ghz With Noise Figure As Low As 0.35dB At L-Band, And 6dB At 94Ghz.

NARROWBAND MEDIUM POWER AMPLIFIERS:

0.5-65Ghz With Output Power Up to 33dBm.

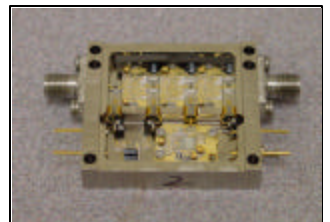
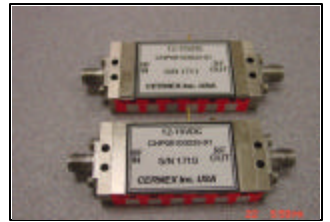
NARROWBAND HIGH POWER AMPLIFIERS:

0.5-40Ghz With Output Power Up To 500W At L & C Band.

LIMITING AMPLIFIERS:

0.5-40Ghz (Octave and Multi-Octave) With Medium And High Gain.

0.5-2Ghz; 2-8Ghz; 2-18Ghz; 4-8Ghz; 6-18Ghz; 8-12Ghz; 8-20Ghz;
18-26.5Ghz, 26.5-40Ghz.

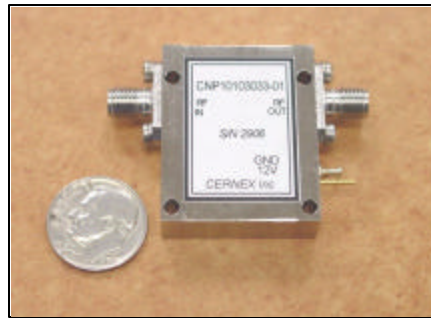


AMPLIFIERS FOR OPTICAL FIBER COMMUNICATIONS:

Broadband Modulator Driver Amplifiers (NRZ) for Optical Fiber Communications Up to 40Gb/s With Output Voltage of 3-8Vp-p.

30Khz-10Ghz; 30Khz-12Ghz; 30Khz-14Ghz; 50Khz-18Ghz; 50Khz-20Ghz; 75Khz-45Ghz.

Driver Amplifiers (RZ) for Clock Recovery and Forward Error Correction Up To 40Gb/s With Output Voltage Up to 30 Vp-p.



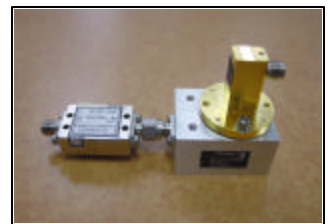
FREQUENCY MULTIPLIERS UP TO 110Ghz:

PASSIVE FREQUENCY MULTIPLIERS:

With Input Frequency As Low As 1Ghz, And Output Frequency As High As 110Ghz.

ACTIVE FREQUENCY MULTIPLIERS:

With Input Frequency As Low As 0.05Ghz, And Output Frequency As High As 94Ghz. Multiplication Factors from 2 to 64.



RECEIVER PRODUCTS UP TO 220Ghz:

Harmonic Mixers, Spectrum Analyzer Mixers, Single Ended Mixers, Balance Mixers, Wide-Band Balance Mixers, Broadband Detectors, Balanced Phase Detectors, Finline Detectors, Self Biased Detectors.



SOURCES UP TO 160Ghz:

Mechanically Tuned Gunn Oscillators, Varactor-Tuned Gunn Oscillators, DROs, VCOs, PLOs, Injection Locked Oscillators, Noise Sources,



CONTROL COMPONENTS UP TO 110Ghz:

Direct Reading Precision Attenuators, Programmable Rotary Vane Attenuators, Uncalibrated Variable Attenuators, Fixed Attenuators. Dial-Driven Calibrated Attenuators, Micrometer-Driven Calibrated Attenuators, Variable PIN Attenuators.

PIN Switches (SPST, SPDT, Fullband Switches).

FERRITE PRODUCTS UP TO 170Ghz:

Fullband Junction Circulators And Isolators.

(18-26.5Ghz; 26.5-40Ghz; 33-50Ghz; 40-60Ghz; 50-75Ghz; 60-90Ghz; 75-110Ghz).

High Power Isolators and Circulators

Coaxial and Drop-in Isolators and circulators

WAVEGUIDE FILTERS & DIPLEXERS UP TO 160Ghz:

BandPass Filters, Low Pass Filters, HighPass Filters.

WAVEGUIDE PRODUCTS UP TO 325Ghz:

Directional & Bi-directional Couplers, Precision High Directivity Couplers, Crossguide Couplers.

Matched Hybrid Tees, E-Plane and H-Plane Tees.

Waveguide Sections, Terminations, Sliding Matched terminations, Twists & Bends, Broadband Air Cooled Power Loads

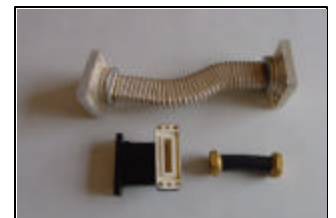
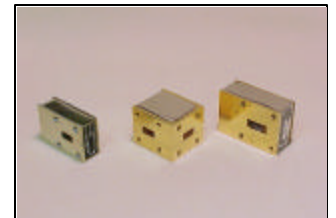
Tunable Loads & Shorts, E/H Plane Tuners. Mechanical and Electromechanical Switches.

Fixed and Variable Attenuators, Direct Reading Precision Attenuators

Direct Reading and Variable Phase Shifters.

Frequency Meters & Direct Reading Frequency Meters

Low Loss Cosine & Linear Tapered Mode Transitions, Circular to Rectangular Waveguide Transitions, Waveguide to Coax Transitions.



ANTENNA PRODUCTS:

Horn Lens Antennas, Standard Gain Horn Antennas, Scalar & Wide Angle
Scalar Feed Horn Antennas.
Cassegrain Reflector Antennas, Prime Focus Antennas.
Orthomode Transducers, Linear To Circular Fixed and Switchable
Polarizers.
Flat Panel Antennas

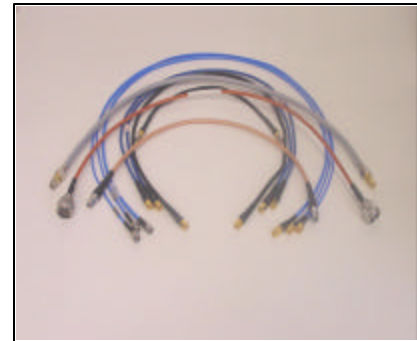
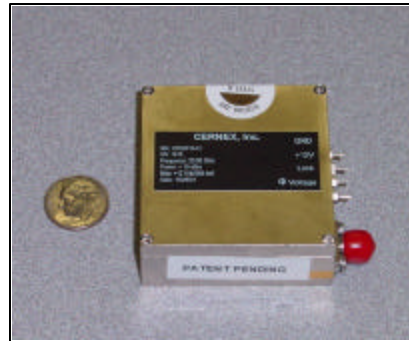
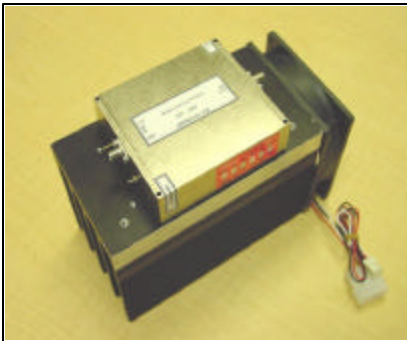


ASSEMBLIES AND SUBSYSTEMS:

Up/Down Converters, Sat-Com Up/Down Converters, Dual & Tri-Band
Block Down Converters, Transmitters, Generic Transceivers, Antenna-
Related Subsystems.

SYSTEMS PRODUCTS CAPABILITY:

Sensor Products, Communication Products, remote Sensing Products,
Surveillance and EW Products.



**NOTES: PLEASE, CONTACT THE FACTORY FOR ALL YOUR OTHER SPECIAL
REQUIREMENTS. WE ALSO HAVE PRODUCTS, WHICH ARE NOT YET
MENTIONED IN THIS BROCHURE. DATASHEETS FOR EACH PRODUCT CAN BE
DOWN LOADED FROM OUR WEBSITE.**

CERNEX, Inc.

INTRODUCTION

CERNEX, INC., is a company with a commitment to product excellence and technological expertise in state-of-the art thin-film hybrid and discrete microwave and millimeter-wave components, and sub-assemblies up to **325Ghz**. Our company was established to provide products and services to growing markets such as wireless telecommunications and fiber optic communications industry.

The company was incorporated in 1988 to develop and manufacture high quality thin-film hybrid gain modules, frequency multipliers, amplifiers, and various other microwave and millimeter-wave products for the commercial and military markets. Our excellent technical staff and production facility enable the company to respond quickly to customers' needs.

Our goal is to achieve the highest quality performance, reliability, service and on-time delivery. This goal has allowed our company to maintain a steady growth over the past few years.

Our management team consists of a team of senior design engineers and sales/marketing staff with over 250 man-years of experience in the microwave and millimeter-wave businesses.

