

Couplers

KRYTAR's couplers are uniquely designed for systems applications where external leveling, precise monitoring, signal mixing or swept transmission and reflection measurements are required. These couplers provide simple solutions for many applications including electronic warfare (EW), commercial wireless, SATCOM, radar, signal monitoring and measurement, antenna beam forming, and EMC testing environments. For many space-restricted applications the compact size makes KRYTAR couplers ideal solutions.



[\(http://krytar.com/products/couplers/directional-couplers/\)](http://krytar.com/products/couplers/directional-couplers/)

Directional Couplers
[\(http://krytar.com/products/couplers/directional-couplers/\)](http://krytar.com/products/couplers/directional-couplers/)

- 0.3 to 67 GHz
- 6, 10, 13, 16, 20, 30 dB Coupling
- High Isolation, Low VSWR



[\(http://krytar.com/products/couplers/dual-directional-couplers/\)](http://krytar.com/products/couplers/dual-directional-couplers/)

Dual Directional Couplers
[\(http://krytar.com/products/couplers/dual-directional-couplers/\)](http://krytar.com/products/couplers/dual-directional-couplers/)

- 1 to 40 GHz
- 10, 16, 30 dB Coupling
- High Isolation, Low VSWR

Hybrid Couplers

KRYTAR's 90 Degree Hybrid Couplers perform many functions, including splitting and combining signals in amplifiers, switching circuits, and antenna beam-forming networks used in a wide range of commercial and military applications. 90 degree hybrids are used in circuits requiring a balanced division of power into two transmission lines with 90 degree separation of phase.

KRYTAR's Hybrid Couplers offer wide frequency coverage in single, compact packages which provide low insertion loss, high directivity and tight coupling. These hybrid couplers offer simple solutions in many applications within those frequency bands including electronic warfare (EW), commercial wireless, SATCOM, radar, signal monitoring and measurement, antenna beam forming, and EMC testing environments. For many space-restricted situations the compact size of these KRYTAR couplers are ideal. These couplers can be also be manufactured to meet military specifications.

KRYTAR offers complete engineering services for custom designs that meet or exceed critical performance and/or packaging specifications



[\(http://krytar.com/products/hybrid-couplers/3-db-90-degree-hybrid-couplers/\)](http://krytar.com/products/hybrid-couplers/3-db-90-degree-hybrid-couplers/)

[3 dB 90 Degree Hybrid Couplers \(http://krytar.com/products/hybrid-couplers/3-db-90-degree-hybrid-couplers/\)](http://krytar.com/products/hybrid-couplers/3-db-90-degree-hybrid-couplers/)

- 0.5 GHz to 36 GHz
- Outstanding Versatility
- Excellent Phase and Amplitude Matching



[\(http://krytar.com/products/hybrid-couplers/3-db-180-degree-hybrid-couplers/\)](http://krytar.com/products/hybrid-couplers/3-db-180-degree-hybrid-couplers/)

[3 dB 180 Degree Hybrid Couplers \(http://krytar.com/products/hybrid-couplers/3-db-180-degree-hybrid-couplers/\)](http://krytar.com/products/hybrid-couplers/3-db-180-degree-hybrid-couplers/)

- 0.5 GHz to 40 GHz
- Outstanding Versatility
- Excellent Phase and Amplitude Matching

Dividers

KRYTAR's power dividers offer the widest frequency coverage in a single package on the market and provides superior performance. Targeting broadband electronic warfare (EW) systems and complex switch-matrix applications, for example, KRYTAR has used its proprietary design to produce a wide assortment of matched-line directional dividers (MLDD) with ultra-high performance over a broadband frequency range.



[\(/products/dividers/2-way-power-dividers/\)](/products/dividers/2-way-power-dividers/)

[2-Way Power Dividers \(/products/dividers/2-way-power-dividers/\)](/products/dividers/2-way-power-dividers/)

- 0.5 to 45.0 GHz
- Wilkinson
- MLDD



[\(/products/dividers/mldd-4-way-power-dividers/\)](/products/dividers/mldd-4-way-power-dividers/)

[4-Way Power Dividers \(/products/dividers/mldd-4-way-power-dividers/\)](/products/dividers/mldd-4-way-power-dividers/)

- 0.5 to 40 GHz
- MLDD
- Patented Designs



[\(/products/dividers/mldd-8-way-power-dividers/\)](/products/dividers/mldd-8-way-power-dividers/)

[4-Way Power Dividers](/products/dividers/mldd-8-way-power-dividers/)

- 0.5 to 26.5 GHz
- MLDD
- Patented Designs

Detectors

KRYTAR detectors are specifically designed for use in today's high-performance microwave instrumentation and systems. KRYTAR family of detectors are designed for such applications as power measurements, analyzing radar performance, leveling pulsed signal sources, AM noise measurements, system monitoring and pulsed RF measurements in ultra-broadband and mm-Wave applications. Many connector options are available.

KRYTAR detectors are typically available from stock to 30 days ARO.

KRYTAR offers complete engineering services for custom designs that meet or exceed critical performance and/or packaging specifications



[\(/products/detectors/zero-bias-schottky-detectors/\)](/products/detectors/zero-bias-schottky-detectors/)

[Zero Bias Schottky Detectors \(/products/detectors/zero-bias-schottky-detectors/\)](/products/detectors/zero-bias-schottky-detectors/)

- 10 MHz – 40 GHz Frequency Range
- Excellent Frequency Response
- Input and Output Connector Options



[\(/products/detectors/planar-doped-barrier-detectors/\)](/products/detectors/planar-doped-barrier-detectors/)

[Planar Doped Barrier Detectors \(/products/detectors/planar-doped-barrier-detectors/\)](/products/detectors/planar-doped-barrier-detectors/)

- 10 MHz – 40 GHz Frequency Range
- Excellent Frequency Response
- Low Level Sensitivity



[\(/products/detectors/broadband-planar-tunnel-diode-detectors/\)](/products/detectors/broadband-planar-tunnel-diode-detectors/)

[Broadband Planar Tunnel Diode Detectors \(/products/detectors/broadband-planar-tunnel-diode-detectors/\)](/products/detectors/broadband-planar-tunnel-diode-detectors/)

- 10 MHz – 18.5 GHz Frequency Range
- Excellent Frequency Response
- Very Low VSWR



[\(/products/detectors/broadband-threshold-detectors/\)](/products/detectors/broadband-threshold-detectors/)

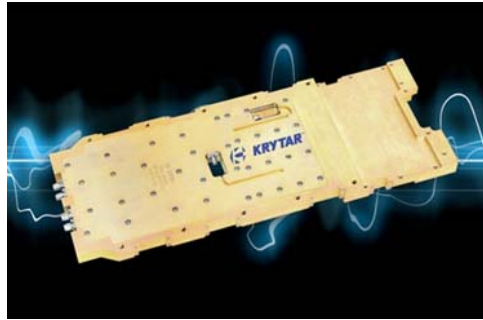
[Broadband Threshold Detectors](/products/detectors/broadband-threshold-detectors/)

[\(http://krytar.com/products/detectors/broadband-threshold-detectors/\)](http://krytar.com/products/detectors/broadband-threshold-detectors/)

- 0.1 GHz – 18.5 GHz Frequency Range
- Hermetically Sealed for High Reliability
- Low Threshold Variation & VSWR

Beam Forming

KRYTAR offers the widest frequency coverage in single-packaged beamforming network designs and provides superior performance in a wide range of RF and microwave applications. KRYTAR's long history of excellence in the design of broadband microwave components offers the unique ability to produce ultra-broadband passive beamforming network solutions.



Features
Frequencies Up to 18 GHz
Ultra-Broadband
RF and Microwave Applications

RF and microwave system engineers can look to KRYTAR to take the confusion and complexity out of their design challenges with unique mechanical and electrical solutions using proprietary computer-aided-engineering (CAE) tools.

KRYTAR beamforming networks are multifaceted assemblies for a wide range of applications including multiple antenna and antenna arrays used in military electronic systems and commercial communications systems. Superior performance and functionality as well as unique form-fit-function designs bring unique solutions to those difficult engineering and manufacturing challenges. Many types of connectors can be designed into the integrated assembly including: SMA, Type-N, APC-7, and 3.5mm.

KRYTAR offers complete engineering services for custom designs that meet or exceed your critical performance and/or packaging specifications.

Coaxial Limiters

KRYTAR has developed a line of broadband coaxial limiters for applications from 0.5 to 18 GHz. The two families of KRYTAR limiters include the Broadband PIN-Schottky Diode Limiters and Broadband PIN-PIN Diode Limiters. These PIN (positive-intrinsic-negative) diode designs exhibit very low insertion loss at a maximum of 2.5 dB and are cylindrical coaxial packages available with SMA female output and SMA male input connectors. KRYTAR diode limiters are broadband passive devices which find uses in receiver and RF component protection in addition to power leveling applications.

Features:

0.5 GHz to 18 GHz

Broadband PIN-Schottky Diode Limiters

Broadband PIN-PIN Diode Limiters



[\(/products/limiters/broadband-pin-schottky-limiters/\)](/products/limiters/broadband-pin-schottky-limiters/)

[Broadband PIN-Schottky Limiters \(/products/limiters/broadband-pin-schottky-limiters/\)](/products/limiters/broadband-pin-schottky-limiters/)

- 0.5 GHz to 18 GHz
- Low Insertion Loss
- Coaxial SMA Connectors



[\(/products/limiters/broadband-pin-pin-limiters/\)](/products/limiters/broadband-pin-pin-limiters/)

[Broadband PIN-PIN Limiters \(/products/limiters/broadband-pin-pin-limiters/\)](/products/limiters/broadband-pin-pin-limiters/)

- 500 MHz to 18 GHz
- Coaxial PIN – PIN diode
- Coaxial PIN – Schottky Diode

Coaxial Adapters

KRYTAR designs and manufactures extremely rugged RF/Microwave coaxial adapters that find uses in a wide array of wireless communications applications, test equipment, and antenna devices for both commercial and military markets.

KRYTAR Coaxial Adapters are available as In Series and Between Series with connector configurations of female-to-male, male-to-female, male-to-male, and female-to-female. Connector types include SMA, 2.92mm, 2.4mm, and 2.92mm to 2.4mm.

KRYTAR Coaxial Adapters are typically available from stock to 30 days ARO.

KRYTAR offers complete engineering services for custom designs that meet or exceed critical performance and/or packaging specifications.

Search by Model Number or Specification:



Features
DC to 50 GHz
SMA / 3.5 mm / 2.4 mm / 2.92 mm

						GHz 1.18, 40.0 to 50.0 GHz 1.25, 50.0 to 67.0 GHz	/pdf/4000_SERIES_ADAPTERS.pdf	
4031	DC	67	In Series	1.85mm	Male to Male	1.15, 18.0 to 40.0 GHz 1.18, 40.0 to 50.0 GHz 1.25, 50.0 to 67.0 GHz	PDF (http://krytar.com/pdf/4000_SERIES_ADAPTERS.pdf)	RFQ
4032	DC	67	In Series	1.85mm	Female to Female	1.15, 18.0 to 40.0 GHz 1.18, 40.0 to 50.0 GHz 1.25, 50.0 to 67.0 GHz	PDF (http://krytar.com/pdf/4000_SERIES_ADAPTERS.pdf)	RFQ
3030	DC	50	In Series	2.4mm	Female to Male	1.10, DC to 27 GHz 1.15, 27 to 40 GHz 1.20, 40 to 50 GHz	PDF (http://krytar.com/pdf/3000_SERIES_ADAPTERS.pdf)	RFQ
3031	DC	50	In Series	2.4mm	Male to Male	1.10, DC to 27 GHz 1.15, 27 to 40 GHz 1.20, 40 to 50 GHz	PDF (http://krytar.com/pdf/3000_SERIES_ADAPTERS.pdf)	RFQ
3032	DC	50	In Series	2.4mm	Female to Female	1.10, DC to 27 GHz 1.15, 27 to 40 GHz 1.20, 40 to 50 GHz	PDF (http://krytar.com/pdf/3000_SERIES_ADAPTERS.pdf)	RFQ
2030	DC	40	In Series	2.92mm	Female to Male	1.10, DC to 27 GHz 1.15, 27.0 to 40 GHz	PDF (http://krytar.com/pdf/2000_SERIES_ADAPTERS.pdf)	RFQ
2031	DC	40	In Series	2.92mm	Male to Male	1.10, DC to 27 GHz 1.15, 27.0 to 40 GHz	PDF (http://krytar.com/pdf/2000_SERIES_ADAPTERS.pdf)	RFQ
2032	DC	40	In Series	2.92mm	Female to Female	1.10, DC to 27 GHz 1.15, 27.0 to 40 GHz	PDF (http://krytar.com/pdf/2000_SERIES_ADAPTERS.pdf)	RFQ
5010	DC	40	Between Series	2.92mm to 2.4mm	Female to Female	1.10, DC to 18 GHz 1.15, 18 to 40 GHz	PDF (http://krytar.com/pdf/5000_SERIES_ADAPTERS.pdf)	RFQ
5020	DC	40	Between Series	2.92mm to 2.4mm	Female to Male	1.10, DC to 18 GHz 1.15, 18 to 40 GHz	PDF (http://krytar.com/pdf/5000_SERIES_ADAPTERS.pdf)	RFQ
5030	DC	40	Between Series	2.92mm to 2.4mm	Male to Female	1.10, DC to 18 GHz 1.15, 18 to 40 GHz	PDF (http://krytar.com/pdf/5000_SERIES_ADAPTERS.pdf)	RFQ
5040	DC	40	Between Series	2.92mm to 2.4mm	Male to Male	1.10, DC to 18 GHz 1.15, 18 to 40 GHz	PDF (http://krytar.com/pdf/5000_SERIES_ADAPTERS.pdf)	RFQ
1030	DC	27	In Series	SMA	Female to Male	1.10, DC to 18 GHz 1.15, 18 to 27 GHz	PDF (http://krytar.com/pdf/1000_SERIES_ADAPTERS.pdf)	RFQ

						1.15, 18 to 27 GHz	/pdf/1000_SERIES_ADAPTERS.pdf	
1032	DC	27	In Series	SMA	Female to Female	1.10, DC to 18 GHz 1.15, 18 to 27 GHz	PDF (http://krytar.com /pdf/1000_SERIES_ADAPTERS.pdf)	RFQ

Coaxial Termination

KRYTAR offers a wide selection of extremely rugged, 50 Ohm mechanical Coaxial Terminations. Coaxial Terminations are useful when terminating unused ports, on isolated ports of hybrids and combiners, and to protect devices from signal reflections.

KRYTAR's terminations are designed to be used in a wide range of ultra-broadband microwave components and test equipment for both commercial and military applications. KRYTAR designs offer reliability, long wear and excellent repeatability.



Features
High Performance: DC to 67 GHz
Extremely Rugged Design
Low VSWR

Many of KRYTAR's terminations have been used to make thousands of measurements and are still within their original performance specifications.

KRYTAR Coaxial Terminations are typically available from stock to 30 days ARO.

KRYTAR offers complete engineering services for custom designs that meet or exceed critical performance and/or packaging specifications

Search by Model Number or Specification:

			1.43, 40 - 67 GHz			/pdf/coaxterm.pdf	
T4M	DC	50	1.25	2.4 mm Male	0.84	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T3M	DC	40	1.2	2.4 mm Male	0.84	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T3MK	DC	40	1.2	2.92 mm Male	0.85	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T3FK	DC	40	1.2	2.92 mm Female	0.80	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T2M	DC	26.5	1.09	3.5 mm Male	0.80	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T2F	DC	26.5	1.11	3.5 mm Female	0.73	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T1M	DC	20	1.05	3.5 mm Male	0.80	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ
T1F	DC	20	1.07	3.5 mm Female	0.73	PDF (http://krytar.com/pdf/coaxterm.pdf)	RFQ

Power Meters

The Krytar Model 9000B is a low cost, high performance CW power meter using a diode based power sensor. The power meter can measure power levels from -39 to +20 dBm and cover frequencies from 100 kHz to 40 GHz. With bench and field service applications in mind, the power meter was designed to be completely portable. The power meter can be used for swept measurement.



Features

Excellent Measurement Speed at All Power Levels

Auto Zero and dB Relative Mode

Completely portable operating on internal rechargeable batteries that offer greater than 12 hours of operation and includes an internal fast battery charger

Built in 50 MHz, 0 dBm Reference Oscillator

V/dB Output Port for: – Swept scalar measurement system – Auxiliary display and bus readings when used with a DVM

Frequency range	100 kHz to 40 GHz
Power range (CW power)	-30 to +20 dBm, usable to -39 dBm
Ranging	Auto-ranging, 2 ranges
Linearity	± 0.05 dB @ 25° C ± 0.10 dB, 10° C to 40° C
Accuracy, power reference	50 MHz, 0 dBm ± 0.05 @ 25° C (NIST traceable) ± 0.10 dB, 10° to 40° C
Sensor zero	Auto zero
Digital 3¾ display	-39.99 to +39.99 dBm (0.01 dB steps) 3 readings/sec
dB/Volts output port	0.1 Volts/dB, -4.0 to +4.0 V, 0.02 dB steps < 1 ms R/F time > 1 kHz 3 dB BW
Temperature	Operating: +10° to +40° C Storage: -20° to +70° C
Power requirement	+10 to +24 VDC, 500 mA 115 VAC $\pm 10\%$, 10 W 230 VAC $\pm 5\%$, optional
Internal batteries and charger	> 12 hours of operation. Charging time approx. 4.5 hrs.

Power Meter Accessories:

Carry Case - OPT 501

12V Car Adapter Plug - OPT 502

Power Meter Options:

RS 232 Serial Port - OPT 002

RS 232 Serial Port - OPT 002

Rack Mount Kit - Single Instrument - OPT 101

Rack Mount Kit - Dual Instrument - OPT 102

Power Sensors

KRYTAR 9500A Series Diode Power Sensor are available with operating frequency range from 100 KHz to 40 GHz. KRYTAR Power Sensors are an excellent choice for use in design, manufacture and maintenance of RF and microwave communication equipment.

KRYTAR's Power Sensors simplify your measurement equipment requirement when used in conjunction with KRYTAR's Model 9000B Power Meter for accurate and repeatable power measurements. The 9000B power meter with a 9500A Series power sensor offers the user exceptional measurement speed and accuracy at an affordable price.

KRYTAR Power Sensors are typically available from stock to 30 days ARO.

KRYTAR offers complete engineering services for custom designs that meet or exceed critical performance and/or packaging specifications

Search by Model Number or Specification:



Features

- 100 KHz to 40 GHz
- Diode Based Design
- Measure Low Power Levels
- Instantaneous Measurements

				(± 0.02 dB)		/pdf/9500a.pdf	
9530A	100	26.5	+21 dBm	-20 to +20 dBm (± 0.02 dB)	3.5 mm Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ
9520A	100	20	+21 dBm	-20 to +20 dBm (± 0.02 dB)	3.5 mm Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ
9517A	100	18	+21 dBm	-20 to +20 dBm (± 0.02 dB)	N Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ
9515A	100	12.4	+21 dBm	-20 to +20 dBm (± 0.02 dB)	N Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ
9516A	100	12.4	+21 dBm	-20 to +20 dBm (± 0.02 dB)	3.5 mm Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ
9510A	100	4	+21 dBm	-20 to +20 dBm (± 0.02 dB)	N Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ
9511A	100	4	+21 dBm	-20 to +20 dBm (± 0.02 dB)	3.5 mm Male	PDF (http://krytar.com/pdf/9500a.pdf)	RFQ

Custom Solutions

- Custom Extensions of Standard Products
- Custom Designs for Specific Applications
- Prototyping

With more than 35 years experience, KRYTAR has a commitment to technical excellence and customer satisfaction. These principles form the basis for the steady growth that has earned KRYTAR an enviable reputation in the microwave community.

Offering more than 200 standard off-the-shelf components, KRYTAR is able to quickly meet your broadband needs with deliveries ranging from IN-STOCK to 4 weeks ARO on our most common products. Our focus on ultra broadband components guarantees the quality and performance customers have grown to expect over the years.

KRYTAR's close relationship with its customers enables the company to provide superior customer service and support a variety of custom solutions. Our engineers and manufacturing team have worked over the years to design custom solutions meeting the highest performance technical requirements tailored for the most challenging applications. If your application pushes the boundaries of what you see in our catalog or on our website, please contact us to discuss your requirements!