A-INFO

AINFO

Dedicated to Antenna, Waveguide Components, and MW RF Components since 2000

A-INFO

Company Profile

1

History

Superior Quality Since 2000.

2

Scale

3 offices

Chengdu, Beijing, USA

3

Staff

30 Employee

>50%Technical Engineers

The New Factory

Been in use since 2019

A-INFO

Founded in 2000, AINFO has three branch offices in Beijing, Chengdu, and USA.

AINFO design and manufacture with high precision machining
Product line:
Antenna

- Horn (Broadband, Octave, Multi Octave, Dual Pol. Standard Gain, Open Ended WG Probes, OMT, Conical, Corrugated Conical, Corrugated Feed, Lens, Circular Pol. 100MHz – 500GHz)
- Spiral (Cavity Backed, Helical, 200MHz – 40GHz)
- Log Periodic (Linear Polarization & Dual Linear Polarization, 30MHz – 6GHz)
- Discone-Type (40MHz – 18GHz)
- Bi-Conical (100MHz – 40GHz)
- Radar Trihedral Corner Reflector

Waveguide Components: Electric Rectangular / Double Ridge Switch, High Directional Coupler, Ultra High Power Load, World Class Precision Calibration Kit, High Pass / Low Pass / Band Pass Filter / To Coaxial Adapter / OMT / E, H, M Tee / Rotary Joint

MW RF Components: Switch, Power Divider, Coupler, Filter & Hybrid

Application: EMC /EMI Testing, Radar, Telecom, Aviation, R&D, etc.

Quality Control System: ISO 9001: 2015 and GJB9001 certified

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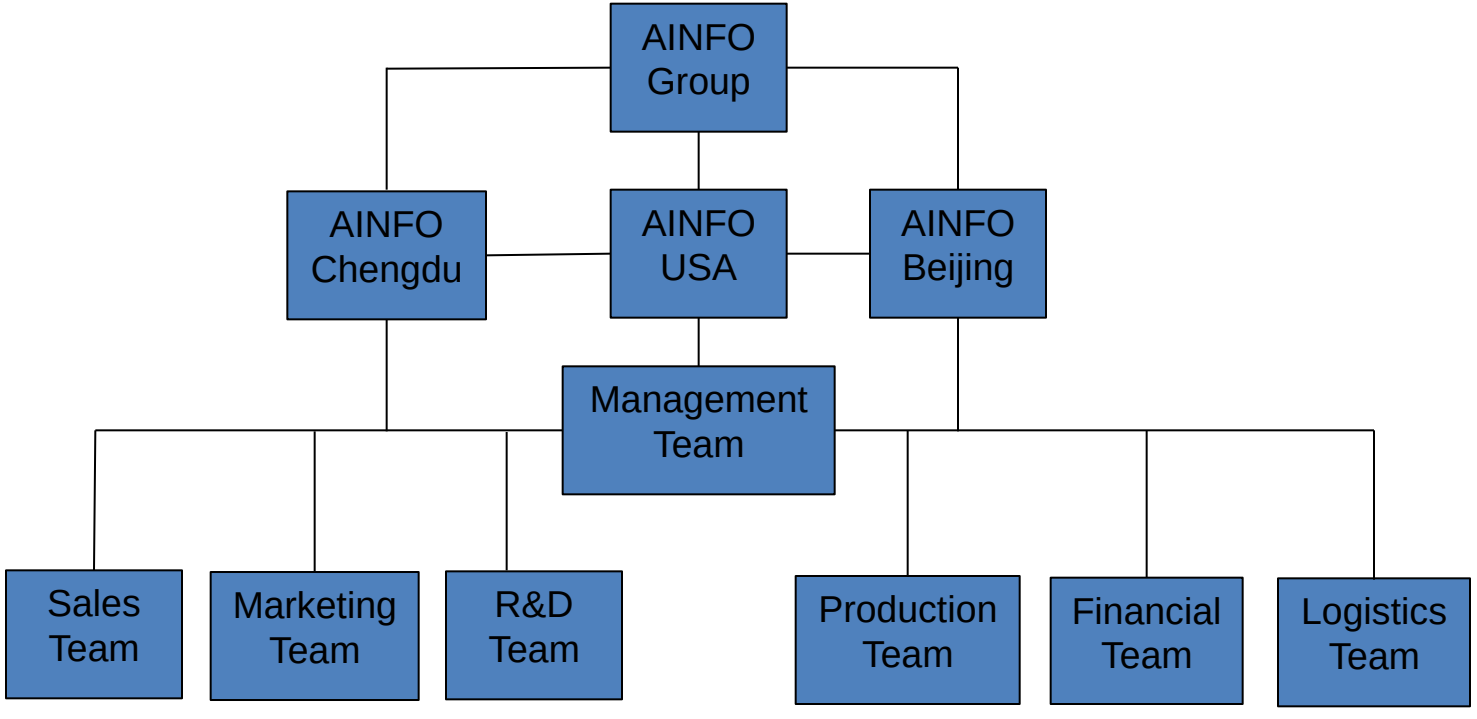
Organization Chart



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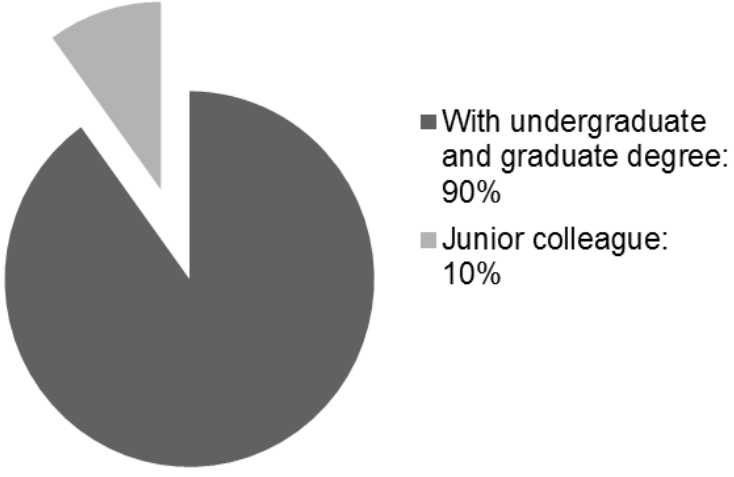
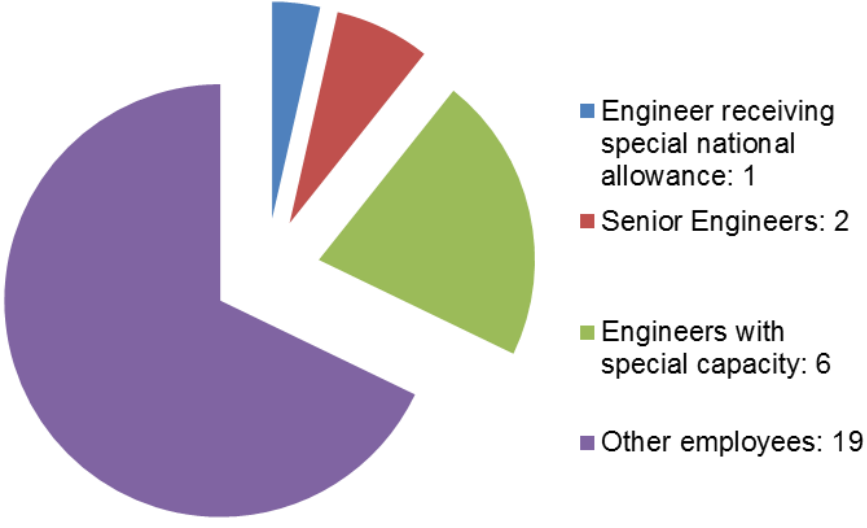
Employees' educational degree



Employees with undergraduate and graduate degree



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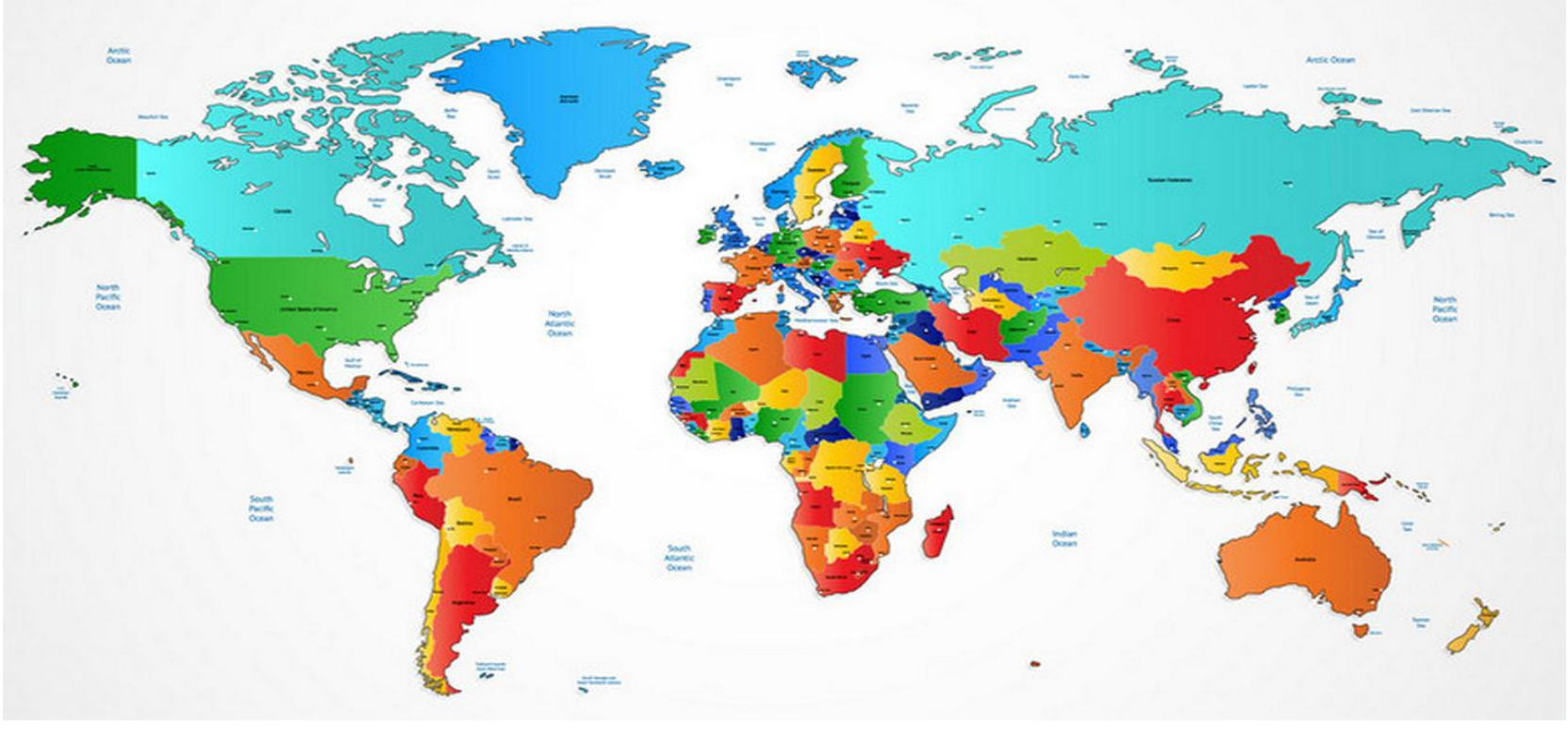
Global Sales Network



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Worldwide Customers

R&S, SIMENS, NEC , NOKIA, Agilent, Intel, US Army Radio Laboratory, NASA, Boeing, Airbus, MIT, Stanford University, Harvard University, etc.

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Huawei, CAS, CLP and its laboratories, AVIC, CSIC, CASIC, CASC and its key laboratories. THU, BUAA, SEU, UESTC, Xidian University.

Happy Customers' Comments

AINFO's products are impressive and VSWR is quite excellent particularly.

---Rohde & Schwarz German Headquarter

AINFO's waveguide coupler satisfactory as it is quite stable in power synthesis testing system

---HUAWEI Technology Co., Ltd @ China

We are able to test most of the parameters and have found that they match your specifications/test data very well. We have had experiences with other vendors in the past where the performance of the antenna did not meet the published specifications. Now we are waiting on our customer and if this antenna will meet their requirements.

---A. H. Systems, Inc. @ USA
http://www.AHSystems.com

This is the same customer who you supplied the LB-OSJ-0460-SF and they very impressive with the quality. We have an opportunity to become the antenna supplier of choice and I believe that there will be much more business to come.

---Representation Company @ UK

The project requirements changed and a broadband antenna was no longer required. A narrow band omni antenna was used in its place. Your antenna is very good product with a good price and a high specification. If I have a requirement for such an antenna on another proposal or project I would consider the AINFO PZ-850/P first.

---Intl Sr. System Engineer, PSPC
Communication SYSTEMS/HARRIS CORPORATION @ USA

There is another PO coming with remaining parts. Thank you for your help our Dallas team is very pleased with your company.

---Customer: www.camber.com @ USA

Just to confirm, the parcel from you was delivered here yesterday, and the Waveguide transitions are looking very nice!
Thanks too for the set of catalogues-that's two sets that I now have-I'll pass one onto someone else here.

---Australia Customer

Thanks for the info. I was working with some AINFO antennas yesterday.
for the first time: impressive

---Carleton University @ Canada

Yes the equipment worked fine and we are happy with it. Thanks for informing me about the new products, I will consider them in the future.
Center for excellence in Signal and Image Processing
Department of Electronic and Electrical Engineering

---University of Strathclyde @ UK

Customer NEXEYA told me that they are happy with the antennas proposed. Thus we should get an order quite soon

---Representation Company

The VSWR bandwidth is great as well as the price.

---US Based Representation Company

目前客戶的實驗室使用到現在,沒有不滿意的表示.
教授也沒有表示任何的意見. 不像上一次提供台灣廠商的產品,從頭罵到尾.
感謝您們提供的產品. 據我所知,前幾天碰到台灣大學電機工程系的研究生,他們的Horn Antenna也是使用 貴司的產品.

---Taiwan Representation Company

AINFO product is tested at NSI (www.nearfield.com), National Institute of Metrology, A.H. system, and other strict and famous measurement organizations worldwide to ensure technical competitiveness internationally. We are glad to announce that the efforts are actually paid off.

AINFO design engineers adopt the most up-to-date design tool and spend tremendous time to optimize the result. When it comes to the manufacturing, AINFO's harsh standard & complete QA process certainly guarantee the superior quality and customer satisfaction.

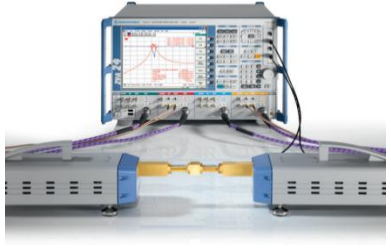
AINFO works very hard to improve the competitiveness of price and delivery time so that with AINFO, customers can acquire the most cost-effective products with immediate delivery. (Items marked "In Stock" on www.ainfoinc.com are actually in stock and ready to be delivered)

To ensure superior quality and visuals, AINFO will run tests one more time before shipment and 3 times before reaching our customers' hand

With professional technical support, your RFQ is answered within 24 hours and customization requests are answered in no later than 72 hours.

A-INFO

Facility: 5 HPC (High Performance Computer)
Keysight, 67GHz Vector Network Analyzer, R&S, ZVA-Z110, 110GHz extender option
Keysight: 40GHz VNA / 6GHz VNA R&S:VA24-4
12 square meters high grade clean room
3 Meter test chamber 10 Meter test chamber
Millimeter wave test bench



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Broadband Horn Antenna

Open Boundary Quad-Ridged Horn Antenna

Corrugated Conical Horn Antenna

Cavity Backed Spiral Antenna

Waveguide VNA Calibration Kits

Waveguide High Directional Coupler

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Product Line	Product Name	Frequency（GHz）	Polarization / Directivity
Antenna Products AINFO provide a series of antenna product that make precision measurement very efficient. It covers 30MHz to 325GHz and meets the IEEE 17025 standard. Outstanding characteristics are: Ultra wide band, excellent VSWR, high gain, compact structure & light weight. These horns are ideal for EMI testing, direction finding, surveillance, antenna gain, pattern measurements, and other applications. AINFO can customize antenna products according to special specifications and applications, such as: aircrafts, ships, vehicles, and aeronautical application.	Broadband Horn	0.1 to 110	Linear / Directional
	Octave Horn	1 to 12	Linear / Directional
	Multi Octave Horn	0.84 to 40	Linear / Directional
	Dual Polarization Horn	1 to 67	Dual Linear / Dual Circular / Directional
	Open Boundary Dual Polarization Qua-ridge Horn	0.4 to 40	Dual Linear / Dual Circular / Directional
	Standard Gain Horn (SGH)	0.32 to 500	Linear / Directional
	Diagonal Horn	0.75 to 220	Linear / Directional
	Open Ended Waveguide Probes	0.32 to 110	Linear / Directional
	OMT Horn	5 to 110	Dual Linear / Directional
	Conical Horn	8.2 to 110	Linear / Circular / Directional
	Corrugated Horn	8.2 to 110	Linear / Circular / Directional
	Corrugated Feed Horn	0.75 to 220	Linear / Circular / Dual Linear / Dual Circular / Directional
	Lens Horn	7.9 to 112	Linear / Circular / Directional
	Circular Polarization	1 to 40	Circular / Directional
	Cavity Backed Spiral	0.5 to 40	Circular / Directional
	Conical Log Spiral	0.2 to 10	Circular / Directional
	Helical Spiral	0.1 to 10	Circular / Directional
	Microstrip Array	0.4 to 40	Linear / Dual Linear / Circular / Directional
	Microstrip Omni	0.2 to 18	Linear / Omni
	Log Periodic	0.03 to 18	Linear / Dual Linear / Circular / Directional
	Discone - Type	0.04 to 40	Linear / Omni
	Bi-Conical	0.1 to 40	Linear / Omni
	Radar Trihedral Corner Reflector		

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WG Component		
Frequency: 320MHz to 325GHz 3 WG Type: Rectangular, Circular, and Double Ridge Flange: Commonly and Precision Outstanding Characteristics: Low Insertion Loss & Low VSWR	VNA WG Calibration Kit: World Class Precision Level Keysight VNA, RS ZV* Series TRL / SSLT 2 Types of Flange Available: Common / Precision	Electric WG Switch: Rectangular, Double Ridge, E & H Plane, Position Indication
	WG Coaxial Adapter: Right Angle, Endlaunch, Double Ridge & High Power	WG Filter: Low Pass / High Pass / Band Pass FULL Band
	Cross Coupler: W+C-XX / WL+C-XX / WL+Cx-XX	Rotary Joint: I / U / L Type Single Channel / Dual-Way / 3-Way
	Rectangular High Directional Coupler: WC-XX / WCx-XX / WUCx-XX / WDCx-XX / WDXCx-XX	OMT
	Double Ridge High Directional Coupler: DRWCx-XX / DRWDCx-XX / DRWDXCx-XX	WG Detector
	Loop Coupler: WHCx-XX / WHHCx-XX / WDHCx-XX	WG Circulator
	Tee: ET / HT / MT	WG Isolator
	WG Load (Rectangular & Double Ridge): Precision / Low Power / Low-Medium Power / Medium Power / High Power	WG Attenuator
	WG Short Plate: Rectangular & Double Ridge Offset Short Plates: Rectangular & Double Ridge, 1/4, 1/8, 3/8	Transition: Rectangular to Rectangular / Circular / Double Ridge / Double Ridge to Double Ridge / Special Frequency
	Spacer: Rectangular & Double Ridge, 1/4, Customization w/ MOQ Flange: Rectangular & Double Ridge, Worldwide Standard	Straight / Bend / Twist Waveguide: Rectangular / Double Ridge, E & H Plane, 30 / 45 / 60 / 90º

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MWRF

Up to 110GHz

PIN Switch:

Power Divider: 0.0002GHz up to 67GHz

Coupler: 1MHz up to 67GHz

Filter: Loss Pass, High Pass, Band Pass;
Cavity, LC, Suspended Substrate Stripline, Coaxial & Waveguide

Hybrid: 0.5MHz up to 50GHz

High Precision Connector:

SMA - 27GHz N - 18GHz TNCA - 18GHz SSMA - 40GHz 2.92mm - 40GHz 2.4mm - 50GHz
1.85mm - 65GHz 1.0mm - 110GHz

Adapters:

In Series & Between: 7mm (18GHz) / Quick Replacement (SMA / N) / N / SMA / 3.5mm (33GHz) / 2.92mm / 2.4mm / TNC / TNCA / 1.85mm / 1.0mm

Cable Assembly:

Frequency Range: DC – 110GHz

Connector: SMA, Type, TNC, BNC, 3.5mm , 2.4mm, 2.92mm, 1.85mm, 1.0mm

Option: VNA Amplitude Stable, Phase Stable, Semi-Flexible, Flexible, Low Loss, Semi-Rigid, Armor

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① Antenna

② Waveguide Components

③ MWRF Components

1. Horn Antenna
2. Spiral Antenna
3. Microstrip Antenna
4. Log Periodic Antenna
5. Discone-Type Antenna
6. Bi-conical Antenna

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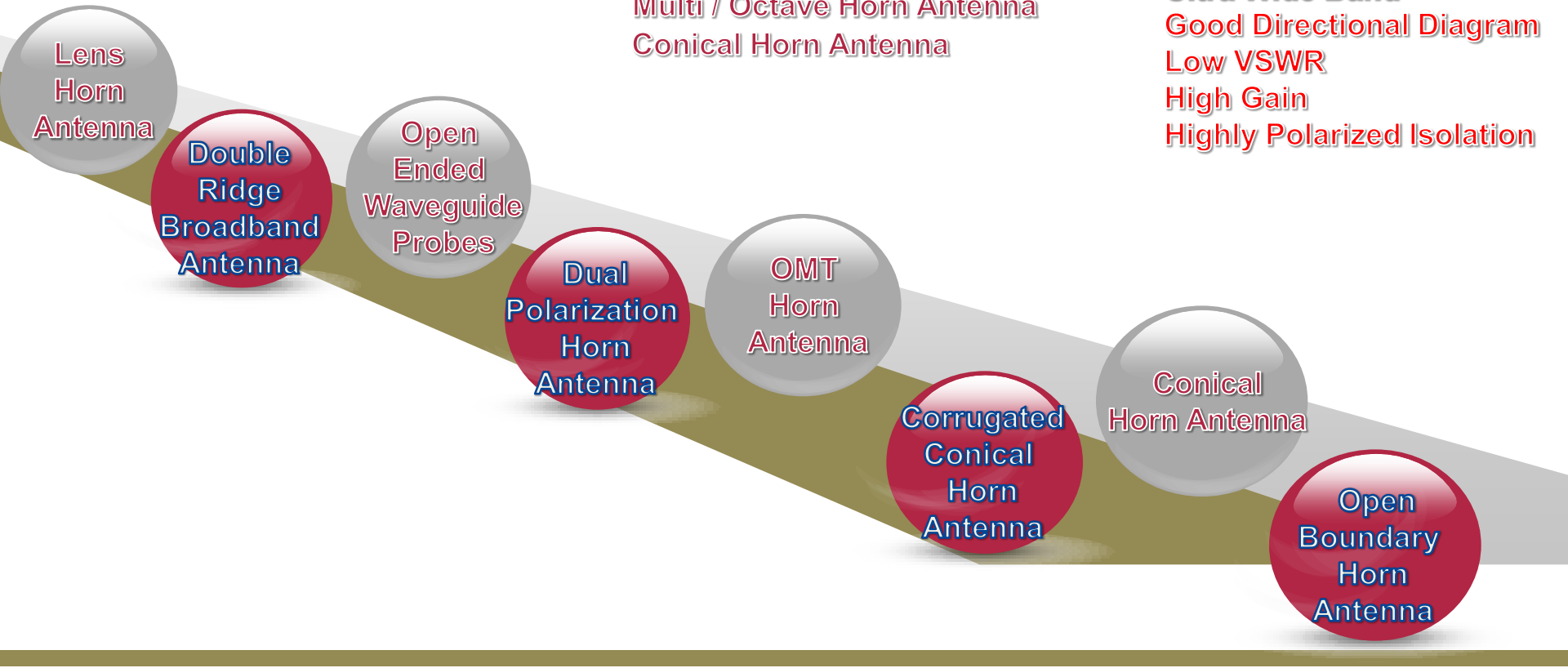
Horn Antenna

Complete Specification

Standard Gain Horn Antenna
Multi / Octave Horn Antenna
Conical Horn Antenna

Advantage

Ultra Wide Band
Good Directional Diagram
Low VSWR
High Gain
Highly Polarized Isolation

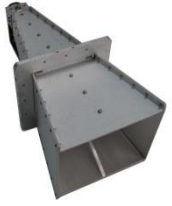


Broadband Horn Antenna

AINFO's LB series' broadband horn antennas are linearly polarized which provide an efficient and low cost way for accurate measurement. With a wide range of frequency ranges from 100MHz to 110GHz, this antenna is best used for EMI testing, direction finding, surveillance, antenna gain and pattern measurements, etc. Outstanding characteristics: ultra wide, high gain, low VSWR, and light weight. AINFO can also provide customizations according to a customer's needs, especially the broadband horn antennas with special gain requirements.

LB-225
0.2-2.5GHz

LB-10180, 1-18GHz
With outdoors radome



LB-20180H, 2-18GHz
High Gain: 20dB

LB-180400
18-40GHz

LB-60670
6-67GHz

LB-1001100
10-110GHz

Specialty

LB-7180 covers 700MHz to 18GHz. In full operating band, its typical VSWR is 2.0. It also has excellent gain flatness and no leakage in pattern measurement. High transmissivity, Low Loss, ultra light-weight radome, excellent for outdoors application is also available. LB-7180, cover 700M to 18GHz, compare w/ ETS 3115 in US and SAS-571 from A. H. System, AINFO's LB-7180-NF is actually w/ better VSWR and flatter gain.

	AINFO Inc.	ETS	Comparison
Model	LB-7180-NF	3115	
Frequency Range	700MHz – 18GHz	750MHz – 18GHz	AINFO's freq. range wider
VSWR	2.0 Typ, 6.6919 @ 700MHz	< 1.5:1 5.5 W 750MHz	
Power	300 Watts CW	500 Watts CW	
Polarization	Linear	Linear	Same
Radiation Pattern	Uni-Directional	Uni-Direcrtional	Same
Gain	2.68 dBi @ 700 MHz 6.0 dBi @ 800 MHz 14 dBi @18GHz	2.5 dBi @ 750MHz 13 dBi @ 18GHz	AINFO's better
Average Gain	12 dB Typ.		
Beam Width @ -3 dB	E-Plane: 11.82 °- 100.77 ° H-Plane: 10.57 °- 75.92 °	E-Plane: 10 °- 97 ° H-Plane: 10 °- 75 °	
Front to Back Radiation	22.0 dB Typ.	20 dB	
Impedance	50Ohms	50 Ohms	Same
Connector	"N" Female	"N" Female	Same
Length	244mm	279mm	AINFO's smaller
Height of Aperture	160.5mm	159mm	AINFO's bigger
Width	228mm	244mm	AINFO's smaller
Material Construction	Aluminum	Aluminum	Same
Finish	Aluminum Passivation	Red side Plates	
Mounting + Tripod Mounting	¼" x 20 thread	¼" x 20 thread	Same
Weight	1.5kg	1.8kg	AINFO's lighter

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NEWEST

Broadband Horn Antenna

5G

LB-40400-KF

4-40GHz

7-17dBi

LB-45500-2.4F

4.5-50GHz

4.5-20dBi

LB-60670-1.85F

6-67GHz

6-20dBi

Compatible: ETS 3116C

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NEWEST!!!

10-110GHz UWB Horn Antenna

LB-1001100-1.0F

Frequency: 10-110GHz

Gain (dBi): 5-17

Linear Polarization

Output: 1.0mm Female

Cover Popular 5G Bands:

Asia: 26.5-29.5 GHz

North America: 27.5-28.35 GHz, 37-40 GHz, 47.2-48.2 GHz

Europe: 24.25-27.5 GHz, 31.8-33.4 GHz, 40.5-43.5 GHz

WRC-19: 37-43.5 GHz, 45.5-47 GHz, 66-71 GHz

Corrugated Horn Antenna

With a frequency range from 8.2 to 110 GHz, the Corrugated Conical Horn Antennas are widely used for radar, satellite communication, and surveillance

Features:
> Very symmetrical radiation pattern（axial symmetry）
> Very low cross polarization
> Low side lobe: in the frequency range of
Whole Waveguide: -25dB (typical)
Narrowband: -40dB (typical)
> Low return loss
> Linear, dual, and circular polarizations available
> Square or circular waveguide output with relevant waveguide coaxial adapter for choices.
> Optional standard gain: 10dB, 15dB, 20dB, 25dB
> Customizable

LB-CH-15（59-67GHz）
Linear Polarization
Left/Right Hand circular polarization
High Gain：25dB

LB-CH-90-20（8.2-12.4GHz）
Linear Polarization
High Gain：20dB
NASA Purchased Products!

Lens Horn Antenna

Applications

- MVDS (Multipoint Video Distribution System)
- LMDS (Local Multipoint distribution service)
- Traffic Control System
- Secure Communications System
- Electro - Magnetic Compatibility (EMC) Measurement
- Compact / Mobile System
- Point to Point Radio Link
- Vehicle Anti-collision Radar
- Traffic Tolling System
- Short Range Radar
- Radiation Monitoring System
- Dual Polarized System

LB-CL-28-C20
（35-35.2GHz）
Gain: 28dB

Features

Up to 112GHz
Linear, Dual, and Circular Polarization
Rectangular / Circular Feed
Optional Protective Membrane
Choice of Mounting Configuration
Choice of WG to coaxial adapter online:
www.ainfoinc.com/en/p_wr_wca.asp

Dual Polarization Horn Antenna

Dual Polarization Horn Antennas range from 1 – 54GHz, with options to switch to Linear Polarization, Left – Handed Circular Polarization, Right – Handed Circular Polarization, Dual Circular Polarization, and 4 Polarization Switchable
Application: EMC, EMI, OAT, Satellite Communication & Surveillance

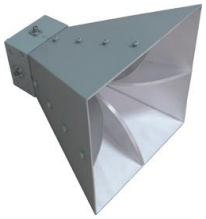
Feature:

> Ultra wide band from 1GHz to 54GHz
> Low VSWR in full band: 1.5:1 Typ.

> Excellent Gain Flatness & Radiation Pattern
> Good Port Isolation: 35dB(typical)

LB-OSJ-0460

> Polarization Option: Vertical Linear, Horizontally Linear, Left – Handed Circular, Right - Handed Circular, Dual Circular Polarization, and Polarization Switchable



LB-SJ-10100
1-10GHz

LB-SJ-20180
2.0-18.0GHz

LB-SJ-180400
18-40GHz

Open Boundary Quad-Ridged Horn Antennas

Ultra wideband, from 400MHz to 18GHz, low VSWR, and good performance, compact size, low sensitivity of phase center with change of frequency

0.4-6GHz Dual Polarization Horn Antenna Cross Reference (AINFO & ETS)		
Product Number	LB-OSJ-0460 (Chengdu AINFO Inc.)	3164-06 (ETS)
Type	Open Boundary	Open Boundary
Frequency Range (GHz)	0.4 – 6.0	0.3 – 6.0 Although indicated to start from 0.3GHz, the VSWR below 0.4GHz is very high and basically useless
Polarization	Dual Linear	Linear or Circular Polarization (with Hybrid Coupler)
Gain (dBi)	4 – 13 (full bandwidth) 4 – 8.5 (400 – 800MHz) 8.5 – 10 (800 – 2000MHz) 10 – 14.5 (2 – 6 GHz)	4 – 12.5 (full bandwidth) 4 – 8 (400 – 800MHz) 8 – 10 (800 – 2000MHz) 10 – 13.5 (2 – 6 GHz)
VSWR	2.0 Typ. 1.5 Typ. (0.4 – 0.8 GHz) 1.2 Typ. (0.8 – 4.0 GHz) 1.5 Typ. (4 – 6 GHz) Very Flat	2.0 Typ. 1.5 Typ. (0.4 – 0.8 GHz) 1.5 Typ. (0.8 – 2.0 GHz) 2.0 Typ. (2 – 6 GHz) Not very flat, high 2.5 @ 2.5GHz & @ 4.7GHz
3dB Beam Width ( )	80 – 30	120 – 18 Too wide, indicating varied gain
Cross Polarization Isolation (dB)	20 dB Minimum 30 Typ. (0.4 – 1.5GHz) 40 Typ. (1.5 – 6.0GHz)	25 dB Minimum 30 Typ. (0.3 – 1GHz) 40 Typ. (1 – 6GHz)
Impedance (Ohms)	50	50
Connector	SMA-Female	SMA-Female
Size (mm) (L x W x H)	510 x 510 x 550	514 x 500 x 500
Weight (Kg)	Approximately 9.5	9.3
Material	Aluminum	Aluminum

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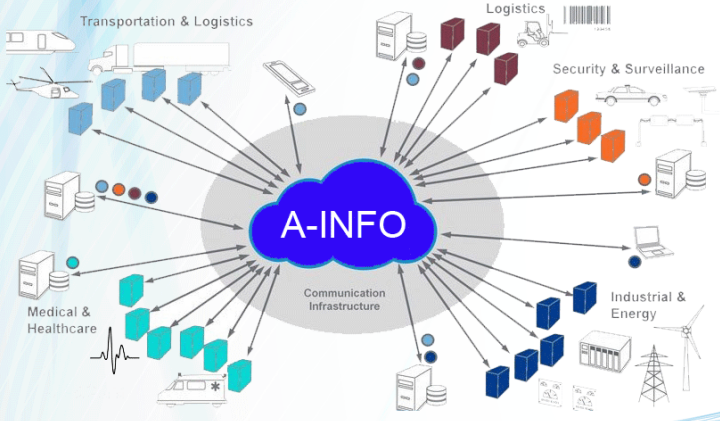
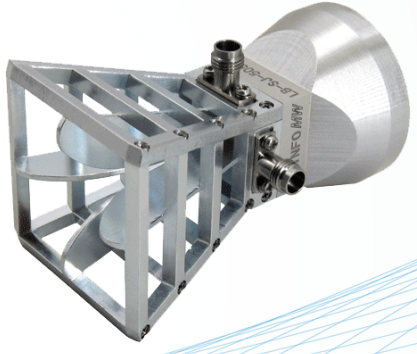
NEWEST!!!

5-50GHz Broadband Dual Pol. Antenna

5G





P/N: LB-SJ-50500

Frequency:5-50GHz

Dual Polarization

Output: 2.4mm/1.85mm

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NEWEST!!!

24-50GHz Broadband Dual Pol. Antenna For 5G Measurement

LB-CH-28-20-T68-C-2.4F

Frequency: 24-50GHz

Gain (dBi): 10, 15, 20, 25

Dual Polarization

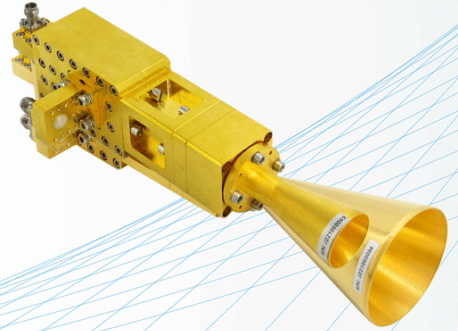
Output: WR28/2.4mm-50K

Cover Popular 5G Bands:

Asia: 26.5-29.5 GHz

North America: 27.5-28.35 GHz, 37-40 GHz, 47.2-48.2 GHz

Europe: 24.25-27.5 GHz, 31.8-33.4 GHz, 40.5-43.5 GHz



LB-CNH-28-20-T68-C-2.4F

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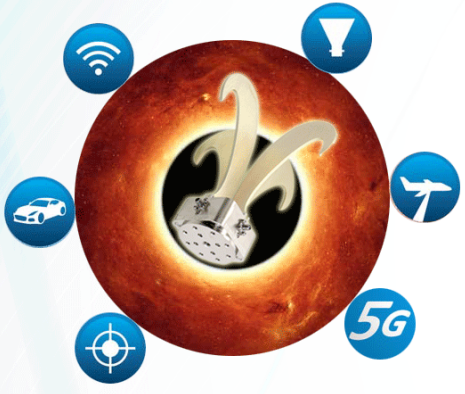
1-20GHz Open Boundary Dual Pol. Antenna



> Near Field and Far Field Test
> CATR Systems
> Automotive Antenna Test
> Radar Cross Section
> Target Simulation
> Wireless
> OTA

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Standard Gain Horn Antenna

SGH antennas have all adopted linear polarization, making measurements more efficient with a wide range from 320MHz to 500GHz. Widely used in pretty much every single section of testing and measurement. High Gain, Low VSWR, Compact Structure, Light Weight.

High Transmissivity, Low Loss, Ultra Light Antenna Radome. Specifically designed for excellent performance.

LB-2100-10-C-SF
0.35-0.53GHz, 10dB

LB-2.2-25-A
325-500GHz, 25dB

LB-CNH-90-20-C-SF
8.2-12.4GHz, 20dB

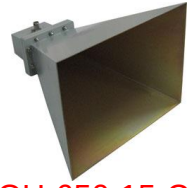
LB-CNH-10-20-A
75-110GHz, 20dB

Octave / Multi Octave

Octave: 1GHz to 12GHz
Multi Octave: 0.84GHz to 40GHz

Widely used in testing and measurement. High Gain, Low VSWR, Compact Structure, and Light Weight.

High Transmissivity, Low Loss, Ultra Light Antenna Radome. Specifically designed for excellent performance.



LB-OH-650-15-C-SF
1-2GHz, 15dB

LB-65180-20-C-SF
6.5-18GHz, 20dB

LB-112-20-C-NF
6-12GHz, 20dB

LB-180400-20-C-KF
18-40GHz, 20dB

A.H. Systems, inc.
(818) 998-0223

Octave Horn Antennas 1 GHz - 8 GHz

Home / Products / Horn Antennas / Octave Horn Antennas

Image Coming Soon

SAS-590-10
1 GHz - 2 GHz
This Octave horn antenna has medium gain and low VSWR; excellent for both immunity and emissions testing.
details

SAS-590-11
2 GHz - 4 GHz
Linearly polarized octave horn antenna.
details

SAS-590-12
4 GHz - 8 GHz
High power handling capability makes this Octave horn antenna excellent for immunity testing.
details

The Following P/N are LB-OH octave horn antennas that A.H. Systems Inc. purchased from AINFO as SAS-590 series:

LB-OH-650-15-C-NF
1GHz-2GHz,15dB

LB-OH-320-15-C-NF
2GHz-4GHz,15dB

LB-OH-159-15-C-NF
4GHz-8GHz,15dB

A-INFO

Open Ended Waveguide Probe

Application: Near Field Measurement
Frequency: 320MHz to 110GHz
Special Protection Radome for High Frequency

975EWGS
0.75-1.12GHz

187EWGN
3.95-5.85GHz

34EWGK
22-33GHz

15EWG1.85
50-75GHz

Circular Polarization Horn Antenna

Circular Polarization is very efficient in discovering the electromagnetic radiation source

Conical Octave Horn from 1 to 40GHz with Left - Hand & Right - Hand Circular Polarization

LB-CP-2040-NF_LHCP/RHCP
2-4GHz

LB-CP-4080-NF_LHCP/RHCP
4-8GHz

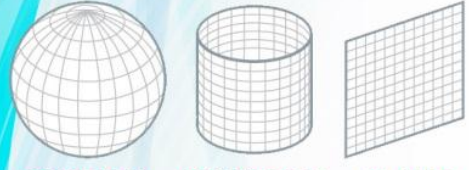
LB-CP-1020-NF_LHCP/RHCP
1-2GHz

A-INFO

NEWEST!!!

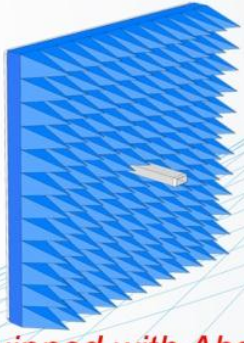
Open Ended Waveguide Probes

NEAR-FIELD METHODS



SPHERICAL CYLINDRICAL PLANAR

975EWGN 90EWGEN 34EWGK 10EWG



Equipped with Absorber

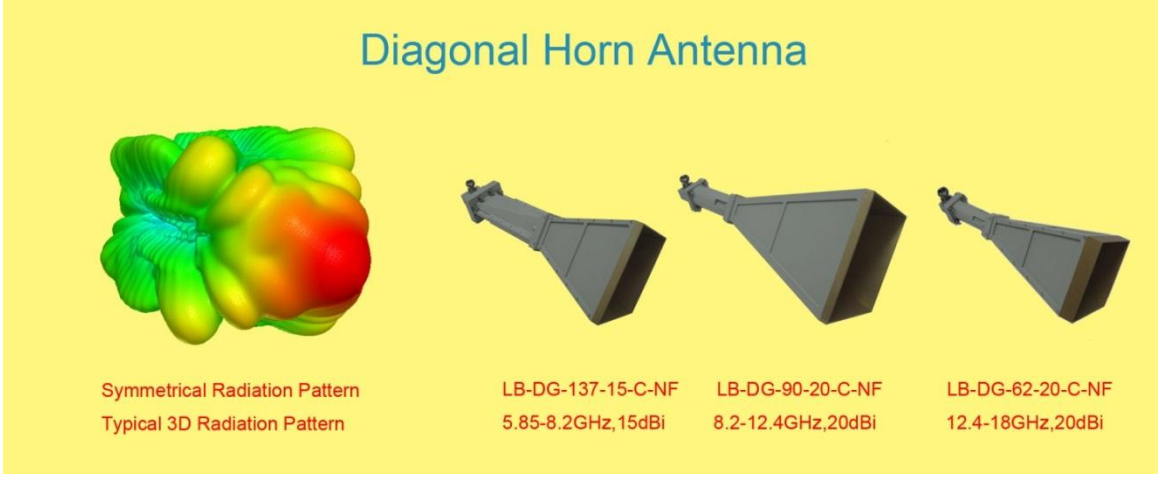
Compatible: MVG OEW Series & FLANN 246 Series

Diagonal Horn Antennas

The LB-DG series diagonal horn antennas are linearly polarized and provide a symmetrical radiation pattern and extremely low side-lobes. A-INFO's diagonal horn antennas can cover from 750MHz to 220GHz frequency range. These horns are ideally suited for illumination of anechoic chamber, antenna far field test, radar cross section (RCS) measurements, and other applications.

Features

> Frequency: 0.75 to 220GHz
> Low VSWR
> Extremely Low Side-lobe: -30dB Typ.
> Cross Pol. Isolation: -40dB Typ.
> High Gain: 15, 20, 25 dBi Typ.



Corrugated Feed Horn Antennas

LB-ACH series corrugated feed horn antennas are axially corrugated aperture design horns. Those corrugated feed horn antennas have features such as: rotationally symmetric radiation pattern, low cross polarization, and stable amplitude taper within operating frequency. There are four kinds of polarization options for the LB-ACH series feed horn antenna: Linear, Circular(RHCP/LHCP), Dual Linear, and Dual Circular. A-INFO's corrugated feed horn antennas can cover from 0.75GHz to 220GHz frequency range. These feed horn antennas are precisely manufactured to minimize the tolerance of aperture corrugated groove and are ideally suited for Compact Antenna Test Range(CATR), Reflector antennas, and other applications. All feed horn antennas have the option of integration with absorber for better gain flatness and radiation pattern.

Antenna Accessories

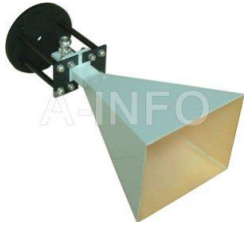
1. Radome

Foam Type: High Transmissivity, Low Attenuation, Ultra Light. Specifically designed For AINFO Antenna. Waterproof and dust proof as is standard

Aviation Type: Aviation Material, Strong Structure suitable for Special Aviation Application. Of course, Ultra light and Min. effect on the performance

2. Mounting Bracket

Round Type suitable for C Type SGH Installation Plate Application



L Type suitable for C Type SGH Tripod Application

Suitable for open boundary quad-ridged horn antennas

3. Tripod

Rigid, Compact Structure, w/ 3 extension up to 2100Cm, Suitable for All AINFO antenna

WOODEN Type available

4. Carrying case

Applicable for All AINFO antenna. Safe, Easy to carry, convenient for storage & Specially designed JUST for you!

Spiral Antenna

1. Cavity Backed Spiral Antenna: 0.5-40GHz

AINFO LX series cavity backed spirals is broadband designed for EMC, surveillance, direction finding, telemetry, and airborne application.

AINFO Spiral Antenna can be used as separate component or as broadband feed for antenna array.

AINFO LX series Spiral Antenna exhibits excellent impedance match and radiation pattern over the broad operating band in a compact and lightweight package.

Ideally suited for amplitude matching and phase/gain tracking. the unit-to-unit uniformity and frequency independent performance is perfect for airborne monitoring receiving systems.

Available in **RHCP** or **LHCP**.

Designed to operate in a harsh environment and meet the extreme specifications of the environment.

5 pcs as a group, amplitude consistency: ±1dB
5 pcs as a group, phase equalization: ±10°

2. Log spiral Antenna: 0.2-10GHz

> > Thanks to the circular polarization, it can quickly discover the radiation source of electromagnetic frequency
> > Band is wide up to 10 octaves
> > Outer circulation lines are able to lose heat efficiently

A-INFO

Cavity Backed Spiral

Specialties

LX-520 (0.5-2.0GHz)

Phase Matching
1-18G, Group 6
2-18G, Group 5

LX-20180 (2-18GHz)

LX-180400 (18-40GHz)
With Radome

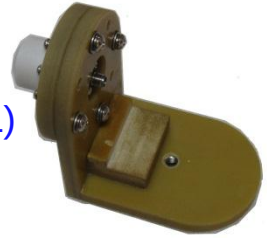
Radome and Bracket

Radome (For Different Application)

Aviation Application

Outdoor Application

Mounting Bracket (L)



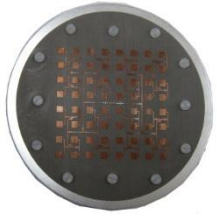
Microstrip Antenna

Frequency: 0.4-77GHz

Features

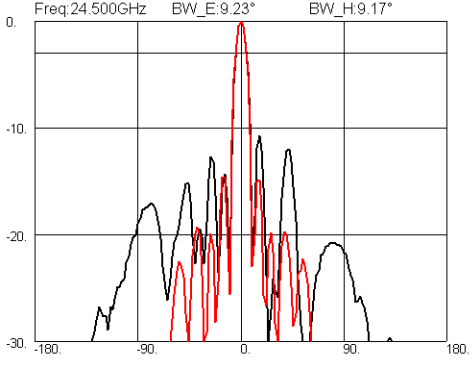
(1) Small Size, Light Weight
(2) Narrow Band, High Gain, Low VSWR
(3) Linear / Dual Linear / Circular
(3) Electrical diversity: The biggest radiation direction of microstrip elements with deferent designs can be adjusted from broadside to end side, easily accessible for all kinds of polarizations.
(4) Easy Integration: It can be integrated with active devices and circuit board.

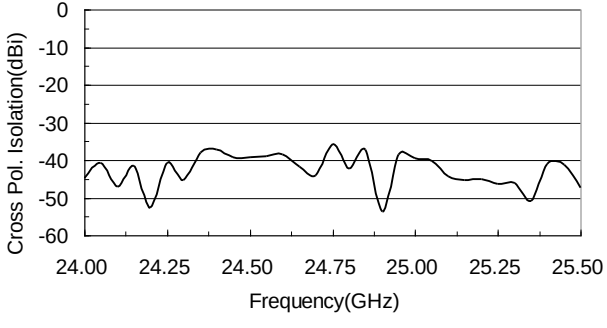
MAA-9600-C41
Dual Linear
9.35-9.85GHz



MMA-240255
24-25.5GHz

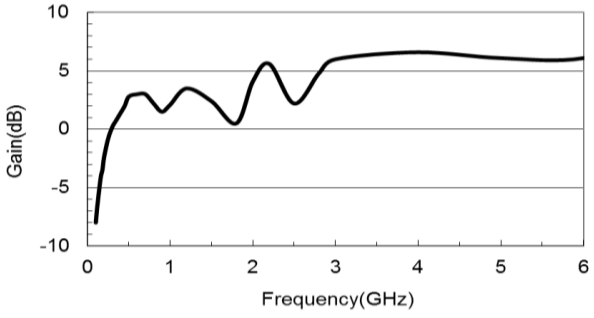
Frequency(GHz)	24.0 - 25.5
VSWR	1.5 Typ. 2.5 Max.
Gain(dB)	22.5 Typ.
3dB Beam Width(º)	9 Typ.
Connector	SMA-Female
Size(mm)	Φ120 x 8.8 (w/o connector)
Weight (Kg)	0.2





Microstrip Omni Antenna

OA-200-6000-0
0.2-6GHz

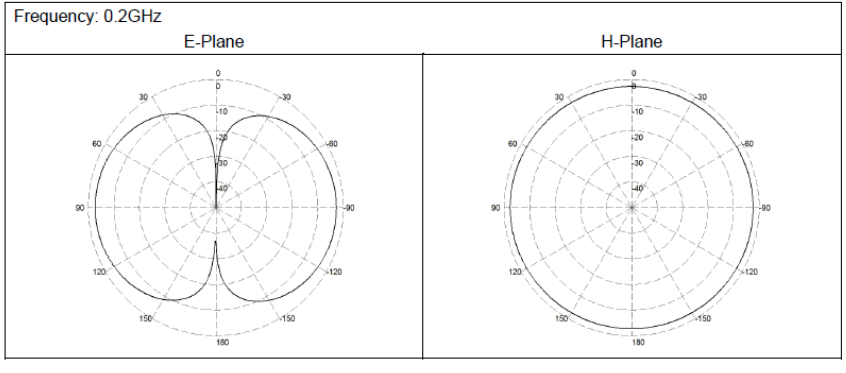


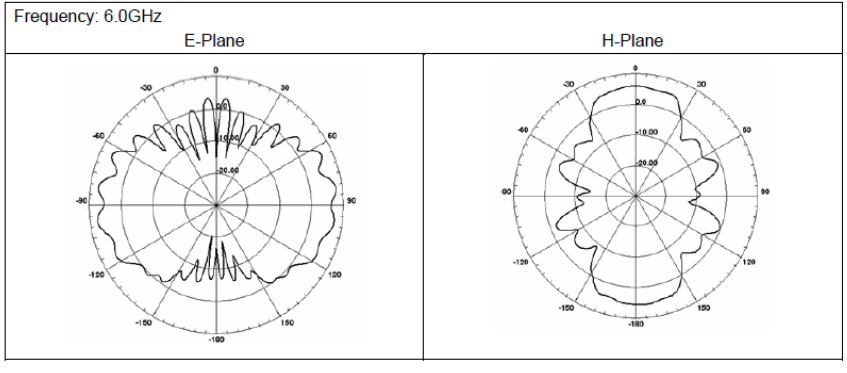
Micro-strip Omni Antenna
Frequency: 0.2-18GHz (Split into several)

OA-800-2700-2.5
0.8-2.7GHz

Ultra wideband, Omnidirectional, and Miniaturization

★AINFO made the best of its technology advantage to miniaturize (d:334mm) for ultra wideband starting low frequency from 200MHz to 6GHz while maintaining relatively high gain and low VSWR. (Typical:2, Max: 5 for low frequency range)





Log Periodic Antenna

Frequency: 30MHz-18GHz, Linear and Dual Linear Polarization

AINFO DS series antennas are light-weight with good gain log periodic designed to transmit and receive signals over broadband. Characteristics include high front-to-back ratio. High quality aluminum material and professional construction design will provide years of trouble-free operation.

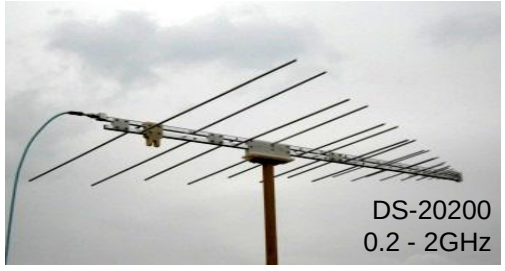
ALL DS antennas are SINGLE Linearly and DUAL Linearly polarized. Supplied in compact kit, easy for packaging and transportation with minimum tool required.

Standard tripod will be provided according to customer's requirement with universal joint.

Wooden tripod is also available for superior performance.

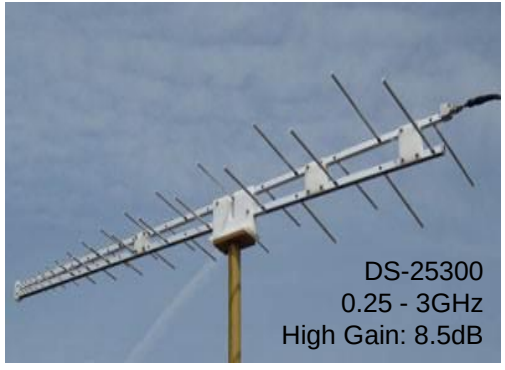
Linear Polarization

DS-3300
0.03 - 3GHz

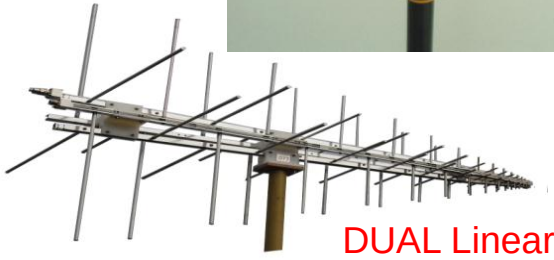


DS-20200
0.2 - 2GHz

DS-40300
0.4 - 3GHz



DS-25300
0.25 - 3GHz
High Gain: 8.5dB



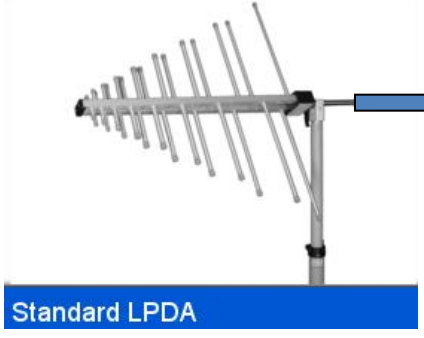
DS-SJ-10400
DUAL Linear Polarization: 0.1 - 4GHz

Log Periodic Antenna

A-INFO's DS series antennas are lightweight, medium gain log periodic dipoles that can cover 30-18000 MHz, and has various different structures recently to match the different holding and fixing.

DS-40300C
0.4-3GHz

DS-40300
0.4-3GHz



Diameter:
φ22 stay

DS-40300E
0.4-3GHz

A-INFO

DS-3300

Log Periodic Antenna DS3300's frequency range is 30MHz-3GHz, commonly used for EMC. Moreover, all specs of DS-3300 achieve the same level as Schwarzbeck: VULB9163, STLP9128D & STLP9128E.

30MHz – 3.0GHz Log Periodic Antenna Cross Reference (AINFO & Schwarzbeck)					
P/N	**DS-3300 (A-INFO)**	**VULB 9163 (Schwarzbeck)**	**STLP 9128 D (Schwarzbeck)**	**STLP 9128 E (Schwarzbeck)**	**Comments**
Freq. Range (GHz)	0.03 – 3.0	0.03 – 3.0	0.08 – 3.0 (nominal) 0.07 – 4.0 (usable)	0.08 – 1.7 (nominal) 0.08 – 2.7 (usable)	AINFO's broader
Polarization	Linear Polarization	Linear Polarization	Linear Polarization	Linear Polarization	Same
Gain (dBi)	-10.0 – 6.0 Typ.	6.4 +/- 1.2 Typ.	9.0 +/- 3.0 Typ.	-14.0 – 7.0 Typ.	Almost Same
VSWR	10.0 Typ. @ 30 – 50MHz 2.0 Typ. @ 50 – 100MHz 1.5 Typ. / 2.0 Max @ 0.1 – 3GHz	15.0 Typ. @ 30 – 50MHz 1.5 Typ. @ 50 – 100MHz 1.5:1 Typ. / 2.0:1 Max @ 0.1 – 3GHz	1.6 Typ. @ f<3.0GHz	1.5 Typ.	Almost Same
3dB Beamwidth ( )	See Pattern	E-Plane: 45 – 65 deg. Typ. @ f>150MHz ≈ 78 deg. Typ. @ f<150MHz H-Plane: 90 – 120 deg. Typ. @ f>150MHz	E-Plane: 60 – 75 H-Plane: 50 – 65	E-Plane: 47 – 87 H-Plane: 41 – 107	
Connector	N-Female	N-Type, Female	N-Female 7/16-Female	N-Female 7/16-Female	Same
Power (W)	300 CW	200W@ (intermitt.) 100W (cont.) (AINFO's could bear much more power)	1kW (const.) @ N-Female 1.5kW (intermitt.) @ N-Female 2kW (const.) @ 7/16-Female 3kW (intermitt.) @ 7/16-Female	1kW (const.) @ N-Female 1.5kW (intermitt.) @ N-Female 2kW (const.) @ 7/16-Female 3kW (intermitt.) @ 7/16-Fema	Schwarzbeck could bear much more power
Weight (Kg)	Around 3.5	3.1	8.1	9.8	AINFO's lighter
Size (mm)	1734 x 1425	1500 x 910 (1240) x 620	1480 x 1480 x 1340	1500 x 1740 x 1400	Almost Same

A-INFO

Omni Antennas

Discone -Type Antenna

Frequency: 30MHz - 18GHz

Discone-type antenna is broadband omni-directional linearly polarized antenna. It has a mounting plate to be used on both the vehicle and the ground, as well as be installed at the end of the metal tube. Our discone-type antenna is designed to transmit and receive signal. The typical gain is 1dBi on the greatest radiation direction. By adding a LNA, it can be used as an active antenna, and the gain can be increased to larger than 10dBi, but will become a receive only antenna.

PZ-350/P
40-500MHz, 300W

PZ-25100/P
250-1000MHz, 300W

PZ-1001800/P
1-18GHz, 80W

Bi-conical Antenna

SZ-10300
0.1-3GHz, 100W

SZ-3004000/P
3-40GHz, 30W

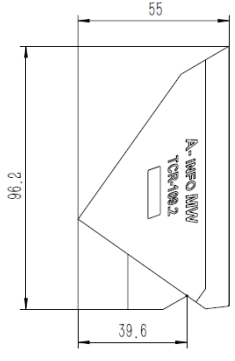
SZ-2003000/P
2-30GHz, 50W

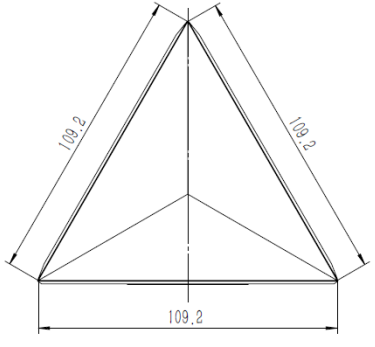
Radar Trihedral Corner Reflector

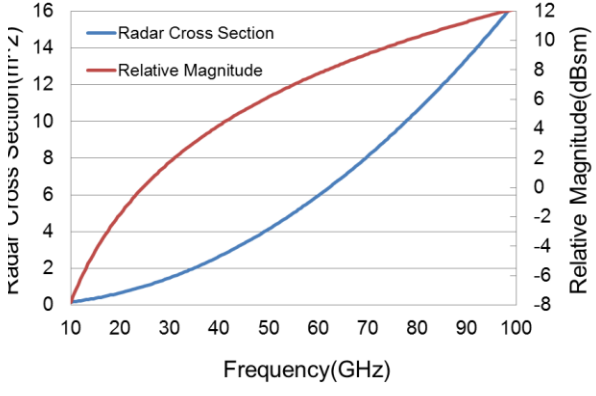
The trihedral corner reflector is a passive device used to directly reflect radio waves back towards the emission source. Therefore, the corner reflector is an useful device for radar system calibration. In general, the corner reflector consists of mutually intersected perpendicular plates. The commonly seen corner reflectors are dihedral and trihedral.
While the dihedral corner reflector is sensitive to its mechanical alignment, the trihedral corner reflect is highly tolerant to misalignment. This offers a convenient way for quick field setup. The trihedral corner reflector is made with three right angle plates which is illustrated in the figure below.

The trihedral corner reflector, featuring a rugged aluminum construction with a gold chemical film finish. The trihedral reflector simulates radar target precisely and is widely used for Radar system calibration. With 1/4 and 3/8 inch threaded holes for a built in mounting bracket, the reflector can be mounted onto a tripod for rapid system setups.
The trihedral corner reflector with the size of the edge length from 1.4” to 30”. Other custom sizes are also available upon request.

TCR-109.2
Edge Size: 109.2mm / 4.3"







A-INFO

① Antenna

② Waveguide Components

③ MWRF Components

1. VNA Calibration Kit
2. Directional Coupler
3. Waveguide Load
4. Waveguide Switch
5. Waveguide Filter
6. Waveguide Coaxial Filter

VNA WG Calibration Kits

The CLKA1 Series Calibration Kits by AINFO are designed to provide accurate TRL (Thru-Reflect-Line) calibration for VNA for measurement and it can support waveguide from BJ9(WR975) to BJ900(WR10) covering frequency range from 0.75 to 110GHz. CLKA1 Series Calibration Kits provide all the necessary components for an accurate TRL calibration. In addition to TRL calibration, CLKA1 Series can also be applied to SSLT(Short-Short-Load Thru) and offset load calibration with the mainstream algorithm. All kit components have both standard flange and precision flange for selection (APF series: designed specifically to ensure the precise alignment and improve test accuracy and repeatability). All of our products are not only designed by ourselves but also manufactured with high precision machines. Plus, it can be shipped to you as soon as your order and payment are received as we keep large amounts of stock.

With our own advantages in technology and processes, the CLKA1 series of waveguide Calibration Kits reached the top level of the industry. Compared with similar series of Keysight, there is very little difference on the third digit after the decimal point so it is replaceable directly.

AINFO's software of the calibration kits is completely compatible with R&S, Keysight, Anritsu and other 41 VNAS.

Waveguide components making up the CLKA1 waveguide calibration kits

Quantity	Description	Notes
2	Waveguide Coaxial Adapter	Right angle, end launch and other adapters.
1	Waveguide Precision Fixed Load	-
1	Waveguide Precision Sliding Load	Options excluded in the standard types
1	Waveguide Spacer	-
1	Waveguide Short Plates	-
1	Waveguide Calibration Section*	Options excluded in the standard types
1~3	Screw Package	Different quantity for each P/N
1	Positional Screw Package	Only used for AINFO's APF precision flanges
1	Allen Driver	-
1	Calibration Software	Options excluded in the standard types
1	Aluminum Alloy Carrying Case	-

Keysight P/N	A-INFO P/N
X11644A	90CLKA1-7RFRF_PB
P11644A	62CLKA1-7RFRF_P0
K11644A	42CLKA1-3.5RFRF_P0
R11644A	28CLKA1-1_P0
Q11644A	22CLKA1-1_P0
U11644A	19CLKA1-1_P0
V11644A	15CLKA1-1_P0
W11644A	10CLKA1-1_P0

Maury P/N	A-INFO P/N
7005E	AINFO can provide equivalent components for all main parts of the CLKA1 calibration kits with same performance.
7005G	
7005M	
7005H	

Notes:
* The calibration kits are suggested to be used for the following frequency range: BJ320(WR28), BJ400(WR22), BJ500(WR19), BJ620(WR15), BJ740(WR12), BJ900(WR10).

Waveguide Coaxial Adapter

Waveguide coaxial adapter is an indispensable component in the microwave testing, microwave devices and microwave systems as well as microwave projects.

AINFO's waveguide coaxial adapters include rectangular waveguide / double ridge waveguide. There are right angle and end launch to feed power. We also offer products with high frequency and high precision testing class products.

The types of the coaxial connectors cover N, TNC, 7/16, 7mm, SMA, 3.5mm, 2.92mm, 2.4mm, 1.85mm, and 1.0mm and so on. Male or Female.

Characteristics:

1. Wide Bandwidth, Complete Specifications, Low VSWR, Insertion Loss, etc.
2. Frequency: 0.32～110GHz P/N: BJ3 (WR2300) to BJ900(WR10)
3. Right Angle, Endlaunch
4. Rectangular / Double Ridge Waveguide
5. Customized: High Power

2300WCAN
WR2300, N-type Coaxial Connector

10WECA1.0_Cu 10WCA1.0_Cu
WR10, 1.0mm Coaxial Connector

250DRWHCAN,
WRD250, N-type Coaxial Connector
1000W,High Power

180DRWECAK_Cu,
WRD180, 2.92mm

Waveguide Directional Coupler

AINFO's waveguide coupler is typical of high directionality and small coupling degree with many different couplings for choice. Meanwhile, its coupling response is even and the VSWR of main and secondary linear is low. There is N type, TNC, 7/16, 7mm, SMA, 3.5mm, 2.92mm, 2.4mm, and 1.85mm available to choose.

Frequency: 0.75～110GHz P/N: BJ9 (WR975) to BJ900(WR10)

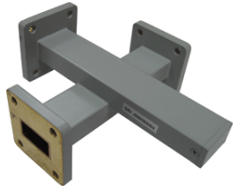
It is widely used to testing, sampling and testing of high frequency and microwave power feeding system, radar, microwave feeding system and telecommunication, navigation and satellite telecommunication devices.

Product types:
Waveguide Cross Coupler
Waveguide High Directional Coupler
Waveguide Loop Coupler
Double Ridge Waveguide High Directional Coupler

Waveguide Cross Coupler

With frequency scope from 0.75 - 40GHz,P/N of standard rectangular waveguide from BJ9 to BJ320, the VSWR of the typical main line is 1.05 and the secondary line is 1.1. Other specifications are as follows: the coupling degree: 30~60dB for options , directriontivity: 18dB and coupling degree: 0.7dB, frequency response: 1dB in the full waveguide bandwidth. The basic material of the waveguide high directional coupler is copper and aluminum while the surface treatment methods: silver, gold and nickel plating and passivation and conductive oxidation among other processing ways. The following specifications can all be customized as the customer asked: size, flange, types of the adapters and materials and surface treatment as well as electrical specifications.

W+C-XX Type


WL+C-XX Type


WL+Cx-XX Type

A-INFO

Waveguide High Directional Coupler

We can also provide the following types of couplers, please see the outline drawings.

With frequency from 0.75 - 110GHz, P/N of standard rectangular waveguide from BJ9 to BJ900, the typical VSWR of the main line is 1.15 and that of the secondary line 1.5 max. in the full waveguide bandwidth. Other features are as follows: the coupling degree: 3~60dB for options, minimal directionality: 30dB, coupling degree: 0.9dB, and frequency response: 0.7dB.

The basic materials of the waveguide high directional copper and aluminum. The surface treatment methods : silver, gold and nickel plating and passivation and conductive oxidation among other processing methods. The following can all be done as the customer required: size, flanges, type of the adapters, and materials and surface treatment as well as electrical specifications.

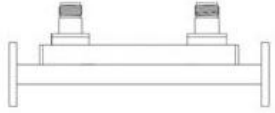
Three Ports Directional Coupler

WC Series

WCx Series

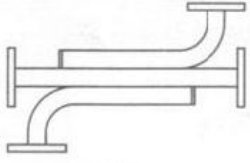
Four Ports Dual Coupler

WUC Series

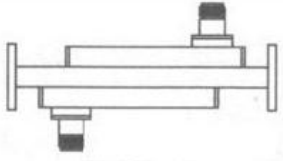


WUCx Series

Four Ports Dual Directional Coupler

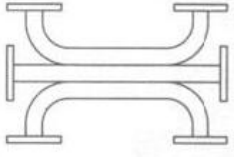


WDXC Series

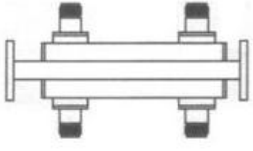


WDXCx Series

Six Ports Dual Coupler

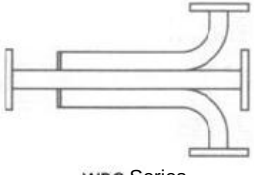


WDUC Series

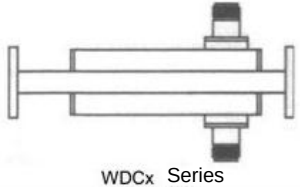


WDUCx Series

Same Directional Coupled Power Divider



WDC Series



WDCx Series

Waveguide Coupler

> Frequency: 0.75 to 110GHz

> Low VSWR 1.10:1 Typical

> Excellent Coupling Accuracy

> Coupled Port: E/H-plane Bend Optional

> Rectangular & Double Ridge Waveguide

> Loop Coupler，Cross Coupler& High Directional Coupler

> Connector available: SMA, N type, 3.5mm , 2.92mm (K), 2.4mm , 1.85mm

12WC-30_Cu

E Band, WR12, 60-90GHz

High Directional Coupler

Coupled Port: E/H-plane Bend Optional

Directivity: 30dB Min.

Coupling: 30dB

Coupling Accuracy: ±1.3 Max.

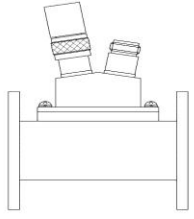
Frequency Sensitivity: ±0.9 Max.

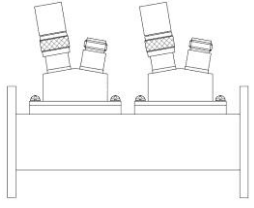
VSWR: 1.25:1 Max.

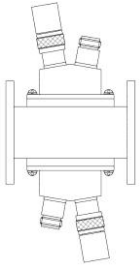
A-INFO

Waveguide Loop Coupler

Frequency range 1.7 - 40GHz, its standard waveguide covers BJ22 to BJ320 in full bandwidth, the specifications include the following: main standing VSWR:1.15, secondary VSWR:1.5, coupling degree :30~60dB optional, minimal directivity:15dB, coupling accuracy:0.9dB, frequency response: 0.7dB.



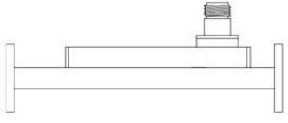




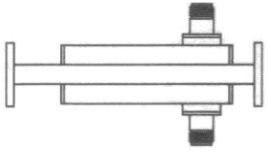
WHCx-XX type WHHCx-XX type WDHCx-XX type

Double Ridge Waveguide High Directional Coupler

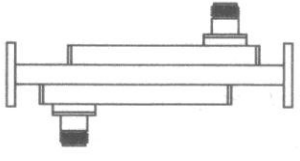
From 2 - 40GHz, double ridge waveguide from WRD200 to W RD180, in full bandwidth of waveguide, specifications are as follows: main standing VSWR:1.25, secondary VSWR1.5, coupling degree 10~50dB optional, directivity:25dB, coupling accuracy: 1.5dB, frequency response:1.5dB.



DRWCx-XX type



DRWDCx-XX type



DRWDXCx-XX type

180DRWCK the first product of this kind in China!

Waveguide Load

The WPL is requisite for the end devices of waveguide testing and waveguide feed system. AINFO provides series of WPL products with complete specs and outstanding performance. There is high precision calibration glass waveguide load with VSWR as low as 1.015. AINFO has waveguide load of small, medium and high frequency with rectangular and double ridge types.

The absorber of the waveguide employs somatic absorbing materials, greatly improving the matching and absorption properties with VSWR 1.2 max. AINFO's waveguide load has frequency range from 0.75 to 110GHz(~330GHz) and the power can be up to 8KW(~200KW).

The basic materials of the waveguide high directional coupler are copper, aluminum, and stainless steel while the surface treatment methods include silver, gold, and nickel plating and passivation and conductive oxidation among other processing ways. We can do custom waveguide load power according to customer's requirements: size, flange, type of the adapters, and materials and surface treatment as well as electrical specifications

Precision Power Load Low Power Load

The WPL series low power waveguide are precision with VSWR terminations suited to a wide variety of precision laboratory applications. They can be used for full bandwidth, one-port calibration, and full band two-port, isolation calibration. A-INFO Precision Flange(APF) is available for this series.

Precision Sliding Power Load

The WSL series waveguide sliding terminations are precise, Low power within 30W and low VSWR 1.015 suited to a wide variety of precision laboratory applications. They can be used for full band one-port calibration and full two-port, isolation calibration. The effect of sliding the termination is a greater accuracy than that achieved by a fixed load. A-INFO Precision Flange(APF) is recommended for this series.

Low-medium power Load

With power from 10-100W, WMPL series Medium Power Terminations are convection-cooled, designed to handle medium power levels. Typical applications include system or test bench set-ups and as moderate power dummy loads.

A-INFO

Medium Power Load

WMPL, Power scope:100W-2KW, low VSWR and stable electrical property by using absorbing materials of high power.

High Power Load

WHPL up to 10KW, suitable for testing, optimizing and maintenance of high power device and system.

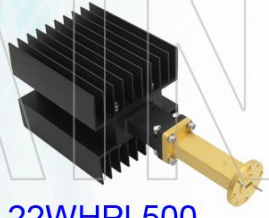
Double Ridge Waveguide Power Load

Covering 2-40GHz, including low, medium, and high power load.
Highest power load: 5.5KW, Max VSWR:1.2.

A-INFO

NEWEST!!!

Millimeter-Wave Waveguide Load



22WHPL500

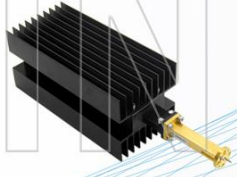
500W,33-50GHz

19WHPL400

400W,40-60GHz

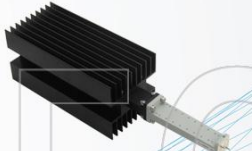
15WHPL250

250W,50-75GHz



12WHPL200

200W,60-90GHz



10WHPL200

200W,75-110GHz

Waveguide Filter

AINFO has series of standard rectangular waveguide filter of high performance. Waveguide band pass filter, waveguide low pass filter and waveguide high pass has frequency range from 2.6~110GHz and standard waveguide from BJ32 to BJ900.

In full bandwidth, the specifications are as follows: typical VSWR:1.2, pass-band Insertion Loss :0.3dB, the stop- band rejection ratio up to over 60dB.

The basic materials of the waveguide filter are copper, aluminum, and stainless steel. The surface treatment methods: silver, gold, and nickel plating and passivation and conductive oxidation among other processing ways. We can do custom waveguide load power according to customer's requirements: size, flange, types of the adapters, materials, and surface treatment as well as electrical specifications

Low Pass Filter

High Pass Filter

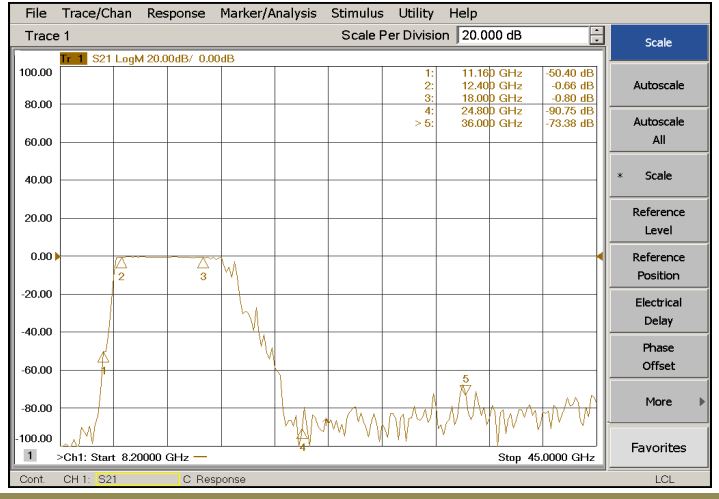
Band Pass Filter

Specialties
Full Band Filter

★AINFO specially produces full broadband waveguide filter with second harmonic high rejection ratio as high as over 60dB

Typical pass-band VSWR: 1.3 and pass-band Insertion Loss: 0.3dB

Three types: waveguide low pass filter, waveguide high pass filter, waveguide band pass filter
BJ120(WR75)，BJ140(WR62)，BJ180(WR51)，BJ220(WR42 with all frequency about to release)



Specialty:
High Performance Filter

[94GHz Band Pass Filter] AINFO succeeded in customizing the high performance filter of W band for Tsinghua
VSWR: 1.5 max(in full band)（13.8dB@89GHz）
Insertion loss: 2.48dB@89GHz (in full band)
Rejection ratio: 62dB@89GHz, 42dB@102GHz

Example of W waveband:
W (75-110GHz) has little attenuation, high resolution, and ultra wide bandwidth. 94GHz atmospheric window band has attracted wide attention. There have been many studies and applications of it.

It has been used widely for millimeter wave radar, fire control radar, quasi-optical system, and Quasi-optical mode converter. Other applications are as follows: electro optic conversion system, security imaging on the airport and station and foreign substance detection as well as traffic collision avoidance system, W band radiation plan and astro-surveilance, cloud testing antenna carried by satellite.

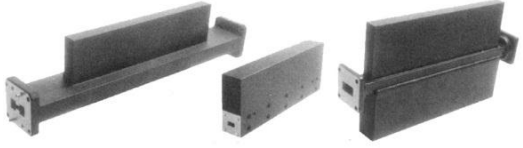
Specialty:
High Power Filter

Frequency: 2.6-40GHz
Ultra High Average Power: Starting from 200W
Low VSWR: 1.5 max.(In Full Band)
Low Insertion Loss: 0.8dB max.(in full band)
Second Harmonic High Rejection: 40dB
Operating mode: Non-Reflective

AINFO is about to release:

Double ridge waveguide: WRD650（6-18GHz）
Rectangular waveguide: BJ120(WR75)，BJ140(WR62)
BJ180(WR51)，BJ220(WR42)

*The following pictures only for reference.



Electric Waveguide Switch

Electrical waveguide switch can change the signal path in waveguide transmission system.

There are E and H plane waveguide switch according to its structure and rectangular and double ridge in terms of waveguide types from BJ32-BJ900 with frequency range from 2.60-110 GHz.

VSWR: 1.15 max., Insertion loss: 0.5dB max., switching speed: 100ms max. in full bandwidth.

Features:

1. Imported and internationally universal aviation six core socket MS3112E10-6P
2. Position Indicator function
3. Switching speed: 100ms Max.
4. Driving voltage: 27V±3V
5. Waveguide Switch switching on H plane
   With isolation:60dB min
6. E plane DPDT available with rectangular and double ridge waveguide.

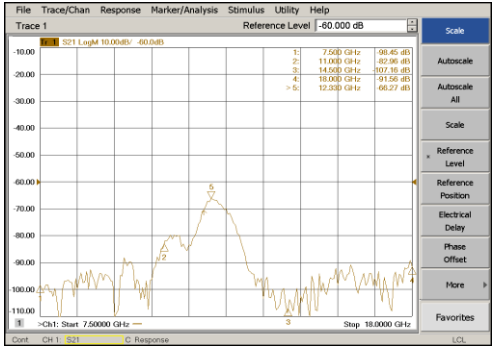
The basic materials of the waveguide switch are copper, aluminum, and stainless steel while the surface treatment methods include silver, gold, and nickel plating, passivation and conductive oxidation among other processing ways. Besides, we can do custom waveguide load power according to customer's requirements in terms of size, flange, types of the adapters and materials and surface treatment as well as electrical specifications

750DRWESMD

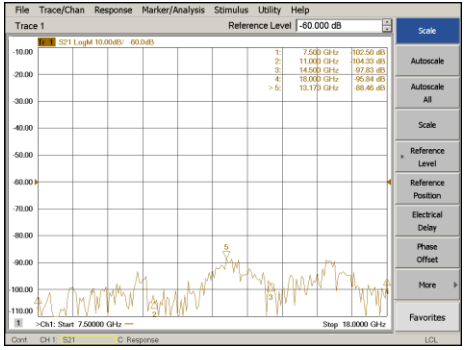
750DRWHSMD

62WESMD

750DRWHSMD, Isolation>60dB (Port3-Port2) @Position1(Pos. 1)

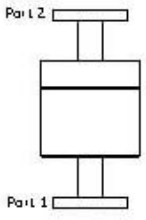


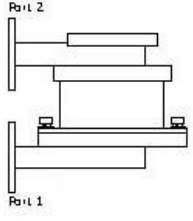
750DRWHSMD, Isolation>90dB (Port3-Port2) @Position2(Pos. 2)

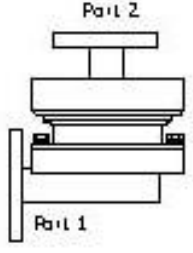


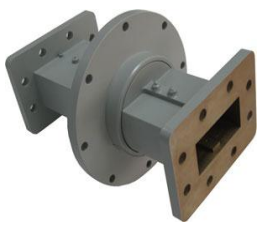
Waveguide Rotary Joint

Waveguide rotary joint is mainly used for connecting the fixed and the rotary parts of radar feed system. There are I type, U type and L type in terms of structure and single and double rotary joints according to the passage composition. The frequency ranges from 2.6GHz to 40GHz and waveguide cover BJ32 to BJ320. In less than 10% waveguide bandwidth, the typical VSWR is 1.2 and the low insertion loss is 0.3dB



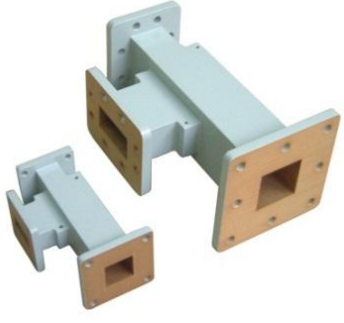






Waveguide OMT

WOMT series Ortho-Mode Transducers are covering full or sub waveguide band from WR340 to WR5 up to 220GHz. These Ortho-Mode Transducers (OMT) are used to separate the signal at the common port into two linear orthogonal components at the rectangular waveguide ports. The common port could be either square waveguide or circular waveguide. The isolation between two rectangular ports is higher than 30dB and has a 45dB typical value. These Ortho-Mode Transducers are ideally suited for radars, remote sensing, measurements, communication systems, and other applications.



Waveguide TEE

AINFO has rolled out series of ET, HT, and Magic TEE of high performance with frequency range from 0.32-110GHz and standard rectangular waveguide from BJ3 to BJ900.

ET can have reverse output of the signal's input in E port at both ends of the balancing arms at the same amplitude, and vice versa.

HT can output the same extent signals input at the balancing arms on H port with same direction. It can be converged to output the signals on H port with same amplitude towards the same direction as which is input as the balancing arms.

The magic tee is a four-port device. Since its collinear ports are perfectly matched, it is also referred to as a matched hybrid tee. When two equal-amplitude, in-phase signals are fed into the collinear ports, the resultant output signal appears at the H-plane port only. On the other hand, when two equal-amplitude, 180° out-of-phase signals are fed into the collinear ports, the resultant output signal appears at the E-plane port only. Alternatively, signals fed into the H-plane port are split into two equal-amplitude, in-phase signals at the collinear ports and signals fed into the E-plane port are split into two equal-amplitude, 180° out-of-phase signals. The H-plane and E-plane ports are isolated. Because of this feature, the magic tees are widely used in monopulse radar antenna systems and many other systems where phase and port isolation are critical. When either the H-plane or E-plane port is terminated, these magic tees are used as in-phase or out-of-phase power splitters or combiners. Furthermore, the magic tees can be used to construct multi-way power combiners or dividers.

ET：VSWR:1.5, asymmetry:0.25dB, in full band.

HT: VSWR:1.5, asymmetry:0.25dB, in full band.

Magic TEE: VSWR:1.5 (E-plane), VSWR:1.3 (H-plane), Asymmetry:0.4dB, Isolation 30dB in full bandwidth.

A-INFO

Waveguide Circulator

We can offer customized full-band waveguide circulator with high power.

Its function is to control the transmission of electromagnetic wave along one ring direction, a kind of unidirectional energy transmission. In addition, it can also connect different parts of the waveguide devices and link parts and system to make them operate independently while isolating from each other.

AINFO's series of standard rectangular waveguide circulator cover the frequency range from 1.13-110GHz and waveguide from BJ14to BJ900 with other features as per: typical VSWR: 1.20 in full band typical insertion loss: 0.3dB and typical isolation: 20dB.Circulator of high power in full band is customizable.

Waveguide Isolator

Customizable for full-band waveguide isolator with high power. Waveguide isolator ensures the transfer of electromagnetic wave along only one specific direction while isolating the opposite direction, a kind of unidirectional transfer of energy transmission. However, it can connect different parts of the waveguide devices and also link parts and system to make them operate independently while isolating from each other. Plus, it mainly works as a role to reduce the reflective signal's effect on the system.

We have series of standard waveguide isolator of high performance with frequency from 1.13-110GHz, typical waveguide from BJ14to BJ900. Other specifications are as follows: typical VSWR: 1.20 in full band, typical insertion loss : 0.3dB, typical isolation: 20dB, isolator of high power in full band customizable.

Waveguide Detector

Waveguide detector is able to detect some useful information by identifying wave, wave oscillation and signals. Output end is standard rectangular waveguide while video output is SMA/BNC usually. With frequency range from 2.6 to 110GHz, it is widely used for aerospace, national defense and commercial wireless application including equipment and meters, power monitoring and direct testing receiver. We can also see the applications in the fields of communication of high frequency, radar, communication of satellite, and point to point radio communication and telecommunication as well as data link and research.

It is highly sensible up to 50-600mV/m. Plus, high power circulator in full band is customizable. The features are as follows: anti-burn power: 5-100W, response speed: 2uS, the voltage output: anode and cathode available.

WG Attenuators

The various attenuators offered by AINFO includes fixed attenuator and adjustable ones. Frequency ranges from 1.12-110GHz and standard waveguide consists of BJ14 to BJ900 while typical VSWR is 1.10 in full band. The attenuation is typical of 3/6/10/20/30dB. The attenuator with high power from 10W to 20KW can be customized and it is also customizable for attenuation during 3-80dB specifically.

Fixed attenuators of high power

Fixed attenuators

Adjustable attenuators

WG Transition

A-INFO's waveguide transitions cover the frequency range up to 170 GHz . It allows RF transit fast from one waveguide to another. Transitions are available in standard lengths as well as specific lengths according to the requirements of customers.

Availabilities: 1. Rectangular to rectangular 2. Rectangular to rectangular-special frequency 3.Double ridge to rectangular 4.Double ridge to double ridge 5.Rectangular to circular.

A series of products are all designed and manufactured by ourselves. It is characteristic of low VSWR and insertion loss and various flanges for choices and materials include aluminum and copper. We are also able to provide the design of waveguide transition cross frequency of high power.

Precision double ridge to rectangular waveguide transition can connect double ridge waveguide and rectangular waveguide and other types featured with low insertion loss and high match, which is fit for the use in laboratories to mount and test double ridge and rectangular components and equipment. We only list the waveguide transition with overlap frequency on our website. If you wish to inquire about a part, please feel free to send us an RFQ.

Rectangular to double ridge
Double ridge to double ridge

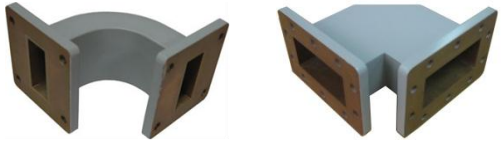
Rectangular to rectangular

Rectangular to circular

Straight/Bend/Twist

They are the basic elements of the waveguide feed system including rectangular and double ridge waveguide. Other specifications are as follows: frequency range: 0.75-325GHz, standard waveguide: BJ9(WR975) to BJ2600(WR3).
It is typical of low VSWR:1.05 and insertion loss: 0.1dB.

E plane & H plane, the bending: 90 Degrees, Types of bending: radius bend waveguide and miter bend waveguide.



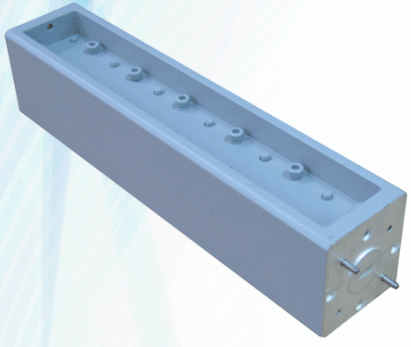
Twist waveguide, twisting: 30/45/60/90 Degrees, typical VSWR: 1.10 (in full band), typical insertion loss: 0.2dB (in full band)

A-INFO

NEWEST!!!

Millimeter-Wave Waveguide Attenuator

5G



P/N: 19WPFA-XX_Cu 12WPFA-XX_Cu 10WPFA-XX_Cu

Frequency: 40-60GHz 60-90GHz 75-110GHz

XX: Available Attenuation(dB) 3/6/10/20/30/40/50

WG Short Plates and Spacer

Waveguide short plate are designed to terminate round or rectangular waveguide connectors at the mating plane. They are used to establish a reference plane in systems and in making loss measurements. They are flat face/flat plane shorts that cover frequencies from 0.75GHz to 110.0GHz. There are waveguide 1/4, 1/8, and 3/8 wavelength offset short plates with 180° phase difference. It can reduce the number of the flanges and keep same current flow and the current stability in the calibration processes.

Those in rectangular guide are nominally 1/8 and 3/8 wavelength offset at a frequency near the waveguide band center. These will not be the exact band center as the frequency is chosen to equalize the phase differences at the band edges.

There are rectangular and double ridge waveguide short plats available. We also can make custom shorting distance as a special order. Please send us your inquiry and discuss your needs.

Short Plates

Offset Short Plates

Double Ridge Offset Plates

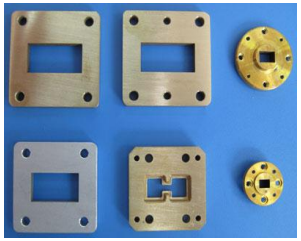
Waveguide spacer of different thickness includes rectangular and double ridge waveguide that is used for connecting the waveguide flanges.1/4 wavelength spacer is commonly applied for correcting the waveguide equipment commonly called as one offset (one bias) or 1/4 wavelength spacer used for connecting of the power load, fixed power load, or the port of the analyzer.

Waveguide Spacer

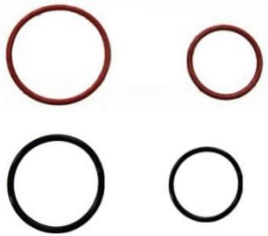
Double Ridge Waveguide Spacer

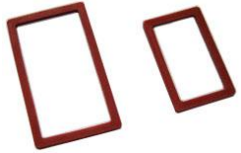
WG Flange and Gasket

AINFO's waveguide flanges and gasket can cover the frequency range from 0.32 to 220 GHz range and waveguide from WR2300 to WR5. There are precision flange, flat flange, and sealing flanges for choices. Flanges with choke and O-ring groove are also available. All flanges are can be made in the materials: brass, aluminum, or copper. Special flanges can be designed and manufactured according to customer's demands.



Series of standard gaskets available are widely applied for the all kinds of the standard waveguide flanges and sealing flanges. There are round and rectangular types with materials of silicon rubber R and conductive silicon rubber CR. Size is also customizable.





A-INFO

① Antenna

② Waveguide Components

③ MWRF Components

1. Coaxial Switch
2. Power Divider
3. Coupler
4. Filter
5. Bridge
6. Cable Assembly
7. Connector And Adapter

Coaxial Switch

Frequency up to 65GHz

Coaxial switch is used for microwave circuit switch, which is controlled by computer programming or voltage. It is applicable for communication, 3G, digital transmission, radar, military communication, TV broadcasting, RF MW research and so on.

1) Reflective and absorptive switch

2) SPST, SP3T, SP4T (according to the points of output and input)

3) Common and high power switch（≥1W) (according to power handling)

Reflective Switch

1.SPST
2.SP2T
3.SP3T
4.SP4T
5.SP5T
6.SP6T
7.SP7T
8.SP8T

Absorptive Switch

1.SPST
2.SP2T
3.SP3T
4.SP4T
5.SP5T
6.SP6T
7.SP7T
8.SP8T
9.SP12T
10.SP16T

Power Divider

Coaxial power divider is used for dividing one way signal into multi-channel signals, acting as average distribution of power. The common types are 2 way, 3 way, 4 way, and many ways.

AINFO has both common and ultra wide band power divider.

Common Power Divider

1. 2 way 0°
2. 2 way 90°
3. 2 way 180°
4. 2 way 0°
5. 3 way 0°
6. 4 way 0°
7. 5 way 0°
8. 6 way 0°
9. 7 way 0°
10. 8 way 0°
11. 10 way 0°
12. 12 way 0°
13. 13 way 0°
14. 16 way 0°
15. 24 way 0°

Ultra Wideband Power Divider

1. 2 way 0°
2. 4 way 0°
3. 8 way 0°
4. 16 way 0°

Coaxial Coupler

Applicable for monitoring the incidence and reflection signals value in the microwave system

Couplers types：

1. Universal Coupler
2. Ultra Wideband Coupler
3. Dual Directional Coupler

Filter

Applied for selecting signals in microwave system, general types: band pass, low pass and high pass as well as band rejection filter, etc.

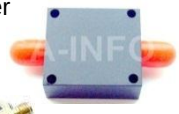
All specifications customizable according to the requirements of the customer with frequency range: DC-40GHz

1. Band Pass Filter
   - A. Cavity band pass filter
   - B. LC band pass filter
   - C. Suspension line band pass filter
   - D. Coaxial waveguide filter

2. Low Pass Filter (LC, suspension line, tubular filter)
   - A. LC low pass filter
   - B. Suspension line low pass filter
   - C. Tubular low pass filter

3. Suspension line high pass filter

4. Cavity band rejection filter



Bridge

Bridge, a kind of component for testing resistance, capacitance and inductance

Narrow bridge and broad bridge

1. Narrowband bridge
   - (1) 90° lumped parameter Bridge
   - (2) 180° lumped parameter Bridge

2. Broadband bridge
   - (1) 90° bridge
   - (2) 180° bridge

A-INFO

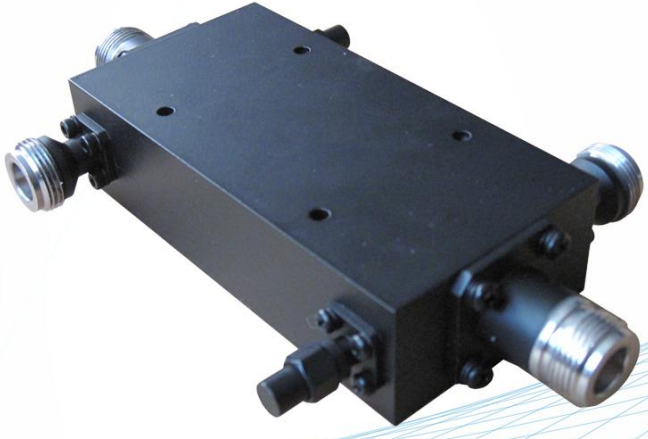
NEWEST!!!

High Power Dual Directional Coupler

Compatible:

AR DC7205

BONN BDC 0760-40/250



SOH-T-760-41, 0.7-6GHz, 41dB, 250W

A-INFO

Cable Assembly

AINFO's cable assembly has the following frequency ranges: DC-3G / 6G / 12G / 18G / 26.5G / 40G / 50G / 67G/110GHz. Other specifications are as follows: Low Insertion Loss, Low VSWR, High Reliability, 50ohm Impedance, Working Temperature: -40℃ ~ +85 ℃, Armor Solution Available, Length Customizable, Various Connectors Available.

The Application For Armor Solution

◆Testing Laboratory ◆Long Distance Field Testing

◆Wet Environment Testing ◆Military Equipment

High Precision Connectors and Adapters

RF Coaxial Adapters:

N type In-Series adapters in stock
SMA In-Series adapters in stock
3.5mm In-Series adapters in stock
2.92mm In-series adapters in stock
2.4mm In-series adapters in stock
1.85mm In-series adapters in stock
1.0mm In-series adapters in stock
TNC In-series adapters in stock
TNCA In-series adapters in stock
N-3.5mm In-series adapters in stock
N-2.92mm In-series adapters in stock
N-2.4mm In-series adapters in stock
N-TNC In-series adapters in stock
N-TNCA In-series adapters in stock
N-SMA In-series adapters in stock
3.5mm-2.92mm In-series adapters in stock
3.5mm-2.4mm In-series adapters in stock
3.5mm-SMA In-series adapters in stock
3.5mm-1.85mm In-series adapters in stock
2.92mm-2.4mm In-series adapters in stock
2.92mm-1.85mm In-series adapters in stock
2.92mm-SMA In-series adapters in stock
2.4mm-1.85mm In-series adapters in stock
1.0mm-1.85mm In-series adapters in stock
2.4mm-SMA In-series adapters in stock
TNC-SMA In-series adapters in stock
TNCA-SMA In-series adapters in stock
7 mm In-series adapters in stock
Quick plug adapter

RF coaxial connectors:

SMA connectors
2.92mm connectors
2.4mm connectors
1.85mm connectors
1.0mm connectors
N type connectors
SSMA connectors
TNCA connectors

Adapters For Testing:

3.5mm In-series Adapter (F-M)
3.5mm-2.92mm Between Series Adapters
N-3.5 Between Series Adapter
2. 2.92mm In-series Adapters (F-M)
3.5mm-2.92mm Between Series Adapters
2.92mm-2.4mm Between Series Adapters
2.92mm-sma Between Series Adapters
N-2.92mm Between Series Adapters
3. 2.4mm In-series Adapters (F-M)
2.92mm-2.4mm Between Series Adapters
3.5mm-2.4mmm Between Series Adapters
2.4mm-sma mm Between Series Adapters
N-2.4mm Between Series Adapters

USA

60 Tesla, Irvine, CA 92618, USA
Tel: +1-949-639-9688 / +1-949-346-9608
Fax: +1-949-639-9670
Zip Code: 92618

Beijing

Room 406, Building 5, Guiguliangcheng, No.1 Nongda South Road Haidian District, Beijing, China.
Tel：010-6266 7326
Fax：010-6266 7379
Zip Code：100084

Chengdu

2nd Floor, Building 3, No.5, Gaopeng East Road, Chengdu, China
Tel：028-8519 2786
Fax：028-8519 3068
Zip Code：610041

www.ainfoinc.com sales@ainfoinc.com