



1. Who We Are ?

Founded in 2007, we are an integrated manufacturer and global exporter specializing in RF passive components, with 19 years of focused industry experience. We integrate independent R&D, precision production, full-performance testing and international sales under one roof. We implement strict full-process quality inspection for all products, and provide comprehensive after-sales technical support for all global partners. We supply both ready-to-ship standard inventory and flexible OEM & ODM customized development services to meet diverse client requirements.

2. Industries We Serve

Our core mission is to deliver stable, low-loss, cost-effective RF passive solutions to global industrial clients. Our components are widely deployed across these key sectors:

- 4G/5G/6G wireless telecom & base station systems
- Aerospace, satellite communication & radar detection equipment
- Laboratory RF test & measurement instrumentation
- IoT modules, industrial wireless sensors & portable radio terminals
- Microwave industrial equipment, medical RF devices, automotive wireless radar

We resolve core radio frequency challenges including signal interference suppression. Our components are widely deployed across these key sectors:

3. Our Full Product Range

We offer a complete lineup of DC–67GHz RF passive components covering all mainstream radio frequency accessories: RF Circulators, RF Isolators, RF Filters, RF Duplexers/Triplexers, RF Power Dividers & Splitters, RF Coaxial Attenuators, Directional Couplers, RF Coaxial Terminations/Loads, Waveguide to Coaxial Adapters, RF Test Cables and RF Coaxial Connectors. All series support customized frequency, power rating, dimension and interface specifications to match unique system design demands.

4. Our Vision

To become the most trusted global one-stop supplier of full-series RF passive components. We aim to set industry benchmarks for consistent product reliability, flexible customized manufacturing and responsive global technical service, empowering wireless technology progress worldwide.

RF Passive Components Factory Core Equipment List — 2WAVE

All in-house processing, testing and quality inspection equipment enables full independent production, tight performance control and reliable delivery of RF isolators, circulators, filters, couplers, combiners and waveguide components, demonstrating our complete manufacturing strength for global RF customers.

1. Mechanical Processing Equipment (Machining Workshop)

Function: Precision shaping, metal machining, housing fabrication, waveguide cavity processing

- CNC High-precision Milling Machine
- CNC Lathe



- Wire Electrical Discharge Machine (WEDM)
- Surface Grinding Machine
- Drilling & Tapping Center
- Laser Cutting Machine
- Metal Bending Machine
- Deburring & Polishing Equipment
- CNC Waveguide Special Processing Machine

2. Surface Treatment & Assembly Equipment

Function: Anti-corrosion plating, surface finishing, component assembly, soldering & sealing

- Silver/Gold Plating Production Line
- Nickel Plating Equipment
- Ultrasonic Cleaning Machine
- Vacuum Drying Oven
- Precision Temperature-Controlled Soldering Station
- High-temperature Sealing Furnace
- Torque Precision Screwdriver Set
- Semi-automatic Assembly Jigs & Fixtures
- Glue Dispensing Machine

3. RF Electrical Performance Test Equipment (RF Lab)

Function: Full electrical parameter testing for frequency, loss, VSWR, isolation, power, phase

- Vector Network Analyzer (VNA)
- Signal Generator
- Spectrum Analyzer
- RF Power Meter & High Power Test Load
- Noise Figure Analyzer
- Phase Noise Tester
- High & Low Temperature Test Chamber
- Temperature Cycling Test Equipment
- Thermal Shock Test Chamber
- VSWR Automatic Test System
- Insertion Loss & Isolation Test Bench

4. Quality Inspection & Metrology Equipment (QC Lab)

Function: Dimensional inspection, appearance check, material testing, reliability verification

4.1 Dimensional Precision Measuring Tools

- 3D Coordinate Measuring Machine (CMM)
- Digital Micrometer, Caliper, Height Gauge
- Optical Projector
- Microscope (Metallographic Inspection)
- Roughness Tester
- Thread Gauge & Plug Gauge

4.2 Appearance & Material Inspection

- High-definition Industrial Microscope
- Salt Spray Test Chamber (Corrosion Resistance Test)
- Material Hardness Tester



- XRF Coating Thickness Detector

4.3 Environmental & Reliability Inspection

- Vibration Shaker Table
- Drop Test Machine
- Humidity & Heat Aging Test Box
- Waterproof & Dustproof Test Equipment

5. Packaging & Auxiliary Equipment

Function: Finished product packaging, label printing, raw material storage support

- Automatic Label Printing Machine
- Vacuum Packaging Machine
- ESD Anti-static Packaging Station
- Electronic Precision Balance
- ESD Wrist Strap & ESD Workbench

2WAVE owns a full set of self-owned machining, RF testing and precision QC equipment covering the whole production chain of RF passive components. From CNC precision metal processing, surface plating, electrical RF parameter testing to dimensional & reliability inspection, all core procedures are completed in our factory without outsourced testing. Complete hardware equipment ensures stable product consistency, strict performance indicators and fast customized R&D verification, fully reflecting our solid manufacturing strength for RF passive devices.