

RFSHOP AUSTRALIA

Capability Statement

**Coaxial cables
Connectors
Adaptors
Antennuators
Antennas
4G/5G and WiFi**

**Built for performance,
made to last.**



WELCOME TO RFSHOP

The experts in RF components and cable harness solutions. **We make complex, simple.**

At RFShop, we're proud to be South Australia's premier destination for customised cable harnesses, premium-quality RF components, high-performance coaxial cables, and high-end antenna development.

ABOUT OUR COMPANY

We are an Australian-owned and operated manufacturer and supplier specialising in custom coaxial cables and advanced antenna design.

We cater to diverse industries and consumers, offering practical solutions and clear technical guidance. Our company is proud to be ISO:9001 certified, which is a testament to our commitment to excellence.

OUR MISSION

We understand the challenges inherent in navigating the complex world of RF components.

With so many types of coaxial cables and connectors required for diverse applications and frequencies, it can often seem overwhelming, leaving individuals unsure of where to start.

Our mission is clear: to empower our customers with confidence in their choices by being responsive and efficient, delivering quality RF products and solutions, backed by superior technical knowledge and presented in an easy-to-understand manner.

It's no wonder why our reputation precedes us for providing superior products and personalised customer service.

INDUSTRIES WE SERVE

We have extensive expertise in providing specialised solutions to withstand rough and rugged conditions for the defence, mining, and automotive sectors.

In addition to serving these industries, we also offer custom solutions for the general consumer market and custom RF harnesses to meet the unique requirements of IoT applications.

We have a passionate team of engineers, technicians, and customer service professionals ready to simplify the process.

With their expertise, they guide customers through the intricacies, offering tailored technical advice to ensure they select the perfect components for their unique needs.

THE RFSHOP DIFFERENCE

From our stringent supplier selection to our customer-first approach, **quality and service define us.**

OUR UNIQUE APPROACH

Our main focus relies on two key principles: Keep it simple and build trust. At the core of RFShop is our unwavering commitment to our customers. This dedication to providing the ultimate customer experience is built on our core values of **quality, integrity, simplicity, innovation, and collaboration.**

We are devoted to exceeding expectations to ensure our customers receive premium quality products promptly and without delays.

Our goal is to provide customers with a smooth and hassle-free purchasing process for essential RF components and cables.

This unique combination sets us apart from competitors and ensures that our customers receive high-quality products promptly and comprehensive support, resulting in optimised performance and smooth operations.

OUR MARKET

Our company has a diverse range of clients and partnerships. We work with Silentium to provide cable assemblies, antenna design, and manufacturing services, and we also collaborate with Solinnov on antenna design and manufacturing.

Additionally, we work with defence companies under NDAs to offer custom cables, antenna design, and manufacturing services. We also supply RF harnesses to Holden Special Vehicles and provide custom RF harnesses for IoT applications at mine sites for MaxMine.

Our partnerships include Black Art Technologies and leading suppliers such as Jye Bao, Huber + Suhner, Rojone, Rosenberger, Cambridge Technologies, ALFA Networks, Poynting Antennas, RF Industries, and Teltonika.



QUALITY



INTEGRITY



SIMPLICITY



INNOVATION



COLLABORATION



Whenever you gaze at a satellite in the distant sky, chances are it's powered by our components.

FROM ADELAIDE TO SPACE

Our components undergo stringent testing to ensure reliability and performance in the harshest environments.

Built to withstand extreme conditions, these components are critical for the success of everything from mining to space missions.

Our team has contributed to groundbreaking achievements in technological advancement and significant milestones in space exploration.

For example, provided high-quality coaxial cables to Inovor Technologies for the successful launch of their pioneering small satellite SpIRIT into space.

The second-ever wholly Australian-built satellite has been launched into orbit, and the next one is set to launch soon.

Both satellites are equipped with our high-quality coaxial cables.

OUR HISTORY

The journey never ends.

From our modest beginnings to today, we have experienced remarkable growth, forging strong partnerships with leading companies and industry suppliers.

Our dedication to RF innovation—whether in designing or manufacturing cutting-edge antennas, RF components, or customized cable harnesses—has positioned us as a trusted name across multiple industries. From advanced antenna design and demonstrator hardware for space projects to enhancing electronic warfare (EW) technology, and improving direction-finding capabilities, we remain committed to pushing the boundaries of what's possible.

Driven by a passion for excellence and innovation in Australian manufacturing, we continuously refine our expertise to meet the evolving demands of modern RF technology.

As we continue to showcase our capabilities on the global stage, we are excited about what the future holds.

2024 SCALING NEW HEIGHTS

RFShop moved to larger premises, certified its first member with the IPC620 standard and obtained the ISO 9001:2015 accreditation, becoming a local leading Australian manufacturer and supplier of customised cable harnesses, premium quality RF components, high-performance coaxial cables, and antennas.

2023 STRENGTH IN UNITY

Annika Altmae joined as a shareholder and COO, bringing new energy and vision. Alongside David and the rest of the team, RFShop and BAT have secured another council grant to begin implementing the ISO 9001:2015 accreditation. Strengthened our commitment to excellence, quality, and business growth.

2022 EXPANDING HORIZONS

RFShop's unwavering commitment to excellence and growth has led to the expansion and establishment of partnerships with businesses across diverse sectors, including Automotive, IT, Mining, Defence, and Telecommunications.

2020 NAVIGATING CHANGE

During the COVID-19 pandemic, RFShop expanded into Wi-Fi solutions for caravans, boats, sheds, and home internet, enhancing our e-commerce store. At the same time, we launched our YouTube channel to strengthen our online presence and connect with a broader audience.

2019 GROWTH STRATEGY

Seeking business growth, Black Art Technologies (BAT), a sub-brand of RFShop specialising in designing and manufacturing high-performance EW and communication antennas, was established, leading to targeting Defence businesses.

2018 PUSHING BOUNDARIES

RFShop identified a market opportunity for growth and specialised in RF custom coaxial cables. Likewise, it won a council grant to upgrade the inventory system, which led us to venture and forge our first significant partnership with a prominent Adelaide business in the automotive industry.

2016 A NEW CHAPTER

Our visionary CTO David de Haaij acquired and relocated the company to Lonsdale, SA. With a larger warehouse and office, RFShop set the stage for groundbreaking advancements in RF Communications Systems.

2009 FOUNDATIONS LAID

RFShop officially took its first steps towards revolutionising the technology sector, establishing itself as a pioneer in the industry.

OUR PEOPLE

Diverse talents,
unmatched expertise.
Together, we push the
boundaries of what's
possible for our
customers.



OUR INNOVATIVE TEAM

Our growing workforce comprises around 20 skilled professionals specialising in assembly, quality assurance, antenna design, sales and procurement, marketing, and management.

They come from various countries, including Australia, South Africa, Estonia, Switzerland, Iran, Colombia, Germany, and many others. Each team member brings unique perspectives and expertise that drive innovation and creativity to deliver exceptional results for our customers.

With their exceptional technical knowledge in RF components, antennas, and cable harness solutions, our team is always ready to engage in approachable technical discussions, making it easy for customers to understand and make well-informed decisions.

THE RFSHOP WAY

We are committed to the RFSHOP way by always striving to exceed customer expectations and going the extra mile in all that we do. This dedication to excellence is a testament to our commitment to our customers.

We're devoted to empowering our customers with the knowledge they need to make confident, informed decisions. We prioritise being responsive, driven by our passion for service excellence, and fuelled by our wealth of expertise. **It's no wonder why our customers trust us to guide them every step of the way.**

THE DRIVING FORCE BEHIND RFSHOP

Annika Altmae Chief Operating Officer

As the COO and Managing Director of RFSHOP, Annika is the driving force behind the day-to-day operations. Her strategic planning and process optimisation skills ensure efficiency across all departments, playing a pivotal role in resource allocation and driving the company's growth.

Annika holds a Master of Science degree in Sustainable Forest Management and has received diverse training in international business management, marketing, HR, leadership, and accounting. She brings a wealth of expertise to RFSHOP and has been instrumental in fostering an environment of innovation and excellence.

Annika's fluency in English and Estonian is also a valuable skill that enables her to collaborate seamlessly with diverse, multicultural teams. Her extensive experience studying and working closely with professionals from Germany, Russia, and Spain further enhances her ability to adapt and communicate effectively in various professional settings.



David De Haaij Chief Technical Officer

With a master's degree in Electronic Engineering, specialising in Passive Microwave Circuit and Antenna Design from the University of Pretoria, coupled with over 20 years of industry experience, David leads technology initiatives as the CTO at RFSHOP Australia.

David plays a crucial role in driving the development of cutting-edge wireless solutions to address the unique challenges faced by clients in both the defence and consumer sectors. His responsibilities extend to supervising the intricate process of creating custom cable and antenna designs, overseeing product distribution, and maintaining stringent quality testing measures.

Passionate about RF education, David shares his knowledge on YouTube to simplify complex concepts for diverse audiences.

OUR KEY PRODUCTS: ANTENNAS AND CABLES

Perfect harmony of connectivity and precision engineering.

Our antennas and cables redefine connectivity, transforming every signal into a symphony and every connection into a masterpiece. Whether it's our off-the-shelf solutions from reputable providers or our custom-designed antennas, we ensure our customers get the best fit for their specific applications, enhancing overall performance and reliability.

Antennas

We offer world-class antenna and passive RF component design for diverse military and commercial wireless applications alongside comprehensive services that use advanced computational electromagnetic modelling.

Our product range include:

- **4G/5G Antennas:** Empowering connectivity for the future by ensuring seamless communication.
- **IoT and HaLow Antennas:** For interconnected solutions.
- **WiFi Antennas:** Elevating wireless experiences by delivering reliable connectivity for homes, businesses, and industries.
- **Vehicle Antennas:** Driving connectivity forward by keeping our customers connected on the move.
- **GPS Antennas:** With precision, our antennas provide accurate positioning for various applications.
- **HELI Series Antennas:** Circular polarised antennas that are specifically designed for **mining & tunnelling applications**.

Custom Coaxial Cables

At RFShop, our customers benefit from our expertise in custom coaxial cables tailored to their needs.

We offer a wide selection of commonly-used coaxial cable types such as RG174, RG316, RG58, RG213, RG223, RG6, RG11, LMR100, LMR195, LMR240, LMR400, LMR600, Enviroflex400, as well as various test cables from Jye Bao. We also provide additional services, including conduit application, custom labelling, coloured heat shrink, and phase matching to ensure their cables meet their exact specifications.

Our connectors come from reputable brands such as Jye Bao, Huber + Suhner, Cambridge Technologies, Rosenberger, and Amphenol, and we have budget options too.

Cable Harnesses

Our cable harnesses are meticulously engineered to withstand even the most challenging conditions and exceed stringent technical specifications, setting a new benchmark for reliability and durability.

They enable our customers' operations to excel by providing flawless connectivity and enhanced performance, uniquely crafted for industries operating in rigorous environments.

ANTENNAS

At RFShop, we are experts in antennas, providing a range of off-the-shelf options from trusted providers and the expertise to create and produce custom antennas. This guarantees that our clients receive optimal solutions for their unique needs, leading to improved performance and dependability.

CABLES

At RFShop, we specialise in creating custom coaxial cables tailored to our customers' specific requirements. Our expertise lies in delivering solutions with short lead times, ranging from 1 day to 6 weeks, to address the need for particular lengths, connector types, and performance characteristics.

OTHER PRODUCTS: CONNECTORS, ADAPTORS, 4G/5G, WIFI AND ATTENUATORS

Flawless performance, seamless integration.



4G/5G and WiFi

For optimal connection, our product range of 4G/5G and WiFi solutions include:

- **Internet Kits for Caravans:** Ensuring seamless connectivity on the go.
- **Home and Office Internet Kits:** Designed for optimal performance in any environment.
- **Boat Internet Kits:** Reliable internet access even on the water.
- **4G/5G Modems:** High-quality devices for fast and stable connections.
- **Shed Internet Kits:** Solutions for remote areas.
- **WiFi Devices:** Enhancing networks with the latest technology.
- **Cellular and WiFi Boosters:** Amplifying coverage to ensure consistent signal strength.

WIRELESS SOLUTIONS

RFSshop offers a wide range of RF and wireless internet solutions, including antennas, WiFi adapters, modems, RF components, and test equipment.



Adaptors and Attenuators

For durable connectivity, our product range of adaptors and attenuators include:

- **SMA:** Ideal for high-frequency applications.
- **N:** Known for durability and reliability.
- **BNC:** Suitable for quick connect and disconnect operations.
- **TNC:** Enhanced performance in challenging environments.
- **In Series:** Seamless connections within the same connector series.
- **Between Series:** Versatile connections between different connector series.

CONNECTIVITY SOLUTIONS

Our adaptors, attenuators, and connectors are designed for optimal performance and durability. We offer many options suitable for high-frequency, durable, quick-connect, and challenging environments. Our products ensure reliable connections for our customer's connectivity needs.

Connectors

For reliable connectivity, our product range of connectors include:

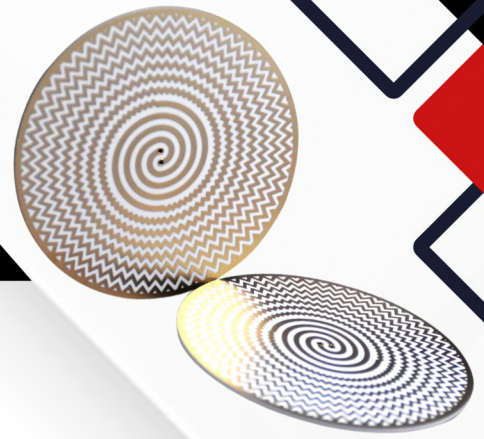
- **MB:** Compact and lightweight, perfect for high-frequency connections.
- **N:** Durable and reliable in demanding environments.
- **BNC:** Popular for quick connect and disconnect operations.
- **TNC:** Enhanced performance in challenging conditions.
- **FME:** Robust and compact, ideal for mobile applications.
- **MCX:** Miniature for space-constrained applications.
- **MMCX:** Reliable performance in tight spaces.
- **SHV:** High-voltage, safe, and secure connections.
- **UHF:** Robust for lower-frequency applications.
- **Microdot:** Precision connectors for high-frequency, miniature applications.





black art

technologies



OUR SERVICES:

Black Art Technologies (BAT), a specialised sub-brand of RFShop, provides our service offerings. We are ISO 9001-certified and focus on:

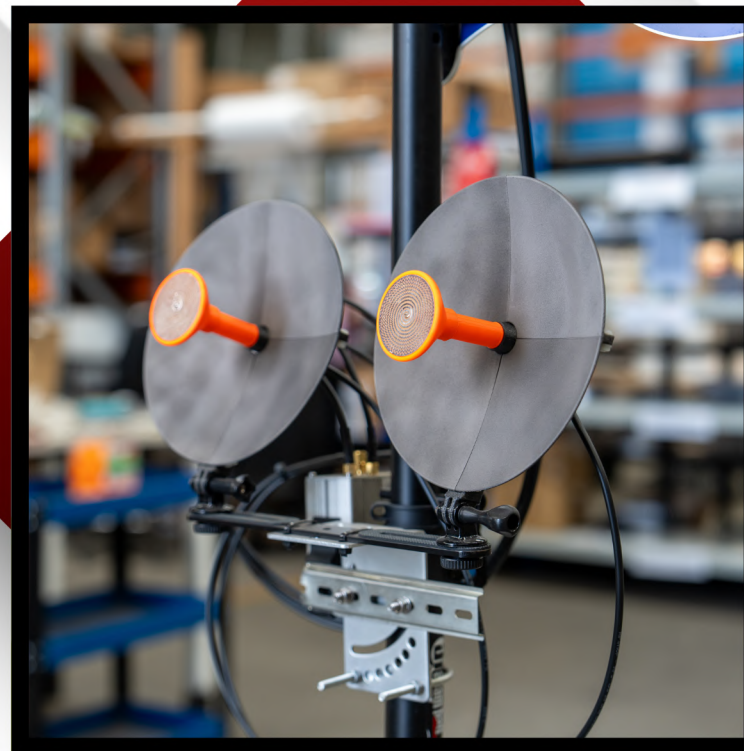
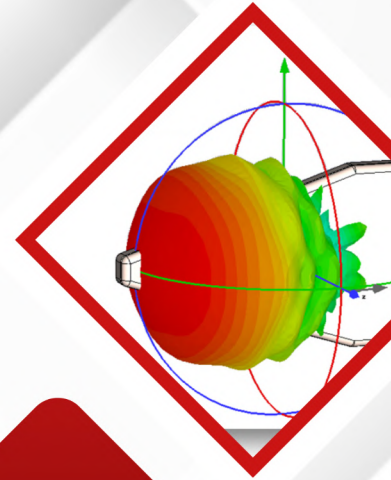
- 01 **Antenna Simulation and Design**
- 02 **Passive RF Circuit Design**
- 03 **Consulting Services**



We design and manufacture high-performance antennas, arrays, and RF systems for applications in Electronic Warfare (EW), Direction Finding, and communication across various industries.

With more than 25 years of industry experience, our approach is based on fundamental RF design principles combined with 3D Simulation Software. We use CST Design Studio and WiPL-D for Computational Electromagnetic Modelling (CEM) and simulation to achieve precise performance parameters and complete the process with rigorous measurements on our Rohde&Schwarz test equipment.

From specialised antenna development to customized RF circuit solutions, we deliver cutting-edge technology tailored to the most demanding environments.



GOVERNANCE: SAFETY AND ENVIRONMENT

Ensuring safety and environmental responsibility is not just a priority.
It's a fundamental commitment ingrained in everything we do.

At RFShop, we are committed to placing safety and environmental responsibility at the forefront of our operations. **Our comprehensive systems and processes steer every decision and action we make.**

WORK HEALTH AND SAFETY (WHS)

At RFShop, we take the health and safety of our employees seriously. We have a comprehensive WHS policy and system in place to maintain a safe and healthy working environment.

This policy is designed to establish comprehensive protocols for identifying and effectively mitigating workplace hazards, implementing safety training programs, and conducting regular audits to ensure compliance with stringent industry standards and regulations.

We place the highest emphasis on the safety of our workforce through ongoing improvement initiatives and a safety-first culture that empowers every employee to proactively take ownership of their safety and the safety of their colleagues.



ENVIRONMENT

At the heart of our operations is sustainability. We have implemented a comprehensive environmental policy to minimise the impact of our manufacturing processes on the environment.

At RFShop, we recognise the importance of sustainable practices in reducing our carbon footprint and preserving natural resources. Our policy includes strategies to minimise waste, improve energy efficiency, and use eco-friendly materials and technologies whenever possible.

We are fully committed to complying with all environmental regulations and standards. As an innovative company, we actively pursue opportunities to set the standard for sustainability in the Australian manufacturing industry.

GOVERNANCE: QUALITY ASSURANCE

Our products undergo rigorous quality checks, ensuring every detail meets our stringent criteria.
We're not just meeting standards, we're setting them.

Quality assurance is at the heart of everything we do at RFShop. With a dedicated QA team, we implement rigorous quality control measures to guarantee the reliability and performance of every item we offer.

OUR DEDICATION TO QUALITY ASSURANCE

At RFShop, excellence is our standard. We ensure consistent quality through a multifaceted approach that combines rigorous standards, continuous improvement, and a dedicated quality assurance team. We achieve this through:



ISO 9001:2015 CERTIFIED QUALITY MANAGEMENT SYSTEM (QMS)

Being ISO certified inspires confidence in our products. Our commitment to quality begins with our ISO 9001:2015 certified QMS. This internationally recognised standard provides a robust framework for our quality management practices, ensuring we consistently meet and exceed customer expectations.



CONTINUOUS IMPROVEMENT: LEADING THE WAY

We continually strive to improve in every way. Our dedication to continuous improvement is evident in all aspects of our operations. By regularly reviewing and refining our processes, we ensure we remain at the forefront of quality and efficiency. Doing so enables us to adapt to new challenges and maintain high standards.



THE VALUE OF CUSTOMER FEEDBACK

We take seriously the feedback from our customers. Listening to and engaging with our customers helps us understand their needs and make informed decisions that enhance quality and customer satisfaction.



EXCLUSIVE COLLABORATION WITH TRUSTED SUPPLIERS

We don't source our products from just anywhere. We partner exclusively with reputable suppliers known for their reliability and high-performance standards. Our rigorous selection process ensures that the components used in our products are of the highest quality, thereby enhancing the overall excellence of our offerings.



DEVOTED AND SPECIALISED QUALITY ASSURANCE TEAM

We employ highly skilled QA specialists. Our experienced quality assurance team is critical in maintaining our high standards. They oversee all aspects of product quality, from supplier selection to final inspection. Their meticulous attention to detail ensures that every product meets our stringent quality criteria.



ISO 9001
QUALITY





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RFSshop has been a long time primary supplier of MaxMine for our RF harnessing requirements. RFSshop provides timely feedback on requests for our existing line of hardware. Additionally, they work closely with us when we have the need to design new products and one-off items. RFSshop is able to provide relative feedback and information to support us in finding the solutions we require.

MaxMine is able to comfortably rely on RFSshop to meet our deadlines, and provide a finished product that continually meets our needs and specifications. Our overall experience with RFSshop has been a positive one, and we will continue to use them as one of our trusted vendors.

MaxMine

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Let's start the conversation.

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