

## Product Overview

RFS HF and tactical antennas provide economical and innovative solutions that can be fully tailored to suit particular system requirements and applications.

In addition, RFS provides a comprehensive antenna field service, with field staff available to support all antenna site activities – site planning and clearing, through installation to final system testing and commissioning.

- **Tactical antennas**

RFS's wide range of tactical manpack and transportable antennas are available in standard designs, or can be customized to meet specific customer requirements.

- **Broadband monopoles**

Designed for medium to long distance omnidirectional operation, these antennas exhibit low angle radiation patterns – an economical solution for general HF communication applications.

- **Horizontal and vertical log periodics**

Suitable for short to long distance applications, RFS's horizontal log periodic antenna performance is virtually ground independent, with take-off angle able to be tailored to suit particular requirements. Alternatively, RFS vertical log periodic antenna series provides ground-dependent vertical beamwidths and is characterized by a low angle radiation that is essentially constant at all frequencies.

- **Rotatable log periodics**

High performance directional antennas designed to provide short, medium and long range coverage. These units exhibit high gain characteristics coupled with excellent rotational speed and accuracy, making these multipurpose antennas the ideal solution for multi-link applications.

- **Biconical dipoles**

This omnidirectional broadband series is designed for short and medium range coverage. As neither terminating resistors nor antenna tuning hardware is required, essentially all input power is radiated.

- **Standard and tandem deltas**

Omnidirectional high angle radiators designed for ionospheric propagation over short to medium distances. Radiation results from a wave travelling upward to a resistive termination at the antenna's apex. Similar in form to the standard delta, the tandem delta does not have a terminating resistor as a result, all input power is radiated, achieving gains of 3-4dB over the standard delta.

- **Surface wave radar**

RFS has developed a comprehensive range of transmit and receive antennas for surface wave systems. Surface wave radar antennas are available in various configurations optimized to suit customer requirements.

- **HF Short wave broadcast antennas**

High performance omni- and directional antennas are available to suit shortwave HF broadcasting applications.

These antennas are capable of handling input powers up to approximately 50kW and have a wide frequency bandwidth.

## Engineering Capability

In the creation of both standard and custom HF and tactical antennas, RFS's design capabilities are among the most advanced in the world.

With its strong focus on improving system performance through innovative product design, RFS serves major defense groups, government organizations and system integrators the world over.

Our highly-qualified team of scientists, engineers, technical officers and technicians work to a continuous program of research and design, developing and adapting HF and tactical products at the cutting edge of modern technology.

World-first from RFS include the complex antenna networks developed for the Jindalee 'Over the horizon' radar project.

## System Integration and Commissioning

- RFS is able to offer complete HF and tactical turnkey project services, with specific resources and skills in the key areas of:

- Installation
- Field supervision
- Commissioning
- Sub-system design
- Training
- Project management

It has proven global expertise in the total project management of cost-effective, end-to-end radio frequency sub-system solutions.

For more information on the selection and use of HF antennas, see the applications overview in the technical section of this catalog.