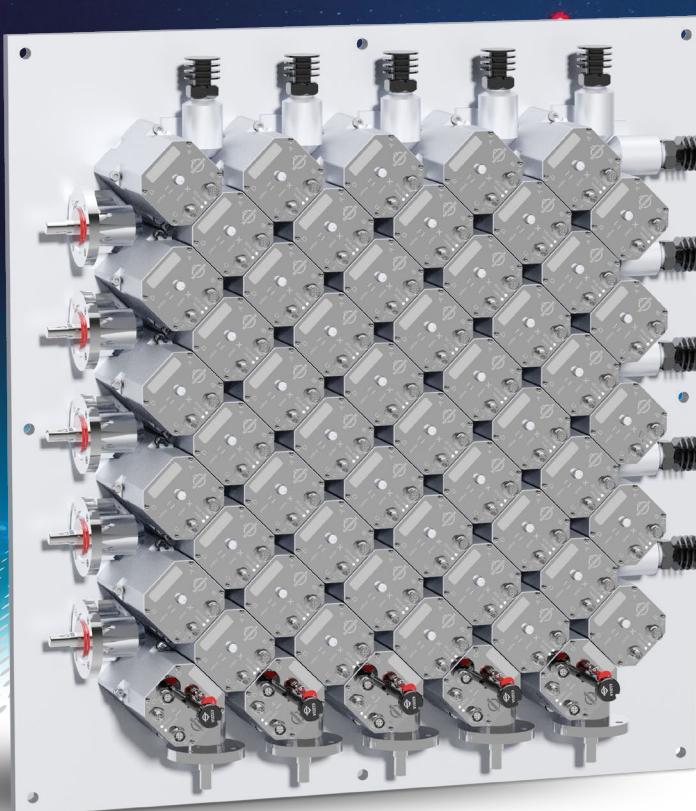


SPINNER HF Switch Matrix for Tactical Communication



PATENT PENDING



Ensuring Mission-Critical
Long-Range Communication



HIGH FREQUENCY PERFORMANCE WORLDWIDE
spinner-group.com



SPINNER Sets Standards in RF Technology

For **over 75 years**, the SPINNER Group has been a **global leader in radio frequency technology**, consistently setting new industry standards. Headquartered in Munich, Germany, SPINNER has more than 800 employees worldwide dedicated to innovation and precision.

With a **global network** of subsidiaries and distributors, SPINNER serves customers in over 40 countries. As a **family-owned business**, the company draws on its extensive expertise to develop solutions for a wide range of market segments.



DEFENSE



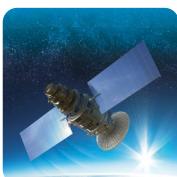
BROADCAST



COMMUNICATION



TEST & MEASUREMENT



SATCOM/SPACE



INDUSTRY



SUBSEA/OFFSHORE

Decades of Experience in Switching Matrices

Our vertically **integrated production processes** ensure **consistent quality and efficiency** from design to manufacturing. With over 60 years of experience in switching matrices and RF switching technology, SPINNER develops solutions for radio-frequency applications worldwide.

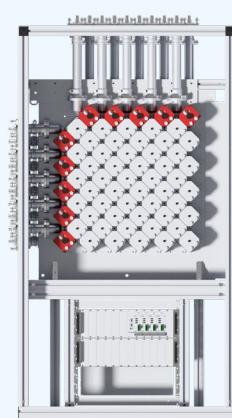
New HF Switch Matrix from SPINNER

Our new HF Switch Matrix is a **reliable, compact, flexible**, and **field service friendly** solution for **connecting your transmitters to an antenna farm**. It supports **scalable input/output interfaces**, features integrated **smart switches**, and includes an **innovative control system** that can be managed via **WebGUI** or remotely via **SNMP**.

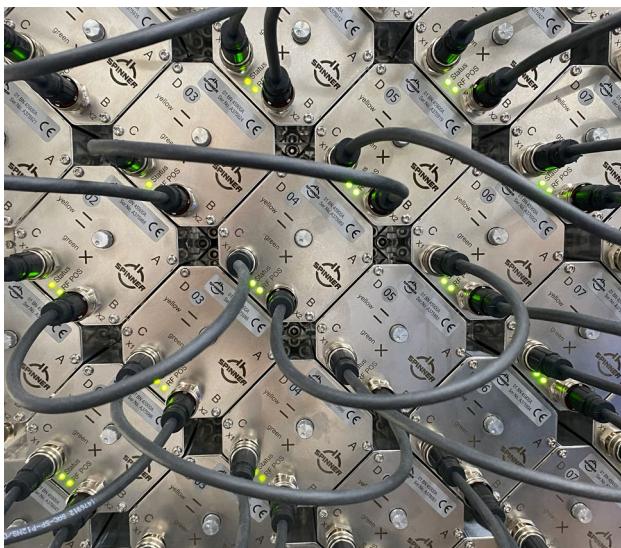
Scalable Input/
Output InterfacesIntegrated Smart
SwitchesField Service
FriendlyInnovative
Control SystemWebGUI /
SNMP

Exceptional Reliability

- ✓ Hypocycloid gear drives for controlled and durable switching
- ✓ Isolated hardware interlock for each antenna output
- ✓ Redundant power supplies
- ✓ Rugged design: Minimum number of interfaces, fanless operation
- ✓ Uninterrupted RF path during power loss
- ✓ Emergency operation: Manual switching possible

10x10 Matrix System
with Control System

Innovative Switch and Matrix Design



Comprehensive Control Concept

- Components capture relevant parameters, e.g., temperature, voltage, switching cycles, and more
- System status monitored
 - » Quick analysis and predictive maintenance

Convenient Handling

- User-friendly web interface
- Intuitive system overview
- Built-in self-test
- Local and remote access for maintenance
 - » Easy operation and service documentation

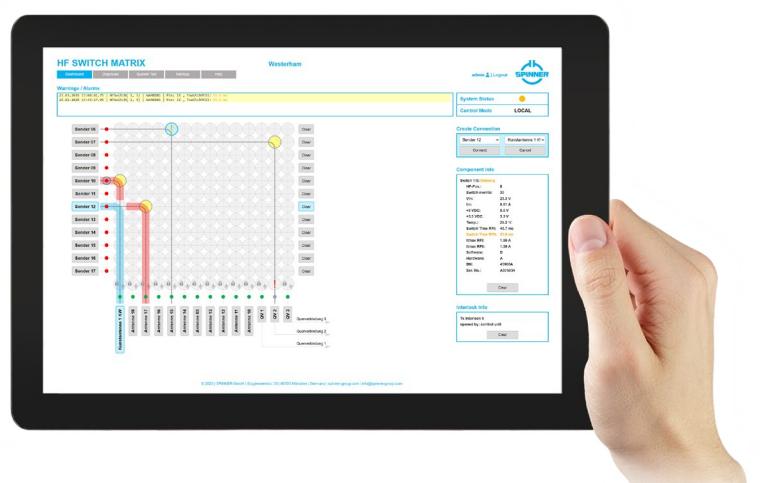
General System Data

- Optimized for a wide frequency range (DC to 200 MHz)
- Low VSWR and insertion loss
- Switching up to 20 kW of RF power (1 to 30 MHz)



Field Service Friendly

- Antenna grounding with key-lock switch
- Hot-swappable field-replaceable units: controller, CPU, and power supplies.
 - » Minimized downtime
- Modbus, power supply, and isolated interlock integrated in one cable
- No interconnecting RF lines required
 - » Quick and simple in-field switch replacement



Your Customization Options

- Number and orientation of inputs/outputs
- Rack configuration, e.g. redundancy
- Coaxial port size
- Dummy load integration
- Manual interlock bypass
- Interfaces for RF measurements on mirror paths
- Directional monitoring couplers



HIGH FREQUENCY PERFORMANCE WORLDWIDE

SPINNER designs and builds cutting-edge radio frequency systems, setting performance and longevity standards for others to follow. The company's track record of innovation dates back to 1946, and many of today's mainstream products are rooted in SPINNER inventions.

Industry leaders continue to count on SPINNER's engineering excellence to drive down their costs of service and ownership with premium-quality, off-the-shelf products and custom solutions. Headquartered in Munich, Germany, the global frontrunner in RF components remains the first choice in simple-yet-smart RF solutions.

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