

# 4931 RF Shield



## Highlights

- Evolution of the very successful 4921 RF Shield
- Gas springs are outside for more space
- No finger stocks to ease maintenance
- High shielding factor for safe testing in all applications
- High-grade absorption for repeatable test results
- Works with 4914, 4916 and 4918 Antenna Coupler

## High Shielding in Every Environment

Shielding is the most important requirement for an enclosure like the 4931 RF Shield. Aeroflex is the only supplier testing every box based on a very stringent standard, the military standard VG 95373 Part 15. Each shielded test enclosure from Aeroflex needs to pass the isolation test with a value much higher than specified in the data sheet. The specified isolation is high enough to test RF devices even under extreme conditions, e.g. on a test site that is co-located with a radio base station in the same building.



## Absorption for Repeatable Test Results

If RF devices are used within an enclosure, RF waves will be reflected from the metal sheets the box is made of. This can result in standing waves and other reflection effects that make test results worthless or even put damage on the devices under test. To avoid reflections, Aeroflex uses only high-class absorber material in its boxes. This way Aeroflex can guarantee that tests in different boxes are comparable and the test results are reliable and repeatable.

## Designed for a Long Life

High-volume service centers and production lines require solutions that work reliably over a long period of time. Aeroflex guarantees the high isolation even after 50,000 open-close cycles. With Aeroflex maintenance kits, the RF Shield will be ready for the next 50,000 open-close cycles. The 4931 RF Shield doesn't have finger stocks any more, therefore it is only necessary to replace the gas springs which makes it very easy and cost efficient to maintain.

## More Space with Same Physical Dimensions

Due to the fact that the gas springs are mounted now outside, the usable space inside the box is now bigger than in the RF Shield of the previous generation. This allows testing fixed wireless phones and 3G Wi-Fi routers inside a standard RF Shield. To enable reliable positioning of larger devices under test Aeroflex offers a Coupling Kit which is mounted on the Antenna Coupler.



## Coupling Loss Values Remains/Unchanged

The 4931 RF Shield is a successor to the 4921 RF Shield. As the physical dimensions remain unchanged the coupling loss values will stay the same. Together with the 4916 Antenna Coupler, XY shuttle and standard shuttle coupling loss values for more than 1000 phones are already available and the number is still increasing.

## SPECIFICATION

Specifications valid within a period of one year after delivery and a maximum of 50,000 open-close cycles; initial isolation significantly exceeds the values specified.

### RF SHIELDING

Measured according to German military standard VG 95737, "Electromagnetic Compatibility of Equipment - Part 15 Test methods for Coupling and Shielding", using a shielded RF cable with at least 100 dB isolation.

Values indicated below are typical values; isolation exceeds 80 dB in all the specified frequency bands:

700 to 1000 MHz Typ. 90 dB

1700 to 2000 MHz Typ. 90 dB

2000 to 2500 MHz Typ. 85 dB

5000 to 6000 MHz Typ. 80 dB

## SPECIFICATIONS

### Connector

N-type

### Open-Close Cycles

>50,000 times

## DIMENSIONS (L X W X H)

### Inside

340 x 240 x 160 mm

(13.4 x 9.4 x 6.3")

### Outside

410 x 265 x 220 mm

(5.5 x 10.4 x 8.7")

### Weight

4.8 kg (10.5 lbs.)

## STANDARD DELIVERY

4931 RF Shield

RF Cable N - N

## ORDERING INFORMATION

4931 RF Shield AG 100 010

Antenna Coupler:

4914 Antenna Coupler AG 248 719  
(including XY Shuttle)

4916 Antenna Coupler AG 248 641  
(including standard Shuttle)

4918 Broadband Antenna Coupler AG 248 700  
(including XY Shuttle)

Shuttles, Coupling Kits:

Standard Shuttle for 4914, 4916, 4918 AG 248 691

XY Shuttle for 4914, 4916, 4918 AG 248 698

PDA Shuttle for 4914, 4916, 4918 AG 248 692

Coupling Kit for 4931 AG 248 467

Customized rear panels with individual RF and data connectors (e.g. DB-9, USB, SMA connector) are available on request. Please contact your local Aeroflex Sales office or representative.

For the very latest specifications visit [www.aeroflex.com](http://www.aeroflex.com)

**CHINA Beijing**

Tel: [+86] (10) 6539 1166  
Fax: [+86] (10) 6539 1778

**CHINA Shanghai**

Tel: [+86] 21 2028 3588  
Fax: [+86] 21 2028 3558

**CHINA Shenzhen**

Tel: [+86] (755) 3301 9358  
Fax: [+86] (755) 3301 9356

**FINLAND**

Tel: [+358] (9) 2709 5541  
Fax: [+358] (9) 804 2441

**FRANCE**

Tel: [+33] 1 60 79 96 00  
Fax: [+33] 1 60 77 69 22

**GERMANY**

Tel: [+49] 89 99641 0  
Fax: [+49] 89 99641 160

**INDIA**

Tel: [+91] 80 [4] 115 4501  
Fax: [+91] 80 [4] 115 4502

**JAPAN**

Tel: [+81] (3) 3500 5591  
Fax: [+81] (3) 3500 5592

**KOREA**

Tel: [+82] (2) 3424 2719  
Fax: [+82] (2) 3424 8620

**SCANDINAVIA**

Tel: [+45] 9614 0045  
Fax: [+45] 9614 0047

**SINGAPORE**

Tel: [+65] 6873 0991  
Fax: [+65] 6873 0992

**TAIWAN**

Tel: [+886] 3 5500 338  
Fax: [+886] 3 5502 065

**UK Stevenage**

Tel: [+44] (0) 1438 742200  
Fax: [+44] (0) 1438 727601  
Freephone: 0800 282388

**USA**

Tel: [+1] (316) 522 4981  
Fax: [+1] (316) 522 1360  
Toll Free: 800 835 2352

As we are always seeking to improve our products, the information in this document gives only a general indication of the product capacity, performance and suitability, none of which shall form part of any contract. We reserve the right to make design changes without notice. All trademarks are acknowledged. Parent company Aeroflex, Inc. ©Aeroflex 2013.

[www.aeroflex.com](http://www.aeroflex.com)  
[info-test@eroflex.com](mailto:info-test@eroflex.com)



Our passion for performance is defined by three attributes represented by these three icons: solution-minded, performance-driven and customer-focused.