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 tablet computers, 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 Tablet 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 (including XY Shuttle)	AG 248 719
4916 Antenna Coupler (including standard Shuttle)	AG 248 641
4918 Broadband Antenna Coupler (including XY Shuttle)	AG 248 700
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
Tablet 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.

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A passion for performance.

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

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