

JRE 0709-USB3

Pre-Configured RF Shielded Test Enclosure

Our compact 0709 chamber with a USB 3.0 SuperSpeed filtered interface already fitted and tested — ready to ship, and ready to test the day it lands.



Ships with the USB 3.0 SuperSpeed interface installed

AT A GLANCE

- **Ready to test out of the box** — the JRE USB 3-1 filtered interface and two SMA feedthroughs are installed, wired and final-tested at the factory
- Handles **USB 1.1, 2.0 and 3.x SuperSpeed** over standard Type-A connectors
- **Not a low-pass filter** — a patented signal-phasing topology discriminates balanced data from common-mode RF, so there is **no inherent speed limit**
- Excellent isolation: **−100 dB DC to 1 GHz, −95 dB to 3 GHz, −85 dB to 6 GHz**
- Roomy **3.25 × 6 × 8.5 inches** inside (90 × 150 × 215 mm) and **light at 5 lb** — grab it and go bench to bench
- **Two SMA female bulkheads** with tethered dust caps for antennas or instrumentation
- Adjustable latch ensures tight RF shielding · optional **MW upgrade** to 28 GHz

DESCRIPTION

The pre-configured 0709 chambers give you the performance of the larger JRE enclosures at an entry-level price, by offering the configurations customers ask for most and building them in quantity. The JRE 0709-USB3 is the one for small wireless devices that need SuperSpeed USB: it arrives wired, final-tested and ready for the bench, with no plate to specify and no wait.

The fitted JRE USB 3-1 works on an entirely different principle from older USB filters. At SuperSpeed rates the data itself climbs into the wireless bands, where a low-pass filter can no longer tell data from interference; the patented design instead exploits the fact that USB data travels as a balanced

differential signal while interfering RF appears as common mode. Roughly 80 dB of rejection from 50 MHz to over 6 GHz, with no filtering on the data conductors at all.

Featuring rugged welded aluminum construction, you can be assured of its tight RF shielding effectiveness. Long-life door gasket material along with our double-edge contact engagement provides solid RF shielding and smooth, trouble-free operation over the life of the chamber. Inside, LS-30 RF absorbing foam tames reflections and hot-spots so measurements stay clean and repeatable.

SHIELDING ISOLATION

DC to 1 GHz	−100 dB
to 3 GHz	−95 dB
to 6 GHz	−85 dB

All JRE chambers, and many JRE filtered interfaces, can optionally be ordered with the MW upgrade for operation to 28 GHz at > 85 dB isolation. Contact the factory for details.

FITTED INTERFACE — JRE USB 3-1

Standard	USB 1.1 / 2.0 / 3.x
Filtering	Patented phasing
Conducted attenuation	~80 dB
Frequency range	50 MHz – 6 GHz+
Insertion loss, data lines	< 1.5 dB

Full specifications on the JRE USB 3-1 datasheet.

DIMENSIONS & WEIGHTS

Inside	3.25" H × 6" W × 8.5" D
	90 × 150 × 215 mm
Outside	4.5" H × 7.25" W × 9.75" D
	115 × 185 × 250 mm
Weight	5 lb / 2.3 kg
Shipping weight	6 lb / 2.7 kg

I/O PLATE & CONNECTORS

Plate size	JRE "A" size, factory-populated
Filtered interface	JRE USB 3-1
RF feedthroughs	Two SMA female bulkheads
Connector covers	Dust caps, tethered
Additional or different interfaces can be fitted — contact the factory.	

FEATURES & BENEFITS

- Double-contact door shields ensure repeatable measurements
- Heavy-duty stainless steel friction hinge holds the lid steady
- 1/2" (13 mm) RF absorbing foam; 90 °C rating, UL 94V-0 flammability
- Two SMA female bulkhead feedthroughs with tethered dust caps

CONFIGURING YOUR CHAMBER

Need a different mix of interfaces? The JRE 0709-P is the same chamber with an empty, field-changeable A-size plate, ready for any combination from JRE's line of filtered interfaces — USB, Ethernet, power, HDMI and more. Use the Configuration Worksheet at jretest.com to organize your requirements.