

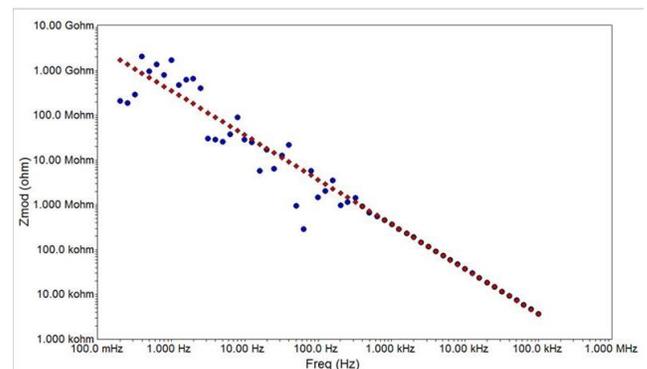
## Faraday Shield



### Faraday Shield Description

The Faraday Shield provides effective shielding from environmental electromagnetic noise allowing for high quality electrochemical measurements even at very low currents or voltages. This is especially important when making measurements on insulating coatings, highly corrosion-resistant materials or ultra microelectrodes.

The EIS results for an insulating coating on a metal substrate shown on the right illustrate this concept perfectly. The blue dots are without the use of a Faraday cage while the red diamonds are with a Faraday cage. Environmental noise in the form of electromagnetic radiation is easily observable when not using a Faraday cage.



The Faraday shield isn't just helpful for measurements for small current changes. It's also useful when testing very low impedance devices such as large supercapacitors. These devices tend to have small voltage responses (sub mV) making them susceptible to environmental noise.

The Faraday Shield includes a two-position shelf, four binding post holes for flexible configurations, multiple entry points for cables or gas hose placement, and handles for easy movement. The Faraday Shield is large enough to accommodate our MultiPort Cell and Optical Bench.

The unit is flat-packed for easier shipping. Assembly can be completed in less than ten minutes with no tools required. See below for full specifications.

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### ***Specifications***

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#### **Dimensions**

|      |  |
|------|--|
| Size | width x depth x height (external)<br>38 cm x 38 cm x 45.5 cm<br>width x depth x height (internal)<br>35 cm x 35 cm x 41.7 cm |
|------|--|

#### **Access**

|                     |                                 |
|---------------------|---------------------------------|
| Side openings (max) | width: 21 cm; height: 2.5 cm    |
| Top opening (max)   | width: 30.2 cm; length: 2.5 cm  |
| Door opening (max)  | width: 28.8 cm; height: 40.5 cm |

#### **Ring Stand Rod**

|          |                   |
|----------|-------------------|
| Length   | 40 cm (15.8 inch) |
| Diameter | 12 mm (0.5 inch)  |
| Material | Aluminum          |

#### **Shelf**

|            |   |
|------------|---|
| Dimensions | width: 34 cm; depth: 27.5 cm; thickness: 6 mm |
| Material   | plastic                                       |

#### **Weight**

|                |         |
|----------------|---------|
| Faraday Shield | 7 kg    |
| Shelf          | 0.5 kg  |
| Ring stand rod | 0.12 kg |

#### **Chemical Compatibility**

|                      |   |
|----------------------|---|
| Non-Wetted Materials | Aluminum alloy 6061 coated with a chemically stable coating |
|----------------------|---|

#### **System Information**

|                |           |
|----------------|-----------|
| Product Number | 992-00164 |
|----------------|-----------|

