

# **Shielding Box Series MSB**





## **Shielding Box Series MSB:**

## **Application**

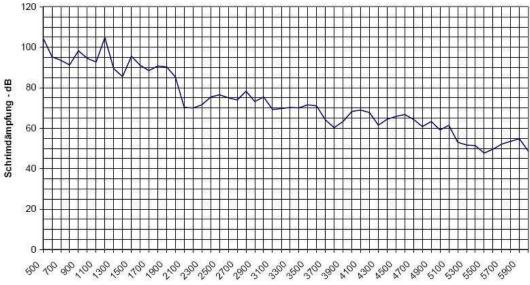
For measurements and tests of electronic devices such as mobile phones, notebooks, evaluation boards etc. without electromagnetic disturbances from the environment.

## **Description**

We have developed a compact and movable EMC screened "room", to fulfil multipurpose requirements. The stable construction of the shielding box series MSB is predestined for high test appearance due to the easy, single-handed open-close function. The test devices can either be clamped into an universal mobile phone attachment or put simply into the shielding box. The operation of the test samples can be done directly through the built-in flexible wire mesh or by using the numerous included communication interfaces.



Mean Shielding 500 MHz - 6000 MHz (MSB-0200)



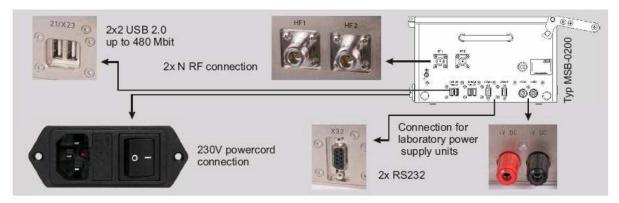
Frequenz - MHz



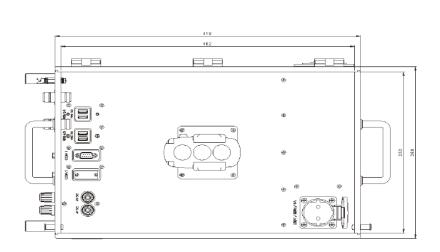
## **Characteristics:**

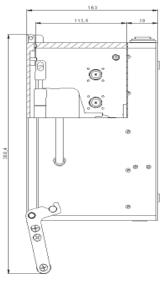
- Highest quality materials for extended life-time and high test appearance
- Economical solution for very high RF shielding levels and reproducible test scenarios to avoid time-consuming and expensive tests at EMC laboratories.
- Usable for frequencies between 500 6000 MHz, such as GSM/DCS/DECT/UMTS/FRID/ZigBee/Bluetooth/WLAN etc.
- Easy operation of the test samples directly through the built-in flexible wire mesh.
- Weight optimized structure improves the mobility
- Highest safety standards through increased slip resistance and gas prop cover holder.
- Integrated universal attachment for most types of mobile phones
- A wide range of supply and communication interfaces are included as standard
- Optional: interfaces and connectors to customers specifications.
- Shielding boxes with other dimensions can be designed according to customers individual requirements.

## **Interfaces:**



## **Dimensions:**







## **Specifications** Shielding Box, Series MSB

| 1 | Λ  | Camanal |
|---|----|---------|
|   | .0 | General |

1.1 Type of product: Shielding box with various interfaces

#### 2.0 **Features**

- 2.1 Box with two handles
- 2.2 Opening and closing by one-hand-mechanism
- 2.3 Optimal shielding realized with internal filters, shielding chamber and RF-shielding-materials
- 2.4 Nickel plated surface (chemical  $20\mu m - 25\mu m$ )
- 2.5 Integrated universal mobile phone mount
- Improved traction caused of rubber bases 2.6
- 2.7 Milling in the top cover for the fitting of two different covers

#### 3.0 **Electrical interfaces**

|        |                              | Shell                         | Interior                    |
|--------|------------------------------|-------------------------------|-----------------------------|
| Standa | <u>rd</u>                    |                               |                             |
| 3.1    | Antenna interface:           | N connector female            | N connector female          |
| 3.2    | Serial interface:            | Sub-D connector female, 9pole | Sub-D connector male, 9pole |
| 3.3    | Audio interface:             | XLR-flange-socket (3pole)     | XLR-flange-jack (3pole)     |
| 3.4    | USB interface:               | Form A (rectangle female)     | Form A (rectangle female)   |
| 3.5    | Voltage connectors           | Banana-socket 4 mm            | Banana-socket 4 mm          |
|        | (+VDC, -VDC) with protection |                               |                             |
|        | against polarity reversal    |                               |                             |
| 3.6    | Ground connection:           | Screw M4                      | -                           |
|        |                              |                               |                             |
| Option | <u>1S</u>                    |                               |                             |
| 3.7    | Infrared interface:          | IR-outlet                     | IR-outlet                   |

| 5.1  | infrared interface:             | IK-outlet                          | IK-outlet              |
|------|---------------------------------|------------------------------------|------------------------|
| 3.8  | Voltage connection 230V AC:     | Rubber connector                   | Earthed wall socket    |
| 3.9  | Second antenna interface:       | N connector female                 | N connector female     |
| 3.10 | Second universal mobile phone n | nount (location of both mounts are | useable independently) |

### 4.0 Dimensions (electrical interfaces not included) and weight

4.1 Inside the box (WxDxH): 402 x 252 x 116 mm 4.2 Outside the box (WxDxH): 416 x 268 x 162,7 mm

(without handles and connectors, extending cover)

4.3 Field of view (cover 1): 220 x 160 mm 4.4 Weight: about. 9,6 kg



| 5.0 | ٨ | ttenuation  | volue   |
|-----|---|-------------|---------|
| 5.0 | А | tteniiation | vallies |

5.1 Cover 1 (vide 6.1): typ. >40 dB @ 200 – 3000 MHz (all connectors open)
5.2 Cover 2 (vide 6.2): typ. >80 dB @ 200 – 3000 MHz (all connectors open)

## 6.0 Delivery contents

6.1 Cover 1: with shielded field of view to operate the unit manually without

opening the cover

6.2 Cover 2: closed

## 7.0 Types

|      | TE-No. | Type              | Interfaces  |
|------|--------|-------------------|---|
| 7.1  | 34489  | MSB-0011-USB      | Standard  |
| 7.2  | 34490  | MSB-0012-USB-230  | Standard, voltage connection 230V AC, 2 <sup>nd</sup> antenna interface           |
| 7.3  | 34491  | MSB-0013-Infrared | Standard, voltage connection 230V AC, infrared, 2 <sup>nd</sup> antenna interface |
| 7.4  | 35102  | MSB-0014          | Standard, 2 <sup>nd</sup> serial interface (9 and 25pole), antenna interface      |
|      |        |                   | N female/SMA female   |
| 7.5  | 34492  | MSB-0015          | Standard, infrared, 2 <sup>nd</sup> universal mobile phone mount                  |
| 7.6  | 35103  | MSB-0017          | Standard, 2 <sup>nd</sup> serial interface (9 and 25pole) and USB interface and 2 |
|      |        |                   | antenna interfaces additionally   |
| 7.7  | 35104  | MSB-0020          | Standard, voltage connection 230V AC, 2 <sup>nd</sup> USB interface               |
| 7.8  | 35105  | MSB-0021          | Standard, voltage connection 230V AC, 3 antenna interfaces                        |
|      |        |                   | SMA-female/SMA-female, 2 <sup>nd</sup> USB interface and serial interface         |
|      |        |                   | (9pole), 2 Twinax-BNC-female/female additionally                                  |
| 7.9  | 35106  | MSB-0022          | Standard, voltage connection 230V AC, 3 antenna interfaces                        |
|      |        |                   | SMA-female/SMA-female, 2 <sup>nd</sup> USB interface and serial interface         |
|      |        |                   | (9pole), 2 Twinax-BNC-female/female additionally                                  |
| 7.10 | 35107  | MSB-0023          | 6 serial interfaces (3x 9pole and 3x 25pole), USB interface, voltage              |
|      |        |                   | connection 230V, antenna interface N-female/SMA-female,                           |
|      |        |                   | 2 fibre-optic connectors FSMA/FSMA  |
| 7.11 | 35856  | MSB-0200          | Standard, voltage connection 230V AC, 2 <sup>nd</sup> serial interface, 3 USB     |
|      |        |                   | Interfaces  |

### 8.0 Notes

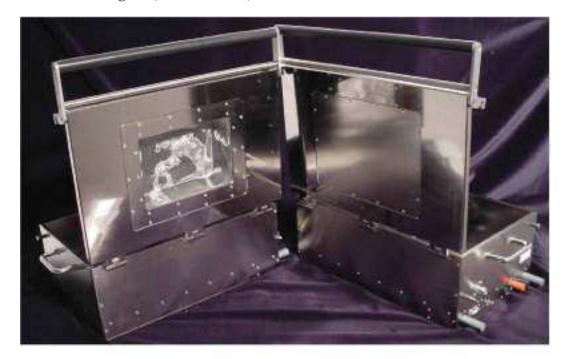
8.1 Warranty: 12 month

8.2 Acceptance inspection: The units fits the specified values. A COC protocol will be delivered if

required.



## 9.0 Illustration of shielding box (MSB-0011-USB) with cover 1 and cover 2



Technical datas subject to prior change!

Customization will be considered on request!