

## Shielding Box MSB-0100

MTS-No.: 20891-02

### Application

The Shielding Box can be used for measurements and tests of electronic devices such as mobile phones, notebooks, evaluation boards etc. without electromagnetic disturbances from the environment.

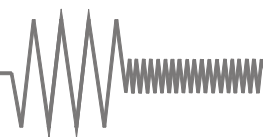
### Description

MTS Systemtechnik GmbH has 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 can be 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.



### Characteristics

- ▶ Highest quality materials for extended life time and high test appearance
- ▶ Economical solution for high RF shielding levels and reproducible test scenarios to avoid time-consuming and expensive tests at EMC laboratories
- ▶ Usable for frequencies between 500 MHz to 4000 MHz, such as GSM / DCS / DECT / UMTS / LTE / RFID / ZigBee / Bluetooth / WLAN etc. (up to 6000 MHz on request)
- ▶ USB 3.0 capable
- ▶ Easy operation of the test samples directly through the built-in flexible wire mesh
- ▶ An ergonomic position of the user is achieved by front side opening
- ▶ Weight optimized structure improves the mobility
- ▶ Highest safety standards through increased slip resistance and gas prop cover holder
- ▶ 1x integrated universal attachment for most types of mobile phones and smart 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



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### Configuration:

2x N connections, 2x SUBD 9-pole, 4x USB 3.0, 2x banana jack (voltage connectors) and 1x 230 V power plug as well as 1x universal smart phone attachment

### Technical data:

#### 1 RF-specifications:

1.1 Impedance	50 Ω
1.2 Frequency range	500 MHz – 4000 MHz (up to 6000 MHz on request)
1.3 Shielding @ closed cover (no mesh)	90 dB typ. @ 500 MHz – 2 GHz, 70 dB typ. @ 2 GHz – 4 GHz

3.9 Surface	Aluminum chem. nickel plated (20 - 25 µm)
3.10 Weight	9.6 kg

#### 2 Connectors (outside / inside):

2.1 Antenna-interface	2x N female / N female
2.2 Serial-interface	2x SUBD 9-pole female / SUBD 9-pole male
2.3 USB-interface modified	4x USB 3.0 type A female / type A female, 2x double module
2.4 Voltage connectors (+VDC, -VDC)	2x banana jack 4 mm / banana jack 4 mm, filtered, with protection against polarity reversal
2.5 Ground connection	Screw M4 outside
2.6 Mains voltage supply	Power plug (IEC 60320 C14) / 230 V AC power jack (CEE7/4), filtered

#### 4 Delivery package:

Shielding Box MSB-0100  
1 Closed cover  
1 Cover with built-in flexible wire mesh  
1 Mains cable  
1 Universal mobile smart phone attachment  
CD with operation manual and configuration sheet

#### 5 Comments:

Warranty 12 months  
RoHS-compliance Yes

#### 6 Recommended accessories:

USB 3.0 cable type A / type A  
Lighting bar  
Several antennas  
Measurement cable assemblies

#### 3 General specifications:

3.1 Power supply AC	100 V - 240 V AC, 50 Hz / 60 Hz, 1 A max.
3.2 Power supply DC	30 V max., 5 A max.
3.3 SUBD	50 V DC max., 1 A max.
3.4 USB 3.0	10 V DC max., 1.5 A max.
3.5 Operating temperature	+0 °C - +50 °C The equipment should not be subjected to extreme temperatures and variations in temperature.
3.6 Reference temperature for specifications	+25 °C
3.7 Dimensions (without protruding parts, like handles, connectors, etc.)	Outside: 418 x 268 x 172.3 (L x W x H in mm) Inside: 402 x 251 x 128.6 (L x W x H in mm)
3.8 Field of vision	190 x 130 (L x W in mm)

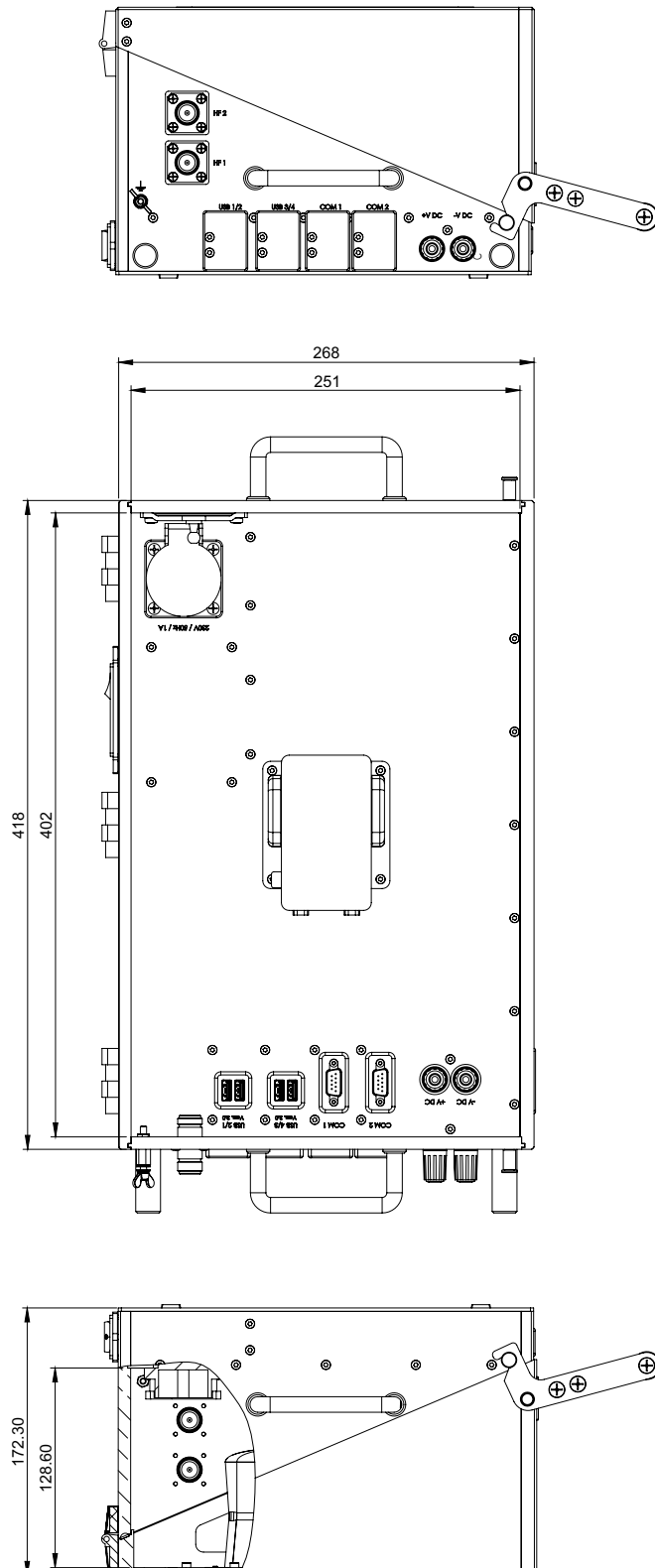
#### 7 Possible options:

Additional or other RF connectors  
VGA-interface  
LAN-interface filtered by optical media converter  
Audio-interface (XLR 3- or 5-pole or stereo jack 4-pole)  
RF absorber mats  
Ferrite absorber  
Infrared window  
Locking (for padlock)  
Ventilation (fan)  
One or more pcs. of mobile smart phone attachment with or without Velcro® fastening  
One or more pcs. of integrated touchpanel operating stylus or rounded field of vision (220 diameter in mm)

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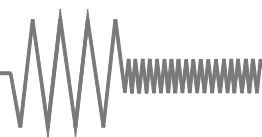
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Technical subject to change

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## Shielding Box MSB-0100

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Shielding with closed cover (without flexible wire mesh):

Mean Shielding 500 MHz - 4000 MHz

