

Shielding Box MSB-0044

MTS-No.: 23363

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.

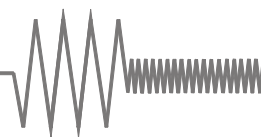
Description

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 be put simply into the Shielding Box. The operation of the test samples can be done 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 4500 MHz, such as GSM / DCS / DECT / UMTS / LTE / RFID / ZigBee / Bluetooth / WLAN etc. (up to 6000 MHz on request)
- ▶ USB 3.0 capable
- ▶ An ergonomic position of the user is achieved by front side opening
- ▶ Weight optimized structure improves the mobility
- ▶ LAN with 10/100 Mbit/s with automatic speed detection, power over Ethernet IEEE-802.3af is possible
- ▶ 19" rack mount case with 6 HU and front door (opening on the right-hand side on request)
- ▶ 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:

4x N connections, 4x USB 3.0, 4x banana jack (voltage connectors), 1x LAN (10/100 Mbit/s with automatic speed detection, power over Ethernet IEEE-802.3af is possible), and 1x 230 V power plug

Technical data:

1 RF-specifications:

- | | |
|--|--|
| 1.1 Impedance | 50 Ω |
| 1.2 Frequency range | 500 MHz – 4500 MHz
(up to 6000 MHz on request) |
| 1.3 Shielding @ closed cover (no mesh) | 80 dB typ.
@ 500 MHz – 1000 MHz,
60 dB typ.
@ 1000 MHz – 4500 MHz |

2 Connectors (outside / inside):

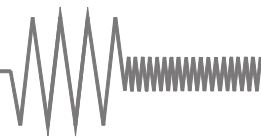
- | | |
|-------------------------------------|---|
| 2.1 Antenna-interface | 4x N female / N female |
| 2.2 USB-interface | 4x USB 3.0 type A female / type A female without filters, 2x double module |
| 2.3 LAN-interface | 1x RJ45 socket 8-pole / RJ45 socket 8-pole 10/100 Mbit/s with automatic speed detection, power over Ethernet IEEE-802.3af is possible |
| 2.4 Voltage connectors (+VDC, -VDC) | 4x banana jack 4 mm / banana jack 4 mm filtered, with protection against polarity reversal by module |
| 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 |

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 USB 3.0 | 10 V DC max., 1.5 A max. |
| 3.4 Internal power consumption | 150 mA max. @ 230V AC |
| 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: 327 x 482.6 (19") x 256.9 (L x W x H in mm)
Inside: 300 x 410 x 194 (L x W x H in mm) |
| 3.8 Surface | Aluminum chem. nickel plated (20 - 25 µm) |
| 3.9 Weight | 13.4 kg |

4 Delivery package:

- Shielding Box MSB-0044
- 1 Mains cable
- CD with operation manual and configuration sheet



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Technical data:

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

7 Possible options:

Additional or other RF connectors
VGA-interface
Interface with stereo jack 4-pole
RF absorber mats
Ferrite absorber
Infrared window
Locking (for padlock)
Ventilation (fan)
Mobile phone attachment with Velcro® fastening
Door with built-in flexible wire mesh (with one or more pcs. of integrated touchpanel operating stylus)

Views:

