

MTS-No.: 20891-01



Shielding Box MSB-0100

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 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
- ► 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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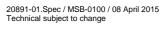
Shielding Box MSB-0100

Configuration:

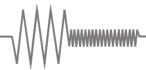
2x N connections, 2x SUBD 9-pole (RS-232), 4x USB 3.0, 2x banana jack (voltage connectors) and 1x 230 V power plug

Technical data:

1	RF-specifications:			General specifications:	
1.1	Impedance	50 Ω	3.1	Power supply AC	100 V - 240 V AC, 50 Hz / 60 Hz, 1 A max.
1.2	Frequency range	500 MHz – 4000 MHz (up to 6000 MHz on request)	3.2	Power supply DC	30 V max., 5 A max.
1.3	Shielding @ closed 90 dB typ. @ 500 MHz – 2		3.3	SUBD	50 V DC max., 1 A max.
	cover (no mesh)	70 dB typ. @ 2 GHz – 4 GHz	3.4	USB 3.0	10 V DC max., 1.5 A max.
2	Connectors (outside / inside):			3.5 Operating temperature	+0 °C - +50 °C The equipment should not be
2.1	Antenna-interface	2x N female / N female			subjected to extreme temperatures and variations in
2.2	Serial-interface	2x SUBD 9-pole female /			temperature.
2.3	USB-interface	SUBD 9-pole male 4x USB 3.0 type A female / type A female without filters,	3.6	Reference temperature for specifications	+25 °C
		2x double module	3.7	Dimensions (without protruding	Outside: 418 x 268 x 172.3 (L x W x H in mm)
2.4	Voltage connectors (+VDC, -VDC)	2x banana jack 4 mm / banana jack 4 mm filtered, with protection		parts, like handles, connectors, etc.	Inside: 402 x 251 x 128.6 (L x W x H in mm)
		against polarity reversal	3.8	Field of vision	190 x 130 (L x W in mm)
2.5	Ground connection	Screw M4 outside	3.9	Surface	Aluminum chem. nickel plated (20 - 25 µm)
2.6	Mains voltage supply	Power plug (IEC 60320 C14) / 230 V AC power jack (CEE7/4), filtered	3.10) Weight	9.6 kg







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Technical data:

4 Delivery package:

Shielding Box MSB-0100

- 1 Closed cover
- 1 Cover with built-in flexible wire mesh
- 1 Mains cable
- 1 Universal mobile 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

7 Possible options:

Additional or other RF connectors

VGA-interface

LAN-interface filtered by optical media converter

RF absorber mats

Ferrite absorber

Infrared window

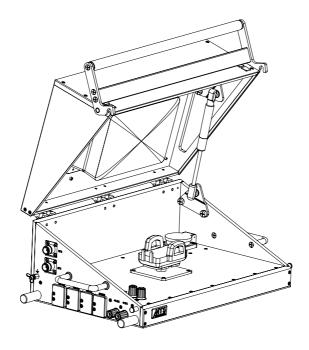
Locking (for padlock)

Ventilation (fan)

Mobile phone attachment with Velcro® fastening

One or more pcs. of integrated touchpanel operating stylus

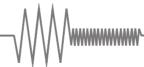
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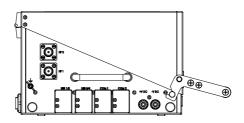


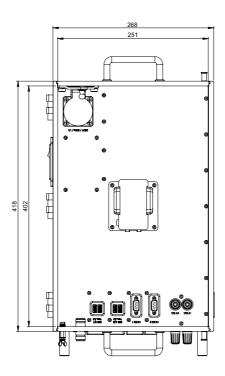


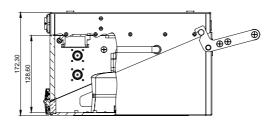
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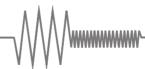




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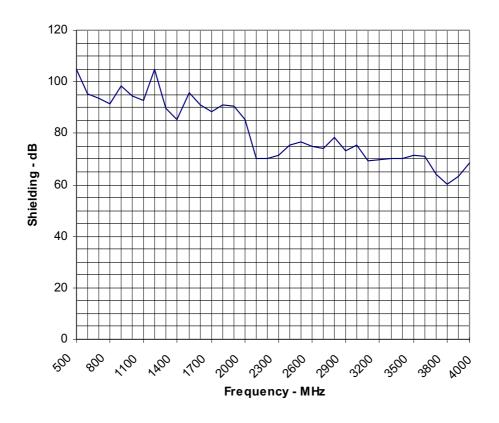


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Shielding with closed cover (without flexible wire mesh):

Mean Shielding 500 MHz - 4000 MHz



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