

Shielding Box MSB-0403

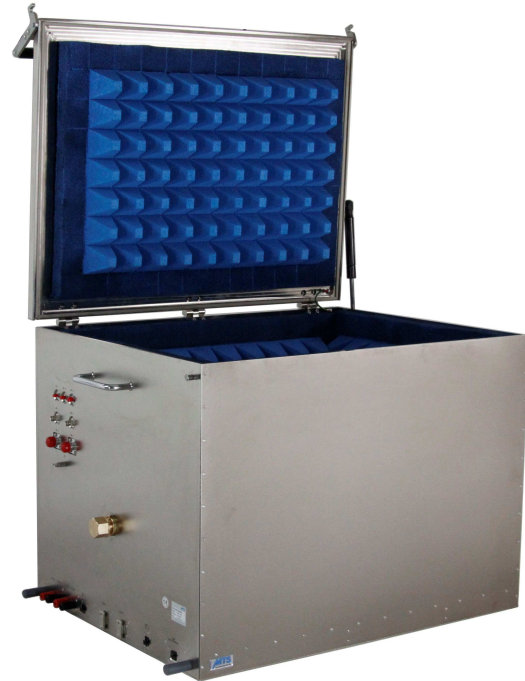
MTS-No.: 27894

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.

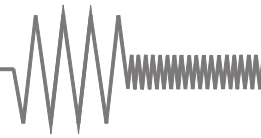
Description

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 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 6000 MHz, such as GSM / DCS / DECT / UMTS / LTE / RFID / ZigBee / Bluetooth / WLAN etc.
- ▶ USB 3.1 capable
- ▶ An ergonomic position of the user is achieved by front side opening
- ▶ Weight optimized structure improves the mobility
- ▶ LAN with 10/100/1000 Mbit/s, with automatic speed detection
- ▶ Additional full absorber lining for interior reflection reduction
- ▶ Highest safety standards through increased slip resistance and gas prop cover holder
- ▶ 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:

3x SMA connections with extension, 2x N connections, 2x BNC connections, 2x SUBD 9-pole, 2x USB 3.1, 4x banana jack (voltage connectors), 1x LAN (10/100/1000 Mbit/s, with automatic speed detection) and 1x 230 V power plug, as well as additional full absorber lining (inclusive top cover, SFC-4-EM) and 2x pipe 0.75 inch with male thread

Technical data:

1 RF-specifications:

1.1 Impedance	50 Ω	3.6 Operating temperature	+0 °C - +50 °C The equipment should not be subjected to extreme temperatures and variations in temperature.
1.2 Frequency range	500 MHz – 6000 MHz	3.7 Reference temperature for specifications	+25 °C
1.3 Shielding @ closed cover (no mesh)	90 dB typ. @ 0.5 – 4.5 GHz 85 dB typ. @ 4.5 – 6.0 GHz	3.8 Dimensions (without protruding parts, like handles, connectors, etc.)	Outside: 666 x 516 x 503 (L x W x H in mm) Inside without absorber lining: 650 x 500 x 448 (L x W x H in mm)

2 Connectors (outside / inside):

2.1 Antenna-interface	3x SMA female / SMA female	3.9 Pipe with male thread	0.75, 120 (diameter in inch x L in mm)
2.2 Antenna-interface	2x N female / N female	3.10 Surface	Aluminum chem. nickel plated (20 - 25 μm)
2.3 Antenna-interface	2x BNC female / BNC female	3.11 Weight	48.6 kg
2.4 Serial-interface	2x SUBD 9-pole female / SUBD 9-pole male		
2.5 USB-interface	2x USB 3.1 gen. 1 type A female / type A female, filtered		
2.6 LAN-interface	1x RJ45 8-pole female to RJ45 8-pole female, 10/100/1000 Mbit/s, optically filtered, with automatic speed detection		
2.7 Voltage connectors (+VDC, -VDC)	4x banana jack 4 mm / banana jack 4 mm, filtered, without protection against polarity reversal		
2.8 Ground connection	Screw M4 outside		
2.9 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 SUBD	50 V DC max., 1 A max.
3.4 USB 3.1 gen. 1	Supported current 1.5 A
3.5 Internal power consumption	200 mA max. @ 230 V AC

4 Delivery package:

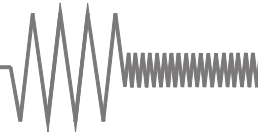
Shielding Box MSB-0403
1 Closed cover
1 Mains cable
CD with operation manual and configuration sheet

5 Comments:

Warranty	12 months
RoHS-compliance	Yes

6 Recommended accessories:

USB 3.1 gen. 1 cable type A / type A
Lighting bar
Several antennas
Measurement cable assemblies



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Technical data:

7 Possible options:

Additional or other RF connectors

Infrared window

VGA-interface

Locking (for padlock)

Audio-interface (XLR 3- or 5-pole or stereo jack 4-pole)

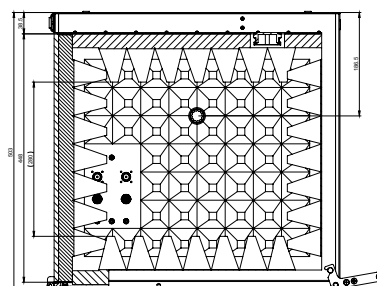
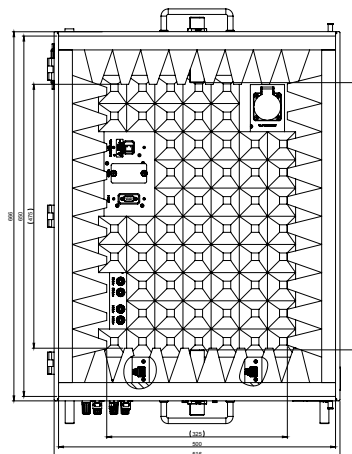
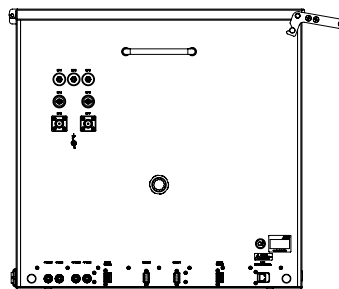
Ventilation (fan)

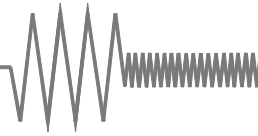
Ferrite absorber

One or more pcs. of mobile smart phone attachment with or without Velcro® fastening

One or more pcs. of integrated touchpanel operating stylus

Views:





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Shielding with closed cover (without flexible wire mesh):

Mean Shielding 500 MHz - 6000 MHz

