

Shielding Box MSB-0605

MTS-No.: 31149

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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 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 6000 MHz, such as GSM / DCS / DECT / LTE+ / 5G / RFID / ZigBee / Bluetooth / Wi-Fi etc.
- ▶ USB 3.2 capable with up to 20 Gbit/s
- ▶ LAN with up to 1 Gbit/s according PoE++
- ▶ Weight optimized structure improves the mobility
- ▶ Highest safety standards through increased slip resistance and gas prop cover holder
- ▶ Attached PVC shelf consisting of one layer
- ▶ Air circulation is given by the integrated fan and honeycomb vents
- ▶ 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:

8x SMA/SMA connections, 4x BNC/BNC connections, 2x SUBD 9-pole, 2x USB 3.2 (20 Gbit/s), 1x LAN (1 Gbit/s according PoE++), 2x ST connections, 6x feedthrough for fiber-optic, 4x banana jack (voltage connectors) and 1x 230 V Harting H-A3 as well as 1x integrated fan and attached PVC shelf consisting of one layer

Technical data:

1 RF-specifications:

1.1 Impedance	50 Ω
1.2 Frequency range	500 MHz - 6000 MHz
1.3 Shielding @ closed cover (no mesh, no shielded window)	80 dB typ. @ 500 MHz – 3 GHz 55 dB typ. @ 3 GHz – 6 GHz

3.5 Operating temperature	-40 °C - +80 °C The equipment should not be subjected to extreme temperatures and variations in temperature.
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3.6 Reference temperature for specifications	+25 °C
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2 Connectors (outside / inside):

2.1 Antenna-interface	8x SMA female / SMA female
2.2 Antenna-interface	4x BNC female / BNC female
2.3 Serial-interface	2x SUBD 9-pole female / SUBD 9-pole male
2.4 USB-interface	2x USB 3.2 type C female / type C female, 20 Gbit/s, ESD protection & filtered
2.5 LAN-interface	1x RJ45 8-pole female / RJ45 8-pole female, 1 Gbit/s, filtered according PoE++
2.6 Voltage connectors (+VDC, -VDC)	4x banana jack 4 mm / banana jack 4 mm, filtered, with protection against polarity reversal
2.7 Ground connection	Screw M4 outside
2.8 Mains voltage supply	Power plug Harting EPIC H-A3 male / H-A3 female, filtered

3.7 Dimensions (without protruding parts, like handles, connectors, etc.)	Outside: 268 / 253 x 358 / 284 x 359 / 352 (L x W x H in mm, with / without modules or legs) Inside: 165 x 259 x 326 (L x W x H in mm)
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3.8 Surface	Aluminum chem. nickel plated (20 - 25 μm)
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3.9 Weight	14.4 kg
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4 Delivery package:

Shielding Box MSB-0605
Attached PVC shelf consisting of one layer
Mains cable
CD with operation manual and configuration sheet

5 Comments:

Warranty	12 months
RoHS-compliance	Yes

3 General specifications:

3.1 Power supply AC	100 V - 240 V AC, 50 Hz / 60 Hz, 1 A max. @ outlet
3.2 Power supply DC	30 V max., 5 A max.
3.3 USB 3.2	20 V DC max., 5.0 A max.
3.4 LAN according PoE++	60 V DC max., 1.5 A max.

6 Recommended accessories:

USB 3.2 cable type A / type C or type C / type C
Lighting bar
Several antennas
Measurement cable assemblies

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Technical data:

7 Possible options:

Additional or other RF connectors

VGA-interface

LAN-interface

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

RF absorber mats

Ferrite absorber

Infrared window

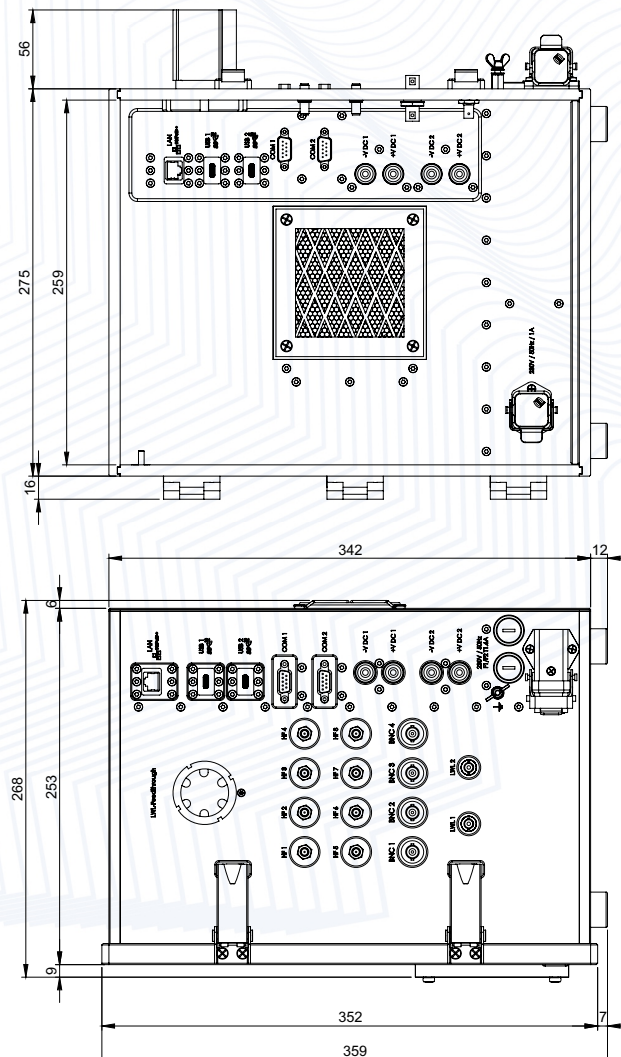
Ventilation (fan)

Locking (for padlock)

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

Door with built-in flexible wire mesh optional with one or more pcs. of integrated touchpanel operating stylus or field of vision or rounded field of vision

Views:



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Shielding with closed cover (without flexible wire mesh, without shielded window):

