

MTS-No.: 31017

Shielding Box MSB-0292-ABS-S1

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 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
- Weight optimized structure improves the mobility

- Additional absorber lining for interior reflection reduction (inclusive lining for top)
- 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

31017.SPEC / MSB-0292-ABS-S1 / 14 December 2023

MTS Systemtechnik GmbH DIN EN ISO 9001:2015 certified Phone: + 49 (0) 907891294-0 Fax: + 49 (0) 9078 91294-70

© MTS Systemtechnik GmbH Technical subject to change



Shielding Box MSB-0292-ABS-S1

MTS-No.: 31017 Page 2 from 4

Configuration:

2x SMA/SMA connections, 4x USB 3.2 (20 Gbit/s), 1x LAN (1 Gbit/s), 2x banana jack (voltage connectors) and 1x 230 V power plug as well as additional absorber lining (inclusive lining for top, flat laminate absorber)

Technical data:

| 1 | RF-specifications: | | | | | |
|-----|-------------------------------------|---|--|-----|--|--|
| 1.1 | Impedance | 50 Ω 500 MHz - 6000 MHz | | | Operating temperature | +0 °C - +50 °C The equipment should not be subjected to extreme |
| 1.2 | Frequency range | | | | | |
| 1.3 | Shielding @ complete solid cover | 105 dB typ. @ 0.5 – 3.5 GHz over 95 dB typ. @ 3.5 – 6.0 GHz | | | | temperatures and variations in temperature. |
| 2 | Connectors (outside / inside): | | | 3.6 | Reference +25 °C temperature for specifications | |
| 2.1 | Antenna-interface | 2x | SMA female / SMA female | 3.7 | | Outside: 418 x 268 x 319 |
| 2.2 | USB-interface | 4x | USB 3.2 type C female / type C female, 20 Gbit/s, ESD protection & filtered | | (without protruding parts, like handles, connectors, etc.) | (L x W x H in mm) Inside: $402 \times 252 \times 263.5$ (L x W x H in mm, without absorber) Inside: $344 \times 194 \times 211$ (L x W x H in mm) |
| 2.3 | LAN-interface | 1x | RJ45 8-pole female / RJ45 8-pole female, 1 Gbit/s, filtered | | | |
| 2.4 | Voltage connectors (+VDC, -VDC) | 2x | banana jack 4 mm / banana jack 4 mm, filtered, without protection against polarity reversal | 3.8 | Surface | Aluminum chem. nickel plated (20 - 25 μm) |
| | | | | 3.9 | Weight | 16.2 kg |
| 2.5 | Ground connection Screw M4 outside | | | 4 | 4 Delivery package: | |
| 2.6 | Mains voltage supply | Power plug (IEC 60320 C14) / 230 V AC power jack (CEE7/3), filtered | | | Shielding Box MSB-0292-ABS-S1 | |
| | | | | | Mains cable | |
| | | | | | CD with operation ma | anual and configuration sheet |
| 3 | General specifications: | | | 5 | Comments: | |
| 3.1 | Power supply AC | 100 V - 240 V AC, 50 Hz / 60 Hz, 1 A max. @ outlet | | | Warranty | 12 months |
| | | | | | RoHS-compliance | Yes |
| 3.2 | Power supply DC | 50 V max., 10 A max. 20 V DC max., 5.0 A max. | | 6 | Recommended accessories: | |
| 3.3 | USB 3.2 | | | Ū | | |
| 3.4 | LAN | 50 V DC max., 0.35 A max. | | | USB 3.2 cable type A / type C or type C / type C | |
| | | | | | Lighting bar | |
| | | | | | Several antennas | aaamhliaa |
| | | | | | Measurement cable a | assemblies |

31017.SPEC / MSB-0292-ABS-S1 / 14 December 2023

MTS Systemtechnik GmbH DIN EN ISO 9001:2015 certified Gewerbepark Ost 8 86690 Mertingen Phone: + 49 (0) 907891294-0 Fax: + 49 (0) 9078 91294-70

© MTS Systemtechnik GmbH Technical subject to change



Shielding Box MSB-0292-ABS-S1

MTS-No.: 31017 Page 3 from 4

Configuration:

2x SMA/SMA connections, 4x USB 3.2 (20 Gbit/s), 1x LAN (1 Gbit/s), 2x banana jack (voltage connectors) and 1x 230 V power plug as well as additional absorber lining (inclusive lining for top, flat laminate absorber)

Technical data:

7 Possible options:

Additional or other RF connectors

VGA-interface

Audio-interface (XLR 3- or 5-pole or stereo jack 4-pole) Ferrite absorber Infrared window

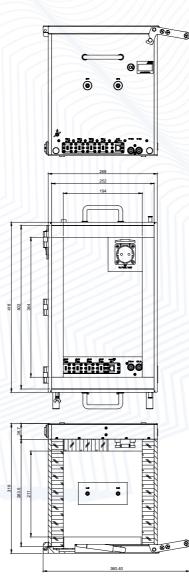
Ventilation (fan)

Locking (for padlock)

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

One or more pcs. of integrated touchpanel operating stylus or field of vision or rounded field of vision

Views:



31017.SPEC / MSB-0292-ABS-S1 / 14 December 2023

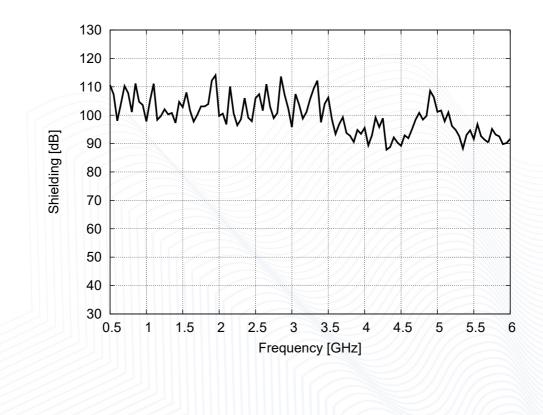
MTS Systemtechnik GmbH DIN EN ISO 9001:2015 certified Gewerbepark Ost 8 86690 Mertingen Phone: + 49 (0) 907891294-0 Fax: + 49 (0) 9078 91294-70

© MTS Systemtechnik GmbH Technical subject to change



Shielding Box MSB-0292-ABS-S1

MTS-No.: 31017 Page 4 from 4



Shielding with closed cover (complete solid cover):

31017.SPEC / MSB-0292-ABS-S1 / 14 December 2023

MTS Systemtechnik GmbH DIN EN ISO 9001:2015 certified Gewerbepark Ost 8 86690 Mertingen Phone: + 49 (0) 907891294-0 Fax: + 49 (0) 9078 91294-70

© MTS Systemtechnik GmbH Technical subject to change