

## Shielding Box MSB-0084-FAN-FLABS

**MTS-No.: 31198**

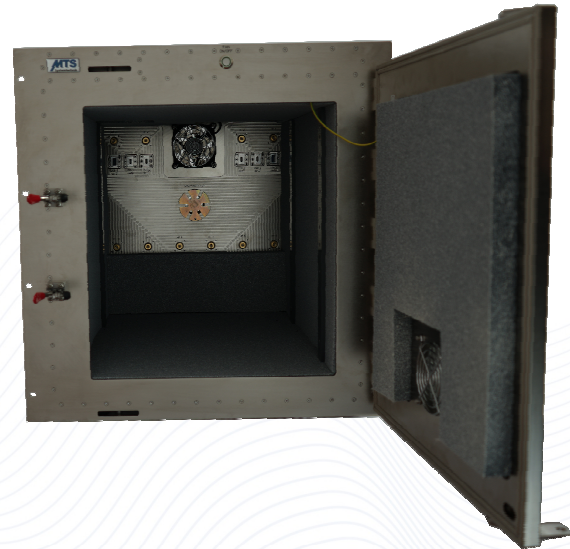
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### Application

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 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
- ▶ USB 3.1 capable with up to 10 Gbit/s
- ▶ LAN with up to 1 Gbit/s according PoE++
- ▶ An ergonomic position of the user is achieved by front side opening
- ▶ Weight optimized structure improves the mobility
- ▶ 19" rack mount case with 11 HU and front door (opening on the right-hand side on request)
- ▶ Additional absorber lining for interior reflection reduction (inclusive lining for top door)
- ▶ Cover locking (by padlock)
- ▶ 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:

10x N/SMA connections, 4x USB 3.2 (20 Gbit/s), 2x USB 3.1 (10 Gbit/s), 4x LAN (1 Gbit/s according PoE++), 6x feedthrough for fiber-optic and 1x 230 V power plug as well as 1x integrated fan with switch and 2x honeycomb vent, cover locking for padlock as well as additional absorber lining (inclusive lining for top door, flat laminate absorber)

## Technical data:

### 1 RF-specifications:

1.1 Impedance	50 Ω
1.2 Frequency range	500 MHz – 6000 MHz
1.3 Shielding	85 dB typ.

### 2 Connectors (outside / inside):

2.1 Antenna-interface	10x N female / SMA female
2.2 USB-interface	4x USB 3.2 type C female / type C female, 20 Gbit/s, ESD protection & filtered
2.3 USB-interface	2x USB 3.1 type A female / type A female, 10 Gbit/s, ESD protection & filtered
2.4 LAN-interface	4x RJ45 8-pole female / RJ45 8-pole female, 1 Gbit/s, filtered, according PoE++
2.5 Fiber-optic-interface	1x feedthrough for 6x Ø 6 mm line
2.6 Ground connection	Screw M4 outside
2.7 Mains voltage supply	Power plug (IEC 60320 C14) / 230 V AC power jack (CEE7/3), filtered

### 3 General specifications:

3.1 Power supply AC	100 V - 240 V AC, 50 Hz / 60 Hz, 3 A max. @ outlet
3.2 USB 3.2	20 V DC max., 5.0 A max.
3.3 USB 3.1	16 V DC max., 1.5 A max.
3.4 LAN according PoE++	60 V DC max., 1.5 A max.
3.5 Internal power consumption	50 mA max. @ 230 V AC

3.6 Operating temperature	+0 °C - +50 °C The equipment should not be subjected to extreme temperatures and variations in temperature.
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3.7 Reference temperature for specifications	+25 °C
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3.8 Dimensions (without protruding parts, like handles, connectors, etc.)	Outside (with / without modules): 559 / 500 x 482.6 (19") x 488.1 (11 HU) (L x W x H in mm) Inside: 428 x 328 x 355.8 (L x W x H in mm with absorber)
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3.9 Door opening	325 x 358 (L x W in mm)
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3.10 Surface	Aluminum chem. nickel plated (20 - 25 µm)
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3.11 Weight	32.0 kg
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### 4 Delivery package:

Shielding Box MSB-0084-FAN-FLABS  
Mains cable  
CD with operation manual and configuration sheet

### 5 Comments:

Warranty	12 months
RoHS-compliance	Yes

### 6 Recommended accessories:

Guiding rails for mounting  
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

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

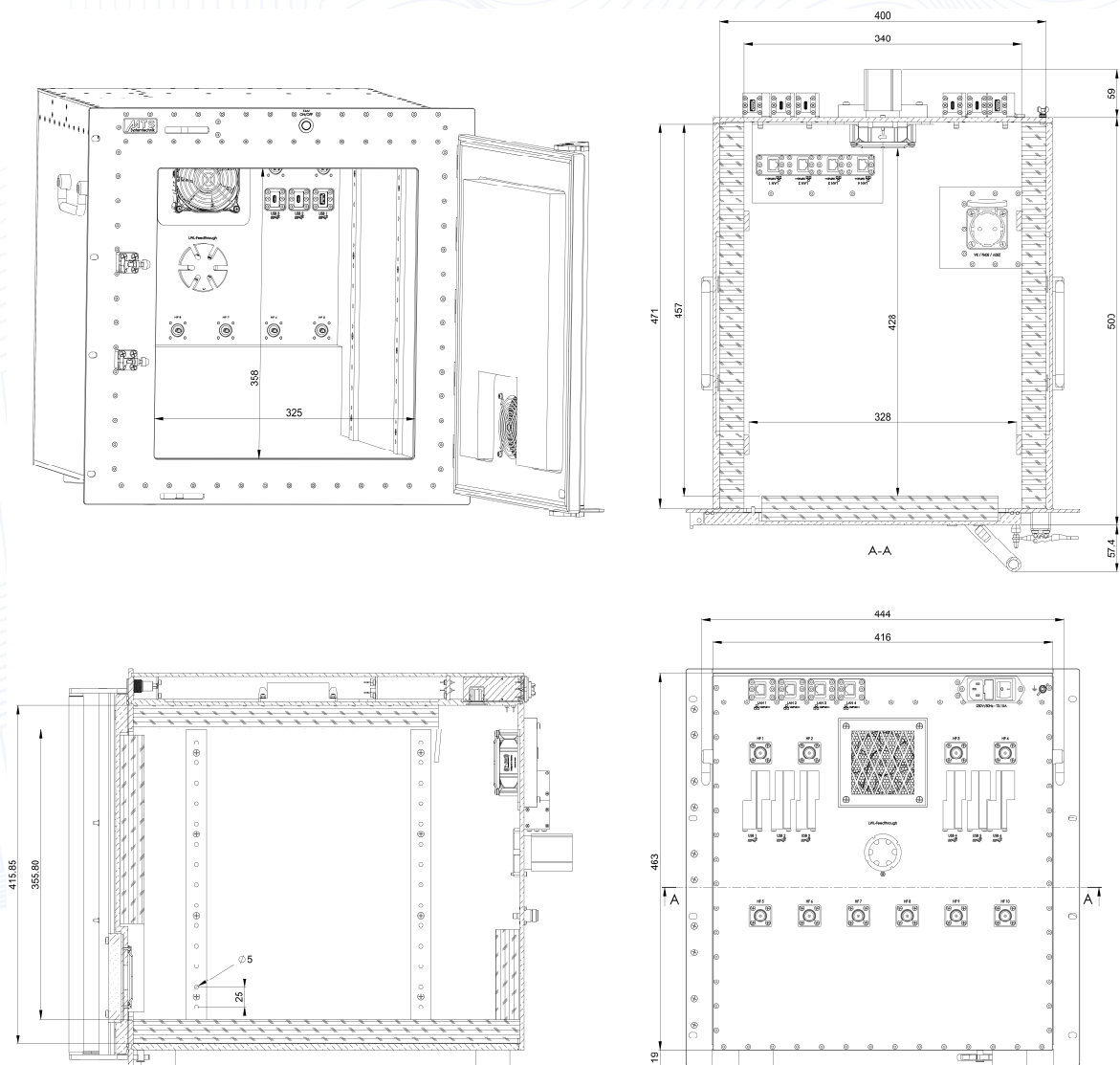
Ferrite absorber

Infrared window

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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Technical subject to change

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**Shielding with closed cover (complete solid cover):**

