smartmicro
SMART MICROWAVE SENSORS

PRODUCT INFORMATION

TRAFFIC MANAGEMENT ACCESSORY

Shield

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CONTENT

1   USER SAFETY WARNING

Please read the entire document carefully before using the device.

INSTALLATION

Please pay attention to the details below before installing and connecting the device:

- Only use provided or approved equipment for the operation.
- Only skilled and instructed persons shall install and connect the device.
- All connectors are pin-coded and fit in only one position.
- Be cautious when using the device on or around active roadways and pay attention to moving traffic.
- Mount the shields carefully to prevent them from shifting or dropping.
- Make sure that test procedures are in accordance with local safety policies and procedures as well as company practices.

OPERATION

The Shield is designed to work under different environmental conditions (temperature, rain, dust, …). Regular maintenance such as cleaning or recalibration is not required.

TECHNICAL SERVICE

Only use provided or approved equipment for operation.

Do not attempt to service or repair this device:

- No user-maintainable parts are contained in the device.
- Unauthorized attempts will void all warranties.
- smartmicro is not liable for any damages or harms caused by unauthorized attempts to open or repair the device.

2 SHIELD M

Shield M[1] is a snow and rain cover aimed to protect the sensor radome surface from accumulation of rain droplets, snow, or ice. The amount of accumulation by such material is diminished. However, Shield M is not intended to serve as a full enclosure and will therefore not prevent all accumulation of such materials.

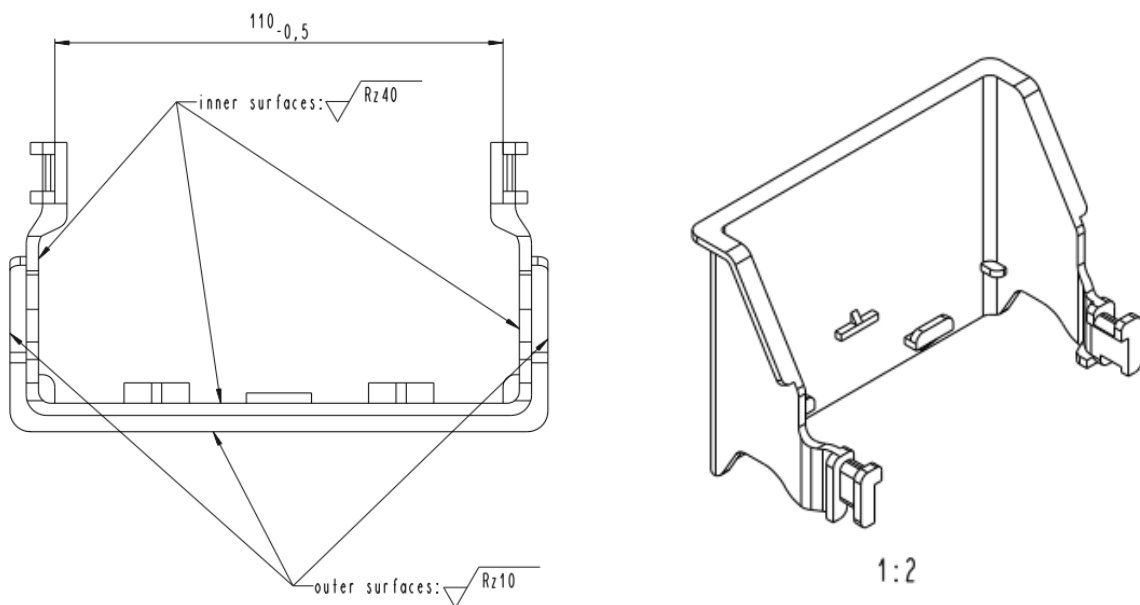Shield M is depicted in the figure below.

Figure 1: Shield M

Figure 2: Shield M drawing

[1] Previously referred to as SHIELD-050000

2.1   GENERAL DATA

Parameter	Value
Dimensions	132mm x 93mm x 90mm 5.2in x 3.66in x 3.54in
Material	PBT GF

Table 1: Shield M general data

2.2   COMPATIBLE SENSORS

Shield M is compatible with the following smartmicro sensors:

Shield Type	Sensor Compatibility
Shield M[1]	UMRR-11 Type 44 UMRR-11 Type 45

Table 2: Shield M compatible sensors

3   SHIELD L

Shield L[2] is a snow and rain cover aimed to protect the sensor radome surface from accumulation of rain droplets, snow, or ice. The amount of accumulation by such material is diminished. However, Shield L is not intended to serve as a full enclosure and will therefore not prevent all accumulation of such materials.

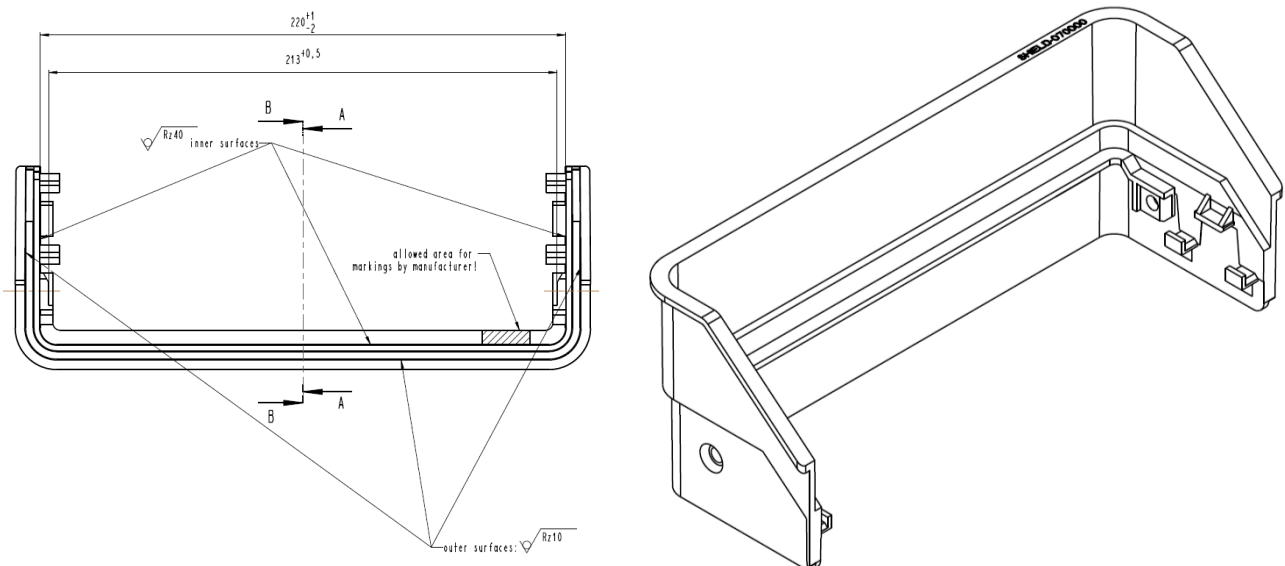Shield L is depicted in the figure below.

Figure 3: Shield L

Figure 4: Shield L Drawing

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[2] Previously referred to as SHIELD-070001

3.1 GENERAL DATA

Parameter	Value
Dimensions	241mm x 90mm x 85mm 9.49in x 3.54in x 3.35in
Material	PBT GF

Table 3: Shield L general data

3.2 COMPATIBLE SENSORS

Shield L is compatible with the following smartmicro sensors:

Shield Type	Sensor Compatibility
Shield L[2]	TRUGRD Stream TRUGRD (UMRR-12 Type 48) UMRR-0C Type 42 UMRR-0C Type 40

Table 4: Shield L compatible sensors
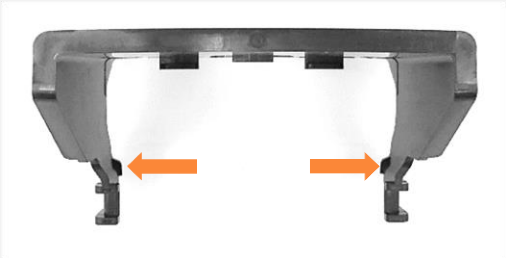
4 MOUNTING INSTRUCTIONS

The following components are needed to get started:

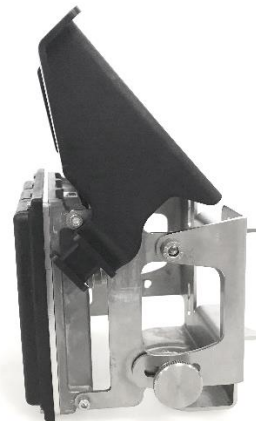| Installation	
For details regarding the different Bracket types and their sensor compatibility, please refer to the Bracket datasheet Image shows a Bracket M	
Shield Image shows Shield M	

Table 5: Mounting instructions
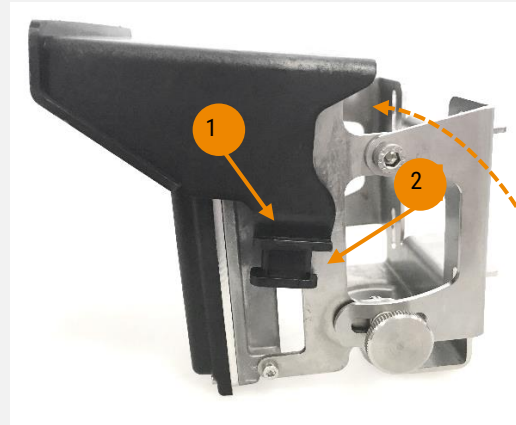
4.1 HARDWARE INSTALLATION

The following pictures show a sensor mounted in the bracket, but a sensor is not needed to assembly the Shield. It is for illustrative purposes only.

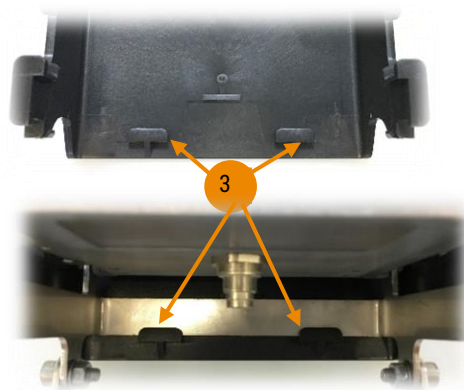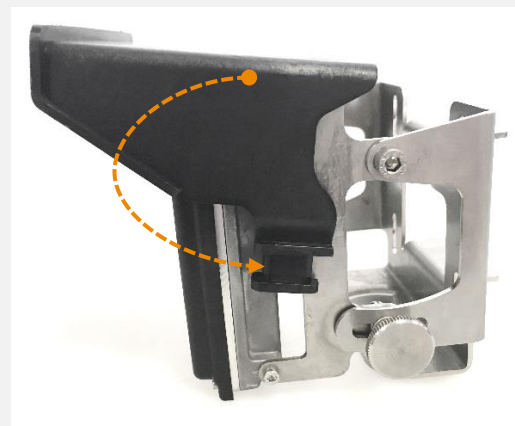| Steps	Illustration
1. Pull the Shield apart at the orange arrows.	
2. Put the Shield at the same angle as the right picture on the Bracket.	

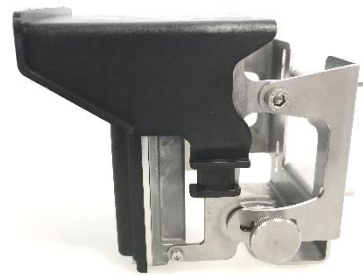3. Put the shield slightly downwards but make sure that the arms (1) don't lock at the shield (2).

4. Lead the shield in front of the two noses (3)…

5. …and lock it at the Bracket with a "click" noise.

6. In the picture to the right, you can see the assembled Shield.

7. In regions where strong winds can be expected, secure the Shield with a metal strap at the indicated position on both sides.
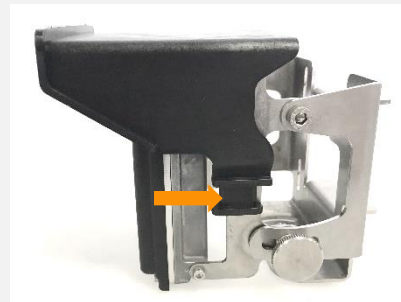

Table 6: Hardware Installation

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