# Protection of Figurines with High Frequency Sensors (Radar Detectors)



### We protect your values!

Figurines are used in museums and exhibitions. They are often used to represent historical characters or recreate historical scenes. Figurines are also used to display historical clothing.

In addition to the danger of theft of garments, visitors can often be photographed with the figurines. This may inevitably lead to damage of the figurine or clothing.

The aim is to protect the entire figurine against physical contact by visitors. A clearly audible warning tone is triggered as soon as someone enters the monitored area. The alarm can be transmitted to the alarm centre, if desired. The reported signal, for example, can then be transmitted to the supervisor in the exhibition area via pager.



#### The Solution with Human Detector

The **Human Detector** alarm module is extremely well suited for the fast and inexpensive protection of figurines. The complete exhibit can be monitored by combining the systems with the radar detector RS-1Z. The use of capacitive field change sensors in the **Human Detector** module is recommended as an alternative to the overall monitoring. The use of these sensors is described in a separate data sheet.

The radar detector needs to be installed below the figurine. The radar detector can achieve a range of approx. 250 cm, depending on the set sensitivity. The lobe-shaped detection area enables the monitoring of the entire figurine. Various circumstances must be taken into account when using a radar sensor. The high-frequency signal transmitted by the radar detector must be able to propagate freely through the figurine and possibly also through the platform floor. This requires that there are no large metallic objects within the exhibit, e. g. metal base plates or a figurine body made of wire mesh.

The area around the figurine must be kept free from visitors, as this area can cause the formation of side lobes of the high-frequency sensor. An alarm is also triggered if a visitor enters the close-up area. We recommend therefore placing the figurine on a platform, for example, which provides a certain distance from any visitor.

## Protection of Figurines with High Frequency Sensors (Radar Detectors)

#### What Material is Needed?

The listed material is required for the protection of figurines with high-frequency sensors (radar detectors) in connection with **Human Detector**.

### **Basic Equipment:**





## **Optional Accessories:**

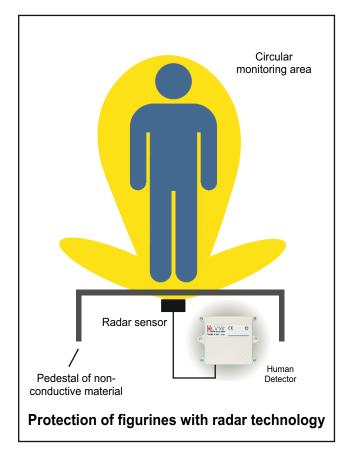




#### Installation - This is How it is Done

Please read the operating instructions carefully before commencing any work. The installation described above makes sense if the complete figurine is to be protected against access. If only parts of the figure are to be protected, we recommend the use of capacitive sensors in the **Human Detector** system (see separate data sheet).

Place the figurine in the desired location. The figurine should be furnished with complete clothing and all other accessories. Place the radar sensor under the figurine. It should point vertically upwards with the potentiometer. If necessary, the system can also be mounted on the ceiling. In this case, check whether the detection area of 250cm is sufficient for the surveillance of the entire figurine. The radar sensor is connected to the **Human Detector** alarm module. In addition, a power supply unit must be connected to the alarm module, since the radar module works as an active transmitter and therefore battery operation is not possible.



Set the **Human Detector** alarm module according to the operating instructions and select a medium range sensitivity on the radar detector. Then switch on the alarm module. Test the alarm activation by approaching the figurine. You can change the sensitivity of the radar sensor by turning the yellow potentiometer and repeat the process until you have found the ideal setting.

Connecting to the **Human Detector** alarm centre or to an alarm loop of a burglar alarm system can be carried out subsequently. This work should only be carried out by trained personnel.

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