

Product supplementary sheet to  
Energy harvesting wireless switch module AFIM-5001

## Safety instructions



**CAUTION:** Damage to components of the evaluation kit due to electrical discharge

- Observe the ESD protection.



**CAUTION:** Damage due to liquid in the components of the evaluation kit

- Prevent liquid from getting inside the components.
- Do not use solvents such as benzine or alcohol, or scouring agent and scourers for cleaning.



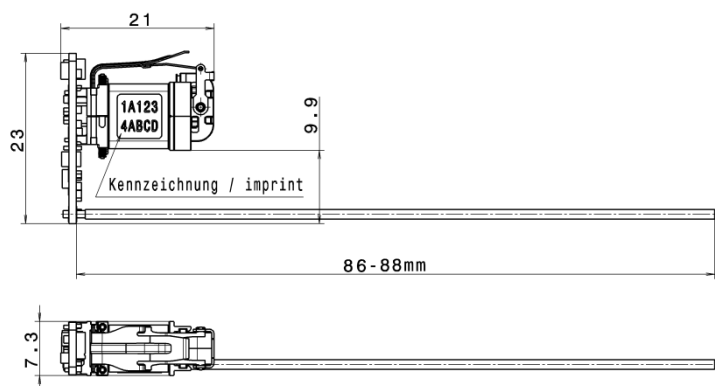
1. Application field  
Batteryless and wireless RF switch module.

2. Product description  
The energy harvesting wireless switch module includes a generator which converts the mechanical energy of the actuation into electrical energy. The energy is used for the RF electronics and the data is transmitted without batteries and wires via 915 MHz to a receiver. The energy harvesting wireless switch module is network-compatible. A flexible "Pairing" allows the operation of several receivers with one switch module (and vice versa). Each wireless RF switch module has a "Unique ID" which excludes a mutual interference between different RF-switch modules.

### 3. Technical Data

Temperature range	-40 to +85 °C
Lifetime generator	up to 1,000,000 operations
Frequency bands	915 MHz
Modulation	2FSK
Protocol	ZF Proprietary
RF distance (open area)	up to 300 m
RF distance (in buildings)	up to 30 m
Operating force	max. 15 N
Operating speed	0.03 – 0.25 m/s
Energy generated	min. 0.33 mWs

### 4. Dimensions



#### 5. Declaration of Conformity

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

#### NOTICE:

Changes or modifications made to this equipment not expressly approved by (manufacturer name) may void the FCC authorization to operate this equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.



Model: AFIM-5001    FCC ID: 2AHGFAFIM5001    IC ID:11057A-AFIM5001  
CAN RSS\_Gen/CNR\_Gen

This device complies with Part 15 of the FCC Rules and with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### 6. Disposal

Dispose of the used components of the evaluation kit at an official collection point for electronic waste or at your local dealer.

#### 7. Contact

ZF Friedrichshafen AG  
Cherrystraße  
91275 Auerbach