

Kathrein offers the most comprehensive UHF RFID antenna portfolio. Smart shelf (SMSH) antennas are available for applications in the read range up to 300 cm. The SMSH antennas offer a very selective reading zone, especially when used in shelves or when a flat installation space is needed.

This guarantees that the area directly in front of the antenna can be read accurately without the influence of metal affecting the reading result. The SMSH antennas are also available as Kathrein RFID Antenna Interface (©KRAI) versions that can be cascaded in a daisy chain. With one ©KRAI reader, up to 32 SMSH antennas can be controlled.

For easy and quick installation, the antennas have FAKRA antenna sockets to connect the antennas with a click. This allows large rollouts to be mounted more quickly and thus reduces installation costs.



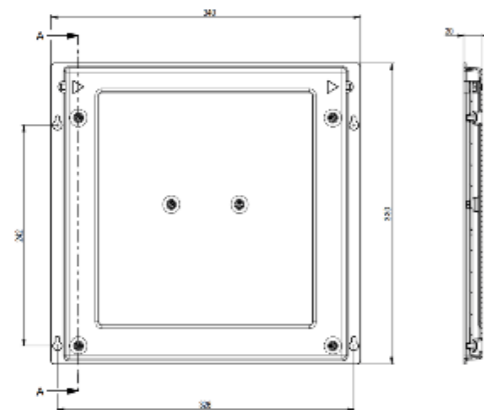
> Features

- Strong separation of read/no-read zone
- Homogenous detection field
- Read range: 0–3 m
- Easy to install or retrofit in existing shelves
- Robust and vibration resistant FAKRA connector
- Optional cascade function with ©KRAI for up to 32 antennas
- Extremely thin design small dimensions
- Available for Europe, US and RoW

> Key Applications

- eKanBan applications
- Point of sales verification
- Asset registration
- Book-and-collect workstation

> Dimensions [mm]



> Note

The dimensions for SMSH and SMSH KRAI antennas are identical.

Risk of material damage!

- ▶ Please ensure that the underlying surface is clean, load-bearing and free of conductors.

> General Specifications

Type		ETSI Version SMSH	ETSI Version SMSH KRAI	FCC Version SMSH	FCC Version SMSH KRAI
Order number		52010523	52010524	52010525	52010526
RFID					
Frequency range	[MHz]	865 - 868		902 - 928	
©KRAI		-	cascading	-	cascading
Protection cover		included			
Impedance antenna port	[Ohm]	50			
Antenna gain	[dBiC]	typ. 5	tap. 4.5	typ. 5	typ. 4.5
Far field half-power beam width	[°]	60/60			
Polarization		circular			
Axial ratio	[dB]	typ. 2			
Front-to-back ratio	[dB]	>20			
Max. input power (at antenna port)	[dBm]	+30			
Max read range	[cm]	300			
VSWR		typ.1.3:1			
Mechanic properties					
Connection Input		FAKRA	FAKRA	FAKRA	FAKRA
Connection Output		-	FAKRA	-	FAKRA
Weight	[kg]	1.00			
Degree of protection		Indoor use only			
Operating temperature range	[°C]	-20 to +55			
Storage temperature range	[°C]	-40 to +85			
Dimensions (L x W x H)	[mm]	340 x 330 x 20			
Packing size (L x W x H)	[mm]	345 x 350 x 35			
Material protection cover		thermoplastic radome, UV-resistant, fibreglass-epoxy resin			

> Deliverables

The following parts are items of delivery:

- SMSH-Antenna
- Protective Cover
- 6x Panhead screw Torx T20 M4x8 DIN7985
- 6x Washer 4.3 DIN 125
- 6x Bolt nut M4 ISO4032