

# Smart Shelf RFID UHF Antenna

## SMSH-30-30-KRAI-ETSI-FCC

### Order-No. 52010258

#### Technical features:



- Antenna module with protective housing and © KRAI
- for applications in radiated near-field
- extremely thin design
- read range: 0 - 1 m
- very homogeneous reading field
- extremely high front-to-back ratio
- suitable for static tag identifications
- cascadable up to 8 antennas SMSH-30-30-KRAI-ETSI-FCC per reader port
- cascadability possible only with © KRAI Reader
- single antenna only useable with © KRAI Reader



<b>Order-No.</b>		<b>52010258</b>
Frequency range	MHz	865-928
Polarization		circular
Antenna gain	dBiC	typ. -7
Axial ratio	dB	typ. 1.5
VSWR		typ. 1.25:1
Impedance	Ω	50
Front-to-back ratio	dB	> 20
max. input power (ETSI EN 302 208)	dBm	+33
max. input power (FCC 15.247)	dBm	+30 (at antenna port)
Far field half-power beam width	°	60 / 60
Connection		input: SMA female output: SMA female
Operating temperature range	°C	-20 to +55
Storage temperature range	°C	-40 to +85
Degree of protection		indoor use only
Weight	kg	1.0
Dimensions (L x W x H)	mm	330 x 340 x 20
Packing size (L x W x H)	mm	345 x 350 x 35

#### Notes:

- the antenna can be operated only in conjunction with a © KRAI Reader

#### Material:

- thermoplastic radome, UV resistant
- fibreglass-epoxy resin

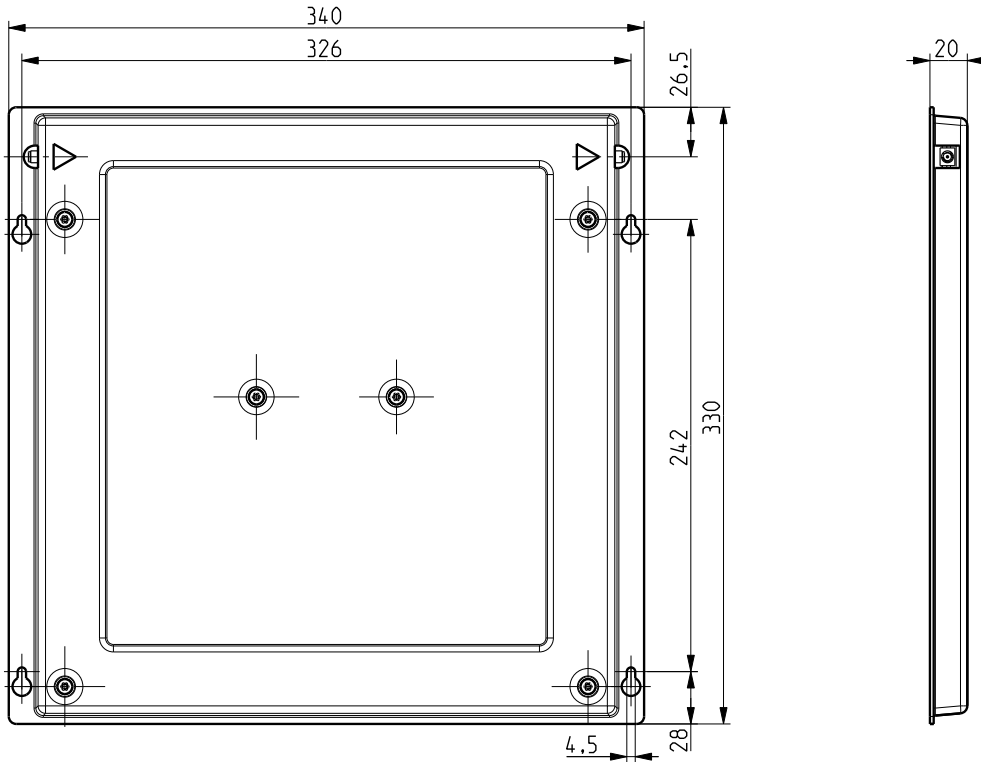
#### Mounting options:

- four through-holes Ø 4.5 mm for M4 screws to mount on wall/ceiling



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## Dimensions in [mm]:



## Description:

The SMSH-30-30-KRAI-ETSI-FCC antenna was developed for applications in the field of point of sale, smart shelf applications and Kanban solutions. The antenna is characterized by an extremely homogeneous read zone, which is emitted by the high front to back ratio. Therefore it is suitable for static detection of multiple transponders.

Due to their extremely thin design, the antenna module can be integrated into different applications universal.

The antenna is equipped with an intelligent bypass circuit that allows for cascading up to 8 SMSH modules per reader port. The control is done by a suitable © KRAI Kathrein RFID reader, the © KRAI control signals are transmitted via the standard antenna cable.

## Example applications:

- Point-of-sales applications
- Smart shelves applications
- Kanban applications
- Conveyor belt applications



# Smart Shelf RFID UHF Antenne

## SMSH-30-30-KRAI-ETSI-FCC

### Bestell-Nr. 52010258

#### Merkmale:



- Antennen-Modul mit Schutzgehäuse und © KRAI
- für Anwendungen im strahlenden Nahfeld
- extrem dünne Bauform
- Lesereichweite: 0 - 1 m
- sehr homogenes Lesefeld
- extrem hohes Vor-Rück-Verhältnis
- geeignet für statische Tag Identifikation
- bis zu 8 SMSH-30-30-KRAI-ETSI-FCC-Antennen pro Reader-Port kaskadierbar
- Kaskadierbarkeit nur mit © KRAI Reader möglich
- als einzelne Antenne Betrieb nur mit © KRAI Reader möglich



Bestell-Nr.		52010258
Frequenzbereich	MHz	865-928
Polarisation		zirkular
Antennen-Gewinn	dBiC	typ. -7
Achsverhältnis	dB	typ. 1,5
VSWR		typ. 1,25:1
Impedanz	Ω	50
Vor-Rück-Verhältnis	dB	> 20
max. eingespeiste Leistung (ETSI EN 302 208)	dBm	+33
max. eingespeiste Leistung (FCC 15.247)	dBm	+30 (an Antennen-Buchse)
Fernfeldöffnungswinkel	°	60 / 60
Anschluss		Eingang: SMA-Buchse Ausgang: SMA-Buchse
Betriebs-Temperaturbereich	°C	-20 bis +55
Lager-Temperaturbereich	°C	-40 bis +85
Schutzart		nur Indoor-Nutzung
Gewicht	kg	1,0
Abmessungen (L x B x H)	mm	330 x 340 x 20
Lieferabmessungen (L x B x H)	mm	345 x 350 x 35

#### Anmerkungen:

- die Antenne lässt sich nur in Verbindung mit einem © KRAI Reader betreiben

#### Material:

- thermoplastisches Radome, UV-beständig
- Glasfaser-Epoxidharz

#### Montage-Optionen:

- vier Durchgangsbohrungen Ø 4.5 mm für M4-Schrauben zur Wand-/Deckenmontage



