

# **Annex no. 12**

# **Antenna Descriptions**

OBID i-scan® HF

# Shielded HF Pad Antenna ID ISC.ANTS370/270

## FEATURES

- More than 30 cm read range
- Modern design
- No tag reading outside of the antenna area
- Optical feedback via LED
- No detuning of the antenna when installing on metal or rather conductive material
- Available as external antenna or with integrated reader



# ID ISC.ANTS370/270-A

## DESCRIPTION

The ID ISC.ANTS370/270-A is designed as a very flat and external antenna for contactless data exchange with common HF transponders and is attractive with its outstanding performance and the modern design.

With these features the antenna is suitable for desktop applications in offices and libraries to trace files or documents and to detect lendable items at the check out or return point. The read range with single transponders could reach more than 30 cm.

Due to its integrated shielding transponders will be detected only inside the antenna area and interferences between several antennas will be minimized. Additionally the installation on metallic or conductive surfaces has no influence on the antenna. Therefore the ID ISC.ANTS370/270-A could be used in normally unsuitable environments.

The antenna ID ISC.ANTS370/270-A has an included coaxial cable to connect it directly to a reader. To indicate different conditions the blue LED could be powered with a DC voltage on the antenna output of the reader.



## ORDER DESCRIPTION

ID ISC.ANTS370/270-A    Shielded, external antenna with coaxial cable

## TECHNICAL DATA

Dimensions (W x H x D)	376 mm x 276 mm x 27 mm (14,8 inch x 10,9 inch x 1,1 inch)
Weight	approx. 2 kg (4,4 lbs)
Housing	
- Pad	Acrylic glass
- Upper part	Plastic SB
- Lower part	Zincd steel
Colour	
- Pad	transparent; black
- Upper part	similar RAL 9003 (white)
Protection class	IP 30
Temperature range	
- Operation	-25 °C up to 55 °C (-13 °F up to 131 °F)
- Storage	-25 °C up to 70 °C (-13 °F up to 158 °F)
Relative air humidity	5...95 % (non-condensing)
Operating frequency	13,56 MHz
Max. input power	1,5 W
Antenna connection	RG58 coaxial cable with SMA connector (50 Ω); approx. 2,3m long (90.5 inch)
Indicator, optical	1 LED (blue; switchable via DC voltage at the antenna output of the reader)

## STANDARD CONFORMITY

EMC	EN 301 489
Safety	
Electrical safety	EN 60950
Human exposure	EN 50364

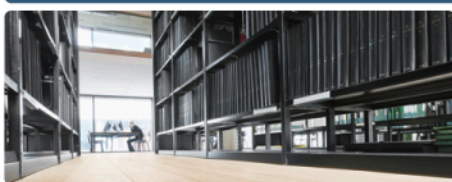
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Stand of information: September 2011.

## HF Clear Gate ID ISC.ANT1300/680



### FEATURES

- Optimal Price-Performance Ratio
- Easy Installation
- Neutral Design
- Multiple Installation Options
- Optional Functions
- Flexible IT Integration
- International Approvals





#### Order descriptions

- **ID ISC.ANT1300/680-A Clear Gate (Base)**  
Gate Antenna with Reader, Power Splitter, Sounder, Alarm Light and Manual Antenna Tuning Board
- **ID ISC.ANT1300/680-B Clear Gate**  
Gate Antenna with Manual Antenna Tuning Board
- **ID ISC.ANT1300/680-BL Clear Gate (Light)**  
Gate Antenna with Alarm Light and Manual Antenna Tuning Board

#### TECHNICAL DATA

##### Mechanical Data

Dimensions (W x H x D)	
Antenna	720 x 1590 x 80 mm +/- 3 mm
Packaging	800 x 1720 x 160 mm +/- 10 mm
Housing	Plastic ABS UV stabilized
Color	
Antenna frame	Light grey RAL 7035
Antenna base	Signal black RAL 9004
Weight	
ID ISC.ANT1300/680-A	approx. 16 kg / 21 kg with packaging
ID ISC.ANT1300/680-B	approx. 15 kg / 20 kg with packaging
ID ISC.ANT1300/680-BL	approx. 15 kg / 20 kg with packaging
Protection class	IP 43
Max. horizontal load on the upper edge of the antenna	250 N*

##### Electrical Data

Operating frequency	13.56 MHz
Transmitting power Reader	1 W up to 5 W (adjustable)
Supply voltage	24 V +/- 15% Noise Ripple: maximum 150 mV
Power consumption	maximum 16 VA
Permissible total transmitting power per Antenna Gate	
Europe (EN 300 330)	5.0 W
USA (FCC Part 15)	5.0 W
Canada (RSS210)	5.0 W
Outputs	
1 Relay (1 x NO)	24 V / 1 A resp. Alarm Kit
Inputs	
1 Opto coupler	24 V / 6 mA
Interfaces	RS232, USB, Ethernet (TCP/IP)
Antenna connection	1 x SMA plug (50 Ω)
Antenna connection cable	
Types -B and -BL	RG58, 50 Ω, approx. 2.0 m long

\*Permanent deformation after unloading approx. 1 cm



#### Order descriptions

- **ID ISC.ANT1300/680-A Clear Gate (Base)**  
Gate Antenna with Reader, Power Splitter, Sounder, Alarm Light and Manual Antenna Tuning Board
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Gate Antenna with Manual Antenna Tuning Board
- **ID ISC.ANT1300/680-BL Clear Gate (Light)**  
Gate Antenna with Alarm Light and Manual Antenna Tuning Board

#### TECHNICAL DATA

##### Functions

Operation Modes	FEIG ISO HOST Buffered Read Mode (BRM, maximum 100 data records) Notification Mode (TCP/IP)
Supported Transponders	ISO 15693, ISO 18000-3-A (EM HF ISO Chips, Fujitsu HF ISO Chips, KSW Sensor Chips, Infineon my-d, NXP I-Code, STM ISO Chips, TI Tag-it)
Angle width (with Power Splitter)	
unidimensional	up to 120 cm
tridimensional	up to 90 cm
Alarm function	Automatically without host connection; EAS, AFI, UID/SNR
Alarm (Type –A)	Sounder & LED Alarm light (red)
Tuning	Manual (jumper) Tuned ex factory for angle width of 90 cm

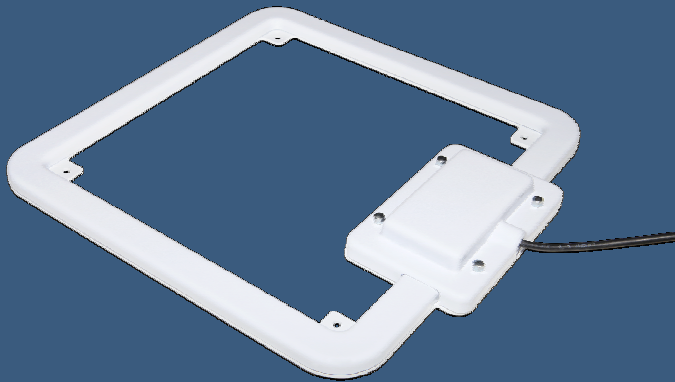
##### Environmental conditions

Temperature range	
Operation	-25°C up to +50°C
Storage	-25°C up to +70°C

##### Standard conformity

Radio approval	
Europe	EN 300 330
USA	FCC Part 15
Canada	RSS 210
EMC	EN 301 489
Safety	
Low voltage	UL 60950-1
Human Exposure	EN 50364

## HF Loop Antenna ID ISC.ANT310/310



### FEATURES

- Transmission power up to 8 W
- Protection class IP65
- Useful in many ways with several readers of the OBID i-scan® HF family
- Manual alignment electronics for optimal adjustment to different surrounding conditions

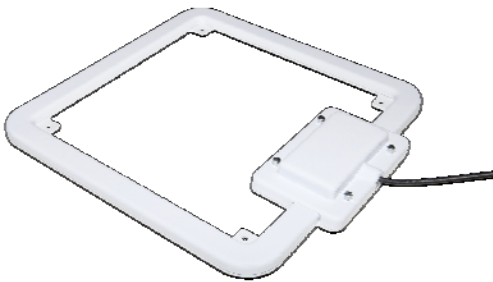


## SHORT DESCRIPTION

HF Antenna ID ISC.ANT310/310-A is distributed, already adjusted for most applications ex works. By means of jumpers the antenna can be adjusted to changing surrounding conditions, optimally.

Typical applications for the antenna are libraries, document tracking, video shops, logistics at conveyor belts or sorting systems, access control and industrial data acquisition. The antenna can be employed in indoor- and outdoor use (IP65).

With a maximum transmitting power of up to 8 W, the antenna can be operated with several OBID *i-scan® HF* readers by FEIG ELECTRONIC. Due to the used reader, read ranges of up to 70 cm can be realized.



## ORDER DESCRIPTION

ID ISC.ANT310/310      HF Antenna

## TECHNICAL DATA

Dimensions (B x H x T)	318 mm x 338 mm x 30 mm
Weight	approx. 700 g
Housing	Plastic ASA
Color	white
Protection class	IP 65
Temperature range	
- Operation	- 25 °C up to 55 °C
- Storage	- 25 °C up to 60 °C
Relative air humidity	5...95 % (non-condensing)
Operating frequency	13.56 MHz
Maximum transmitting power	8 W
Admissible transmitting power	
EU (REC 70-03 An. 9F1)*	8 W
EU (EN 300 330)	4 W
USA (FCC Part 15)	4 W
Read ranges	
1.0 W transmitting power <sup>1</sup>	43 cm**
1.8 W transmitting power <sup>2</sup>	50 cm**
4.0 W transmitting power <sup>3</sup>	60 cm**
8.0 W transmitting power <sup>4</sup>	70 cm**
Antenna connection	1 x SMA plug (50 Ω)
Antenna connection cable	RG58, 50 Ω, length approx. 3.6 m
*In connection with the reader ID ISC.LR2500 and according regulations EN 300 330 and ERC Recommendation 70-03 Annex 9 Vol. F1	
**Read ranges using a transponder 46 x 75 mm <sup>2</sup> over the centre of the antenna and parallel orientation to the antenna	
1 For example OBID® Mid Range Reader ID ISC.MR102	
2 For example OBID® Mid Range Reader ID ISC.MR200	
3 For example OBID® Long Range Reader ID ISC.LR2500	
4 For example OBID® Long Range Reader ID ISC.LR2500	
<b>STANDARD CONFORMITY</b>	
Radio approval	
Europe	EN 300 330
USA	FCC 47 CFR Part 15
EMC	EN 301 489
Safety	
Low voltage	EN 60950
Human Exposure	EN 50364

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