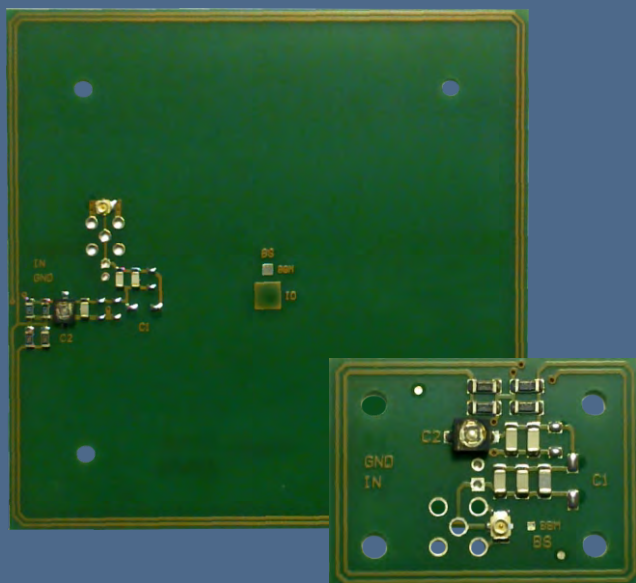


ID ISC.ANT40/30 & ID ISC.ANT100/100

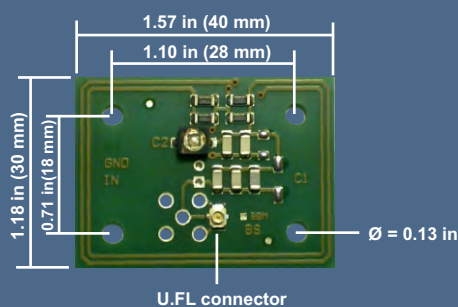
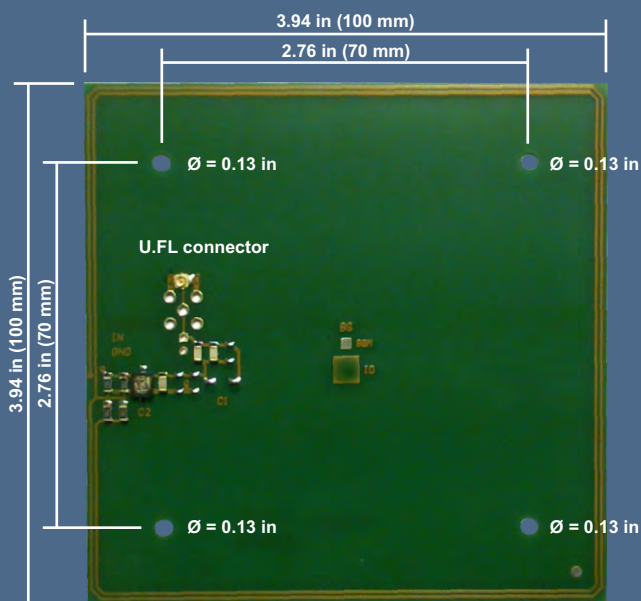
HF-Antennas for RFID proximity reader



Pictures show layout with U.FL connector

- RFID antenna - Impedance: 50 Ω
- Frequency: 13.56 MHz
- Transmitting power: 1 W max.
- Data transfer rate up to 424 kbits/s
- Reading distance up to 5.87 in (14 cm) (ID ISC.ANT100.100)*
- 2 pin or U.FL connector option

- Vending
- eTicketing
- eMobility



Pictures show layout with U.FL connector

The external antennas ID ISC.ANT40/30 and ID ISC.ANT100/100 could be used with all supported HF reader modules of FEIG ELECTRONIC.

* The reading ranges depends on the used transponder.
The ranges are based on an antenna inlay of 2.99 in x 1.77 in (76 mm x 45 mm).

Order descriptions

Article no.	Description
1967.000.00	ID ISC.ANT 40/30-A 2-pin connector
3674.000.00	ID ISC.ANT 40/30-U.FL
1968.000.00	ID ISC.ANT 100/100-A 2-pin connector
3673.000.00	ID ISC.ANT 100/100-U.FL

Specifications

ID ISC.ANT40/30

Dimensions (W x H)	1.58 in x 1.18 in (40 mm x 30 mm)
Interface	
ID ISC.ANT40/30-A	2-pin connector
ID ISC.ANT40/30-U.FL-A	U.FL connector
Operating frequency	13.56 MHz
Impedance	50 Ω
Transmitting power	1 W max.
Max. reading distance	up to 2.76 in* (7 cm)*
Data transfer rate	up to 424 kbit/s
Power supply	unneeded

Environmental conditions	
Operation	-13°F - 158°F (-25 °C - 70 °C)
Storage	-40°F - 185°F (-40 °C - 85 °C)
Relative humidity	0 % - 95 % (noncondensing)

ID ISC.ANT100/100

Dimensions (W x H)	3.94 in x 3.94 in (100 mm x 100 mm)
Interface	
ID ISC.ANT100/100-A	2-pin connector
ID ISC.ANT100/100-U.FL-A	U.FL connector
Operation frequency	13.56 MHz
Impedance	50 Ω
Transmitting power	1 W max.
Max. reading distance	up to 5.87 in* (14 cm)*
Data transfer rate	up to 212 kbit/s
Power supply	unneeded

Environmental conditions	
Operation	-13°F - 158°F (-25 °C - 70 °C)
Storage	-40°F - 185°F (-40 °C - 85 °C)
Relative humidity	0 % - 95 % (noncondensing)

Certifications of conformity

Environment	WEEE – 2002/96/EC RoHS – 2002/95/EC
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Supported products

ID ISC.M02.M8-B
ID ISC.MRM102-A
ID ISC.MRM102-USB

ID CPR74.x

FEIG ELECTRONIC reserves the right to change specification without notice at any time.
State of information: August 2017

ID ANT240/180

PAD ANTENNA

- Up to 42 cm read range
- Flat and compact design for use in enclosed spaces
- Optical feedback via LED
- Also available as shielded antennas or with integrated reader



Pad Antenna

The ID ANT240/180-A is designed as very a flat and compact antenna for contactless data exchange with common RF RFID transponders and impresses with its excellent performance and elegant design.

Due to the smaller format and low height, the antenna fits on any working space without causing any inconvenience. These features enable desktop applications in offices, libraries, file and document tracking, etc. Despite the compact construction the read range of individual transponders can be up to 42 cm.

The antenna ID ANT240/180-A can be connected directly to a reader with an included coaxial cable. For indication of different states like "RUN" or "Tag detect" the blue LED could be powered with a DC voltage on the antenna output of the reader (e.g. ID MR102, ID LR1002).

Also available as shielded antenna ID ANTS240/180 and as antenna with integrated reader module ID PAD74-U.

PAD ANTENNA

ID ANT240/180

Technical data

Dimensions (w x h x d)	240 mm x 180 mm x 13 mm (9.45 inch x 7.09 inch x 0.51 inch)
Weight	approx. 0.36 kg (0.8 lbs)
Housing	
Pad	Insensitive surface
Upper part	Plastic ABS
Lower part	Plastic plate
Colour	
Pad	black
Upper part	similar RAL 9003 (white)
Protection class	IP30
Operating frequency	13.56 MHz
Max. transmitting power	1.5 W
Antenna connection	RG174 coaxial cable with SMA connector (50 Ω); approx. 2.2 m long
Indicator, optical	1 LED (blue; switchable via DC voltage at the antenna output of the reader)
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 % up to 95 % (non-condensing)

Standard conformity

EMC	EN 301 489
Safety & Health	EN 62368-1, EN 50364

Order description

ID ANT240/180-A	6612.000.00	Pad antenna with coaxial cable
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ID ANT240/180-A

ID ANTS240/180

SHIELDED PAD ANTENNA

- Compact, flat and shielded workstation antenna
- Up to 23 cm read range
- Flat and compact design for use in enclosed spaces
- Optical feedback via LED
- No detection outside of the defined detection area
- Defined reading window and suitable for metal environment
- Also available as unshielded antenna or with integrated reader



Shielded Pad Antenna

The ID ANTS240/180-A is designed as a compact, very flat and shielded antenna for contactless data exchange with common HF transponders and impresses with its excellent performance and elegant design even in industrial or metallic surroundings.

A fully shielded antenna providing concentrated detection field means that only items placed directly on the antenna will be detected.

With their outstanding performance and their modern design the ID ANTS240/180-A 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 up to 23 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 antenna could be used in normally unsuitable environments.

The antenna ID ANTS240/180-A can be connected directly to a reader with an included coaxial cable. For indication of different states like "RUN" or "Tag detect" the blue LED could be powered with a DC voltage on the antenna output of the reader (e.g. ID MR102, ID LR1002).

Also available as unshielded antenna ID ANT240/180 and as antenna with integrated reader module ID PAD74-U.

SHIELDED PAD ANTENNA

ID ANTS240/180

Technical data

Dimensions (w x h x d)	240 mm x 180 mm x 15 mm (9.45 inch x 7.09 inch x 0.59 inch)
Weight	approx. 0.67 kg (1.47 lbs)
Housing	
Pad	Insensitive surface
Upper part	Plastic ABS
Lower part	Metal
Colour	
Pad	black
Upper part	similar RAL 9003 (white)
Protection class	IP30
Operating frequency	13.56 MHz
Max. transmitting power	1.5 W
Antenna connection	RG174 coaxial cable with SMA connector (50 Ω); approx. 2.2 m long
Indicator, optical	1 LED (blue; switchable via DC voltage at the antenna output of the reader)
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 % up to 95 % (non-condensing)

Standard conformity

EMC	EN 301 489
Safety & Health	EN 62368-1, EN 50364

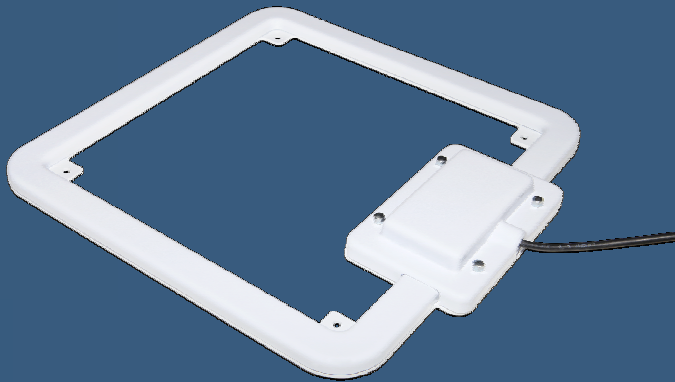
Order description

ID ANTS240/180-A	6616.000.00	Compact shielded antenna with coaxial cable
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ID ANTS240/180-A

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

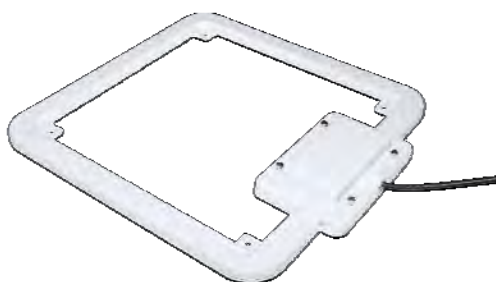


SHORT DESCRIPTION

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 ¹	43 cm**
1.8 W transmitting power ²	50 cm**
4.0 W transmitting power ³	60 cm**
8.0 W transmitting power ⁴	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 mm² 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

STANDARD CONFORMITY

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

FEIG ELECTRONIC reserves the right to change specification without notice at any time.

Stand of information: September 2011.

OBID i-scan® HF

HF Pad Antenna ID ISC.ANT340/240



FEATURES

- Read range up to 30 cm
- Elegant design
- Also available as antenna module



SHORT DESCRIPTION

ID ISC.ANT340/240 is designed as a particularly flat external antenna for contactless data exchange with HF transponders and impresses with its excellent performance and elegant design.

These characteristics allow desktop applications in offices or libraries for file and document tracking and capturing loaned on the issue and redemption. The read range of individual transponders can be up to 30 cm.

ID ISC.ANT340/240 has a coaxial cable and can be operated with a reader, immediately.

Beside the variant with plastic housing, the product is also available as an antenna module without housing.

TECHNICAL DATA

Dimensions (W x H x D)	337 mm x 237 mm x 8 mm
Weight	530 g
Housing	Plastic ABS
Color	grey-white
Protection class	IP 40
Temperature range	
- Operation	0 °C up to 55 °C
- Storage	-25 °C up to 85 °C
Relative air humidity	5...95 % (non-condensing)
Operating frequency	13.56 MHz
Max. transmitting power	1.2 W
Antenna connector	RG58 coaxial cable with SMA plug (50 Ω); length 230 cm

STANDARD CONFORMITY

EMC	EN 301 489
Safety	
Electrical Safety	EN 60950
Human Exposure	EN 50364



ORDER DESCRIPTIONS

ID ISC.ANT340/240	HF Pad Antenna
ID ISC.ANT340/240-B	HF Pad Antenna Module

FEIG ELECTRONIC reserves the right to change specification without notice at any time.
Stand of information: August 2016.

OBID i-scan® HF

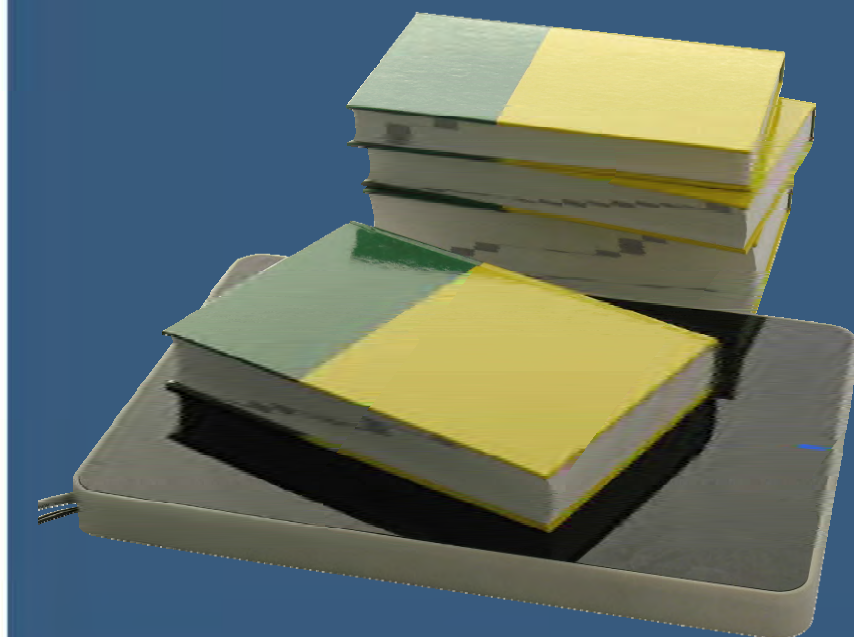
Shielded HF Pad Antenna

ID ISC.ANTS370/270

ID ISC.SPAD102

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

FEIG ELECTRONIC reserves the right to change specification without notice at any time.
Stand of information: September 2011.

ID ISC.SPAD102

DESCRIPTION

The ID ISC.SPAD102 is designed as a very flat antenna with integrated reader for contactless data exchange with ISO 15693 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.SPAD102 could be used in normally unsuitable environments.

The antenna ID ISC.SPAD102 is available with an USB interface and can be integrated into existing background systems easily.



ORDER DESCRIPTION

ID ISC.SPAD102-USB	Shielded antenna with integrated reader; USB
ID ISC.SPAD102-E	Shielded antenna with integrated reader; LAN interface (on demand)

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) approx. 2 kg (4,4 lbs)
Weight	
Housing	
- Pad	Acrylic glass
- Upper part	Plastic SB
- Lower part	Zinc plated 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. transmitting power	1,5 W ± 1 dB
Supply voltage	12...24 V DC
Power consumption	max. 6 W
Interface	USB (Full Speed)
Indicator, optical	1 LED (blue)
Supported transponders	ISO 15693 (ISO 18000-3 MODE 1)*
Protocol modes	ISO Host Mode, Scan Mode, Notification Mode
Others	Temperature monitoring

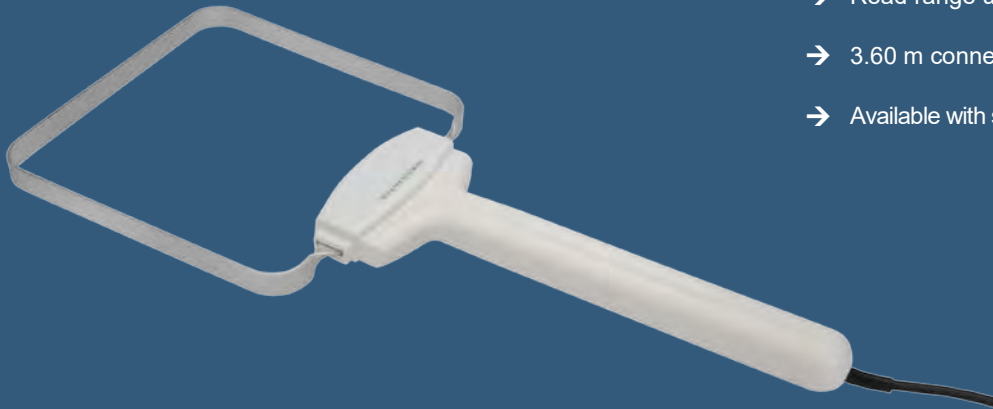
* e.g. EM HF ISO Chips, Fujitsu HF ISO Chips, IDS Sensor Chips, Infineon my-d, KSW Sensor Chips, NXP I-Code, STM ISO Chips, TI Tag-it

STANDARD CONFORMITY

Radio license	
Europe	EN 300 330
USA	FCC 47 CFR Part 15
Canada	IC RSS-GEN, RSS-210
EMC	EN 301 489
Safety	
Electrical safety	EN 60950
Human exposure	EN 50364

FEIG ELECTRONIC reserves the right to change specification without notice at any time.
Stand of information: January 2012.

HF Handheld Antenna ID ISC.ANTH200/200



FEATURES

- Read range up to 40 cm
- 3.60 m connecting cable
- Available with straight or angled handle



SHORT DESCRIPTION

ID ISC.ANTH200/200-A is a Single Loop Antenna and was optimized for operation with HF Mid Range Reader ID ISC.MR102.

With an emitted transmission power of 1W by the reader and a transponder size of 45 x 76 mm² with parallel orientation of the tag, read ranges of 30 – 40cm are possible.

Operation with other 13.56 MHz readers with an impedance of 50 Ohm is possible, too.

The maximum read range will be realized in the middle of the antenna. The optimum orientation of the tag is parallel to the antenna.



Side view of ID ISC.ANTH200/200-A

ORDER DESCRIPTION

ID ISC.ANTH200/200-A HF Handheld Antenna with angled handle

TECHNICAL DATA

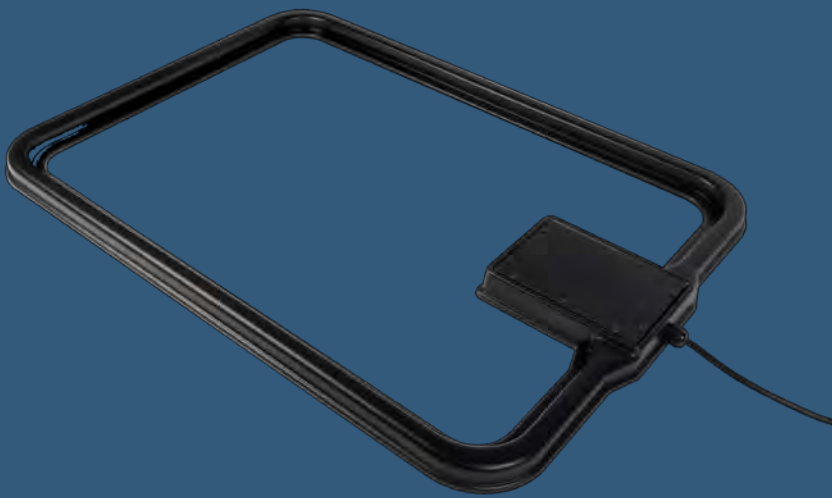
Dimensions (W x H x D)	460 mm x 200 mm x 160 mm
Weight	350 g
Housing	Plastic ABS
Protection class	IP 20
Temperature range	
- Operation	0 °C up to 55 °C
- Storage	-25 °C up to 85 °C
Relative air humidity	5...95 % (not condensing)
Operating frequency	13.56 MHz
Maximum transmitting power	2 W
Antenna connection	RG58 coax cable with SMA plug (50 Ω); approx. 360 cm

STANDARD CONFORMITY

EMC	EN 301 489
Safety	
Electric safety	EN 60950
Human Exposure	EN 50364

FEIG ELECTRONIC reserves the right to change specification without notice at any time.
State of information: April 2019.

HF Loop Antenna ID ISC.ANT800/600-DA



FEATURES

- Transmitting power up to 8 W
- Protection class IP65
- Versatile use with several HF readers
- Read range up to 100 cm
- Easy setup due to integrated dynamic antenna tuner (ID ISC.DAT)



SHORT DESCRIPTION

The HF Long Range Antenna ID ISC.ANT800/600-DA can be used in combination with the reader ID ISC.LR2500-A and the reader module ID ISC.LRM2500-A/-B.

The device is a single loop antenna with tuning circuitry and facilitates read ranges of up to 100 cm with a transmitting power of 4 W.

The antenna consists of the electrical antenna conductor, housing and the tuning circuitry ID ISC.DAT (Tuner) and is factory tuned on a wood base to an impedance of 50 Ω . After installing in changed ambient conditions, the antenna can be tuned using the corresponding commands.



ORDER DESCRIPTION

ID ISC.ANT800/600-DA HF Antenna

TECHNICAL DATA

Dimensions (W x H x D)	852 mm x 620 mm x 40 mm (33.54inch x 24.41inch x 1.57inch)
Weight	approx. 2.5 kg
Housing	Plastic ABS
Color	black
Protection class	IP 65
Temperature range	
- Operation	- 25 °C up to 55 °C
- Storage	- 25 °C up to 60 °C
Humidity	5...95 % (not condensing)
Operating frequency	13.56 MHz
Maximum transmitting power	8 W
Permitted transmitting power	
EU (EN 300 330)	4 W
USA (FCC Part 15)	2 W
Canada (RSS-210)	2W
Read range	up to 100 cm*
Antenna connection	1 x SMA plug (50 Ω)
Antenna connection cable	RG58, 50 Ω , approx. 3.6 m

* Read ranges using a transponder 46 x 75 mm² over the centre of the antenna and parallel orientation to the antenna

STANDARD CONFORMITY

Radio license	
Europe	EN 300 330
USA	FCC 47 CFR Part 15
Canada	RSS210
EMC	EN 301 489
Safety	
Low voltage	EN 60950
Human Exposure	EN 50364

FEIG ELECTRONIC reserves the right to change specification without notice at any time. Stand of information: November 2016.

ID ANT.MUX.5 / ID ANT.MUX.M5

HF 5 CHANNEL MULTIPLEXER

- Communication between reader and multiplexer via antenna cable
- Multiplexer outputs are controlled by the reader or a host
- Non-wearing electronic switching of the outputs
- High switching rate (< 1 ms)
- Available in an industrial housing or as a module without housing



HF 5 channel Multiplexer

The two 5 channel multiplexers ID ANT.MUX.5 and ID ANT.MUX.M5 enable almost loss-free and fast switching between RFID antennas with an operating frequency of 13.56 MHz.

The single output of the RFID reader is thus expanded to up to 5 antenna outputs. This enables complex setups with up to 20 antennas in connection with the Long Range Reader ID LR(M)5400-A.

By controlling the multiplexer via the ID LR(M)5400-A reader in automatic mode, the fastest possible switching between the RFID antennas takes place.

Alternatively, the multiplexer is controlled by a command from the reader via the antenna line. Additional connections to the multiplexer are not required, which leads to a simple installation with little cabling effort.

With the help of the firmware of the multiplexer and the RFID reader, fast and targeted addressing of each connected antenna is possible.

In addition to the 5 channel multiplexer ID ANT.MUX.5 in a housing suitable for industrial use, a module variant ID ANT.MUX.M5 without housing is also available.

HF 5 CHANNEL MULTIPLEXER

Enables the operation of up to 5 antennas with just one reader. In conjunction with the Long Range Reader ID LR5400, the number of antenna outputs increases to up to 20.

Technical data	ID ANT.MUX.5	ID ANT.MUX.M5
Dimensions (w x h x d)	125 x 120 x 85 mm	115 x 75 x 15 mm
Weight	400 g	60 g
Housing	Polycarbonate, with screwed plexiglas lid	—
Protection class	IP65	—
Operating frequency	13.56 MHz	
Grommet	7x screwed cable gland M16 x 1.5	—
Supply voltage	12 – 24 V DC	
Power consumption	max. 4.0 W	
Attenuation per channel	max. 0.5 dB	
Max. perm. switching power	8 W	
RF connections		
1 x input	SMA jack (50 Ω)	
5 x output	SMA jack (50 Ω)	
RF switch	electronic switch; switching speed < 1 ms	
Triggering	via RF input of the reader	
Signal indicators	1 x LED per channel	
	2 x LED (Run / HF / Communication)	
Temperature range		
Operation	–25 °C up to +65 °C	
Storage	–40 °C up to +80 °C	

Standard conformity

EMC	EN 61000-6-3, EN 61000-6-2	
Vibration	EN 60068-2-6	10 Hz to 150 Hz: 0.075 mm / 1 g
Shock	EN 60068-2-27	Acceleration: 30 g

Order descriptions

ID ANT.MUX.5	6216.000.00	HF Multiplexer (5 channels)
ID ANT.MUX.M5	6215.000.00	HF Multiplexer module (5 channels)



ID ANT.MUX.5



ID ANT.MUX.M5