

SIEMENS

RFID systems SIMATIC Ident ANT D5

Compact Operating Instructions

1 Features

ANT D5 	Features	
	Applications	Storage, logistics and distribution
	Writing/reading distance	up to 500 mm (depending on the transponder)
	Connecting cable	3.3 m
	Connectable SLG	• SLG D10/10S • SLG D11/11S
	Degree of protection	IP65

2 Ordering data

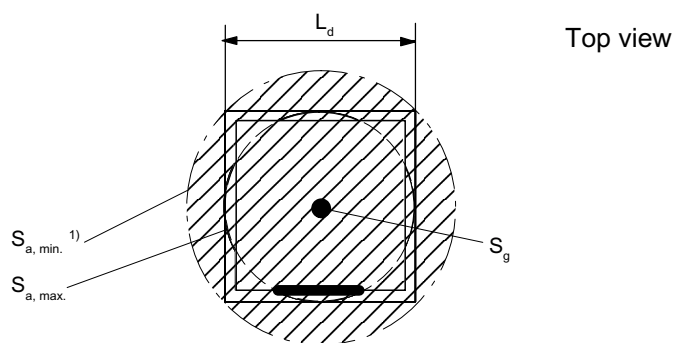
Table 2-1 Ordering data of ANT D5

Antenna	Order no.
ANT D5 (with 1 antenna connecting cable 3.3 m)	6GT2698-5AA10

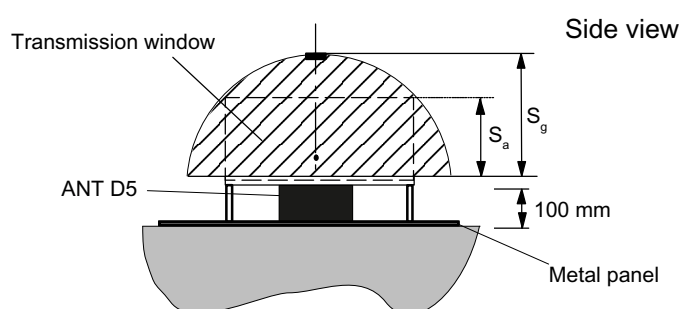
Table 2-2 Ordering data of ANT D5 accessories

Accessories	Order no.
Antenna duplexer (with 1 antenna connecting cable 3.3 m)	6GT2690-0AC00
Antenna multiplexer (with 1 reader connecting cable 0.3 m)	6GT2894-0EA00
Antenna cable, length 10.5 m	6GT2691-0CN10
Antenna extension, length 7.2 m	6GT2691-0DH72

3 Transmission window



¹⁾ At $S_{a, \min.}$ the transmission window is extended



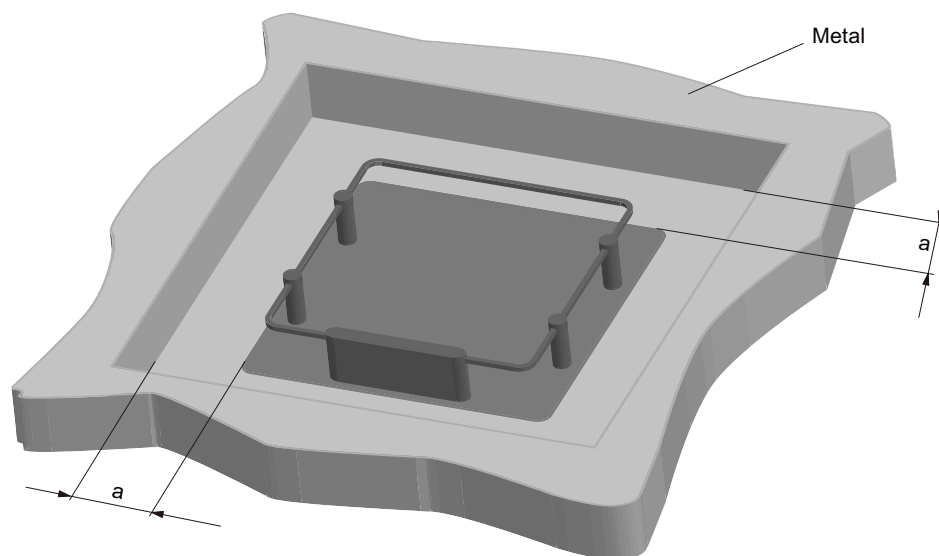
L_d Length of the transmission window (= 300 mm)

S_a Operating distance between antenna and transponder

S_g Limit distance (maximum clear distance between upper surface of the reader and the antenna, at which the transmission can still function under normal conditions)

Figure 3-1 Transmission window for ANT D5

4 Flush-mounted in metal



$a = 150 \text{ mm}$

Figure 4-1 Metal-free area for ANT D5

5 Minimum spacing

NOTICE

Extension of the data transmission time if distance values are undershot

If the distance values specified in the tables are undershot, it is possible that the inductive fields will be affected. In this case, the data transmission time can increase unpredictably or a command is aborted with an error.

For this reason, please observe the values in the tables.

Minimum distances from transponder to transponder (without multitag mode)

	MDS D100 / MDS D139 / MDS D165 / MDS D200 / MDS D261 / MDS D339	MDS D124 / MDS D160 / MDS D324 / MDS D424 / MDS D428 / MDS D460
SLG D10/D10S	≥ 1 m	≥ 0.8 m
SLG D11/D11S		

Minimum distances from antenna to antenna

		SLG D10/SLG D10S			SLG D11/SLG D11S	
		ANT D5	ANT D6	ANT D10	ANT D2	ANT D5
SLG D10/SLG D10S	ANT D5	≥ 2 m	≥ 2 m	≥ 2 m	≥ 1 m	≥ 2 m
	ANT D6	≥ 2 m	≥ 2 m	≥ 2 m	≥ 1 m	≥ 2 m
	ANT D10	≥ 2 m	≥ 2 m	≥ 2 m	≥ 1 m	≥ 2 m
SLG D11/SLG D11S	ANT D2	≥ 1 m	≥ 1 m	≥ 1 m	≥ 0.5 m	≥ 0.8 m
	ANT D5	≥ 2 m	≥ 2 m	≥ 2 m	≥ 0.8 m	≥ 2 m

Definition of distance D

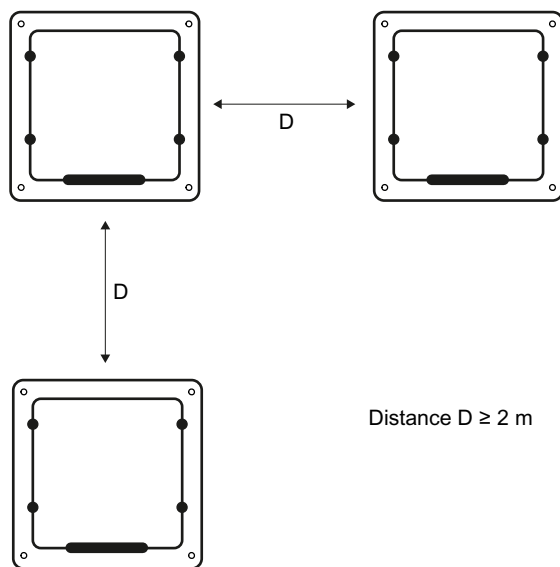


Figure 5-1 Distance D: ANT D5

6 Field data

SLG D10/D10S with ANT D5

	Diameter of the transmission window (L _d)	Operating distance (S _a)	Limit distance (S _g)
MDS D100	Ø 320	0 ... 400	500
MDS D124	Ø 320	0 ... 200	280
MDS D139	Ø 320	0 ... 400	500
MDS D160	Ø 300	0 ... 130	180
MDS D165	Ø 320	0 ... 350	450
MDS D200	Ø 320	0 ... 400	500
MDS D261	Ø 320	0 ... 300	400
MDS D324	Ø 300	0 ... 200	280
MDS D424	Ø 300	0 ... 200	280
MDS D428	Ø 300	0 ... 120	160
MDS D460	Ø 300	0 ... 120	160

All values are in mm

SLG D11/D11S with ANT D5

	Diameter of the transmission window (L _d)	Operating distance (S _a)	Limit distance (S _g)
MDS D100	Ø 300	0 ... 300	380
MDS D124	Ø 280	0 ... 150	220
MDS D139	Ø 300	0 ... 280	350
MDS D160	Ø 280	0 ... 75	110
MDS D165	Ø 300	0 ... 220	300
MDS D200	Ø 300	0 ... 220	320
MDS D261	Ø 300	0 ... 220	280
MDS D324	Ø 280	0 ... 120	160
MDS D424	Ø 280	0 ... 150	200
MDS D428	Ø 280	0 ... 70	100
MDS D460	Ø 280	0 ... 70	100

All values are in mm

Note

The field data for the following MDS is only valid with a corresponding order number:

- MDS D100 with order number 6GT2600-0AD10
- MDS D124 with order number 6GT2600-0AC10
- MDS D139 with order number 6GT2600-0AA10
- MDS D160 with order number 6GT2600-0AB10

7 Technical data

Table 7-1 Technical specifications for ANT D5

Max. write/read distance ANT to MDS (S _g)	500 mm ¹⁾
Dimensions (L x W x H)	380 x 380 x 110 mm
Color	Gray/Black
Material	Aluminum/plastic
Plug connection	1-pin TNC connector
Max. power	10 W (FCC/IC: 4 W)
Antenna cable length	3.3 m
Shock resistant according to EN 60721-3-7 Class 7M2 Total shock response spectrum Type II	30 g
Vibration according to EN 60721-3-7 Class 7M2	1 g (9 to 200 Hz) / 1.5 g (200 to 500 Hz)
Attachment of the antenna	4 M6/M8 screws
Ambient temperature	
• Operation	• -20 °C ... +55 °C
• Transport and storage	• -25 °C ... +70 °C
MTBF	10 ⁷ hours
Degree of protection according to EN 60529	IP65 (UL: for indoor use only)
Weight, approx.	1.2 kg
Approvals	CE / FCC / IC

¹⁾ In order to ensure optimum field data even in the vicinity of metal, ANT D5 is calibrated at the factory at a distance of 100 mm from metal.

8 Dimension drawing

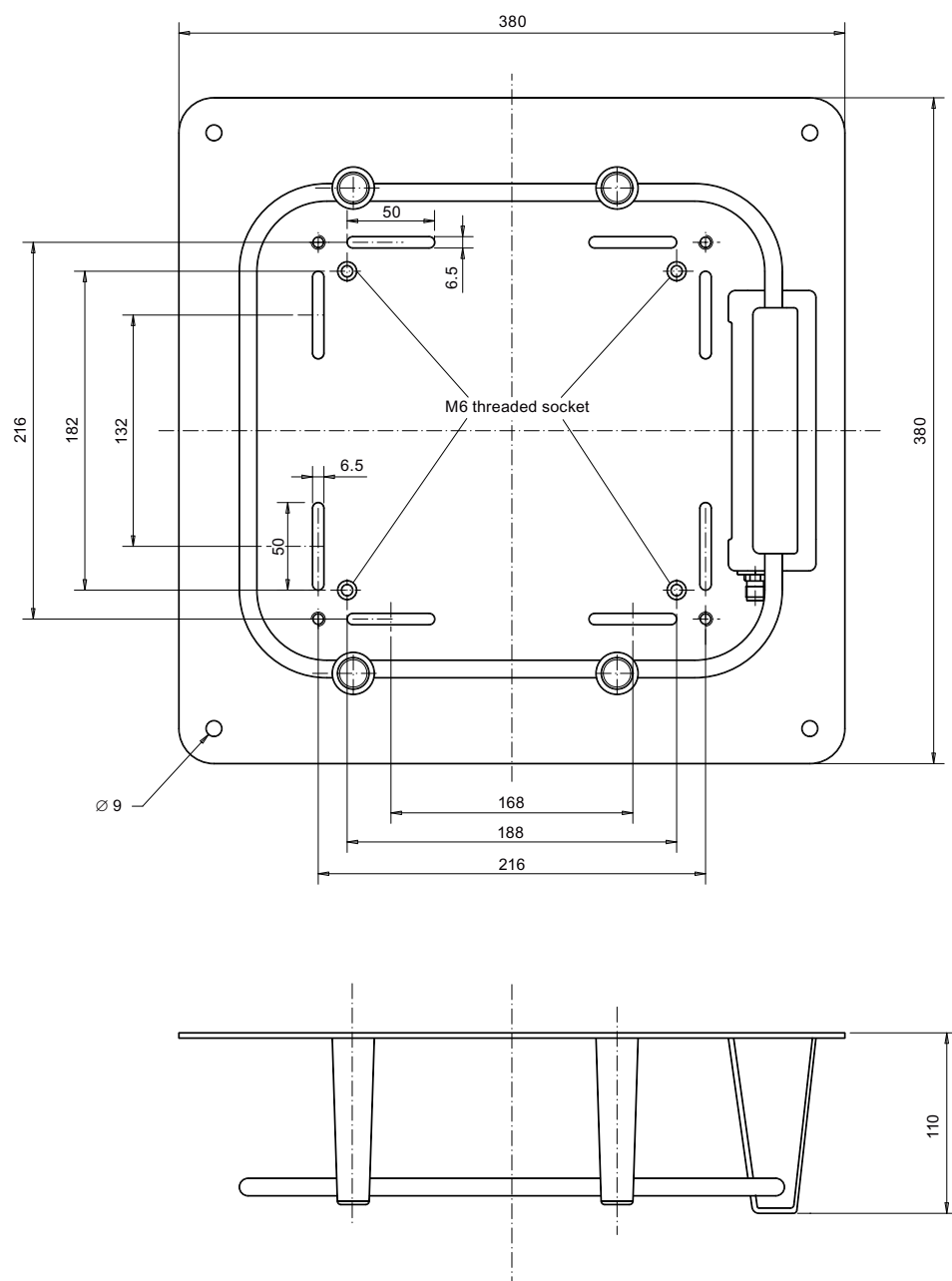


Figure 8-1 Dimension drawing for ANT D5 (all dimensions in mm)

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ANT D5
A5E03932396, 04/2012