IDENTIFICATION

APPLICATION NOTE

Installation and Configuration Manual for the Direction Mode at Gate antennas

ID ISC.ANT1710690-A/-B Version Q3/2017

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FEIG ELECTRONIC

Note

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The instructions given in this manual are based on advantageous boundary conditions. FEIG ELECTRONIC GmbH does not give any guarantee promise for perfect function in cross environments and does not give any guaranty for the functionality of the complete system which incorporates the subject of this document.

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General information's regarding this document

- The sign "☞" indicates extensions or changes of this manual compared with the former issue.
- If bits within one byte are filled with "-", these bit spaces are reserved for future extensions or for internal testing- and manufacturing-functions. These bit spaces must not be changed, as this may cause faulty operation of the reader.
- The following figure formats are used:
  0...9: for decimal figures
  0x00...0xFF: for hexadecimal figures,
  b0...1 for binary figures.
- The hexadecimal value in brackets "[ ]" marks a control byte (command).

Contents

1. Safety Instructions / Warning - Read before start-up !

- The device may only be used for the intended purpose designed by for the manufacturer.
- The operation manual should be conveniently kept available at all times for each user.
- Unauthorized changes and the use of spare parts and additional devices which have not been sold or recommended by the manufacturer may cause fire, electric shocks or injuries. Such unauthorized measures shall exclude any liability by the manufacturer.
- The liability-prescriptions of the manufacturer in the issue valid at the time of purchase are valid for the device. The manufacturer shall not be held legally responsible for inaccuracies, errors, or omissions in the manual or automatically set parameters for a device or for an incorrect application of a device.
- Repairs may only be executed by the manufacturer.
- Installation, operation, and maintenance procedures should only be carried out by qualified personnel.
- Use of the device and its installation must be in accordance with national legal requirements and local electrical codes .
  - When working on devices the valid safety regulations must be observed.
- Please observe that some parts of the device may heat severely.
- Before touching the device, the power supply must always be interrupted. Make sure that the device is without voltage by measuring. The fading of an operation control (LED) is no indicator for an interrupted power supply or the device being out of voltage!
- For installation and dismantling you should wear suitable safety gloves, because parts of antenna housing could be sharp-edged.

CAUTION! The Antenna-Tuner and the Antenna conductor carry voltages up to 1000V.

The Antenna is not water proof and should not be exposed to rain or humidity.
Under extreme circumstances water could seep into the antenna and damage the electronic circuits.

Special advice for wearers of cardiac pacemakers:

- Although this device doesn't exceed the valid limits for electromagnetic fields you should keep a minimum distance of 25 cm between the device and your cardiac pacemaker and not stay in an immediate proximity of the reader’s antennas for any length of time.

- **CAUTION! Do not look directly into the Alarm LED light. There is a danger of injury of the eyes!**

2. Foreword

This application note should be an assistance to install and configure the Direction Mode at gate antennas.

In this application note ,the complete installation and the mechanical setup and configuration of the gate antennas will not be described again.

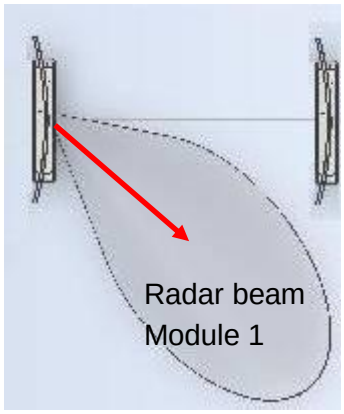
If needed the corresponding installation manual has to be used.

identification-support@feig.de or Tel.:++49 6471- 31 09 0

3. Single Gate (2 antennas)

3.1. Position overview

ANT1 (A) ANT2 (B)



Beam should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter

ANT2: Type B

3.2. Installation and connection of the radar module

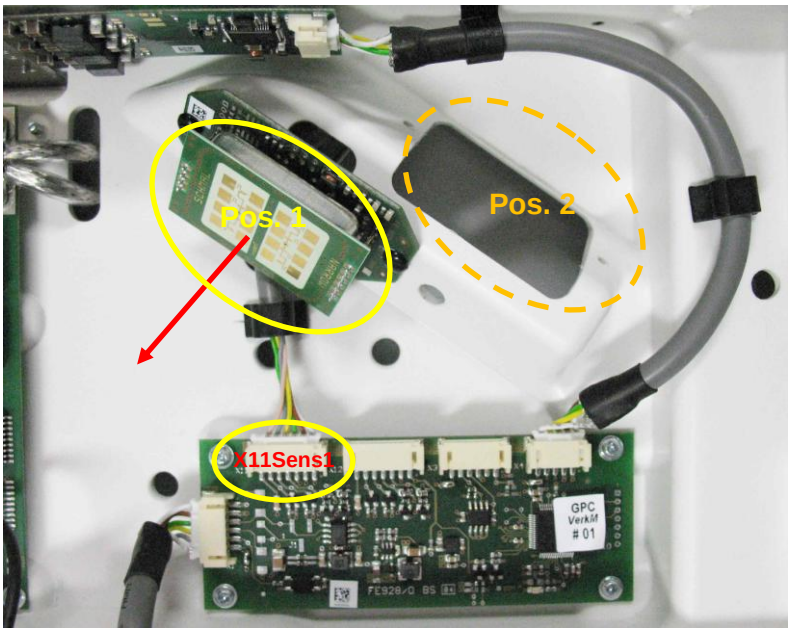
Install the radar module at the right position in the antenna foot.

Module 1 = Position 1

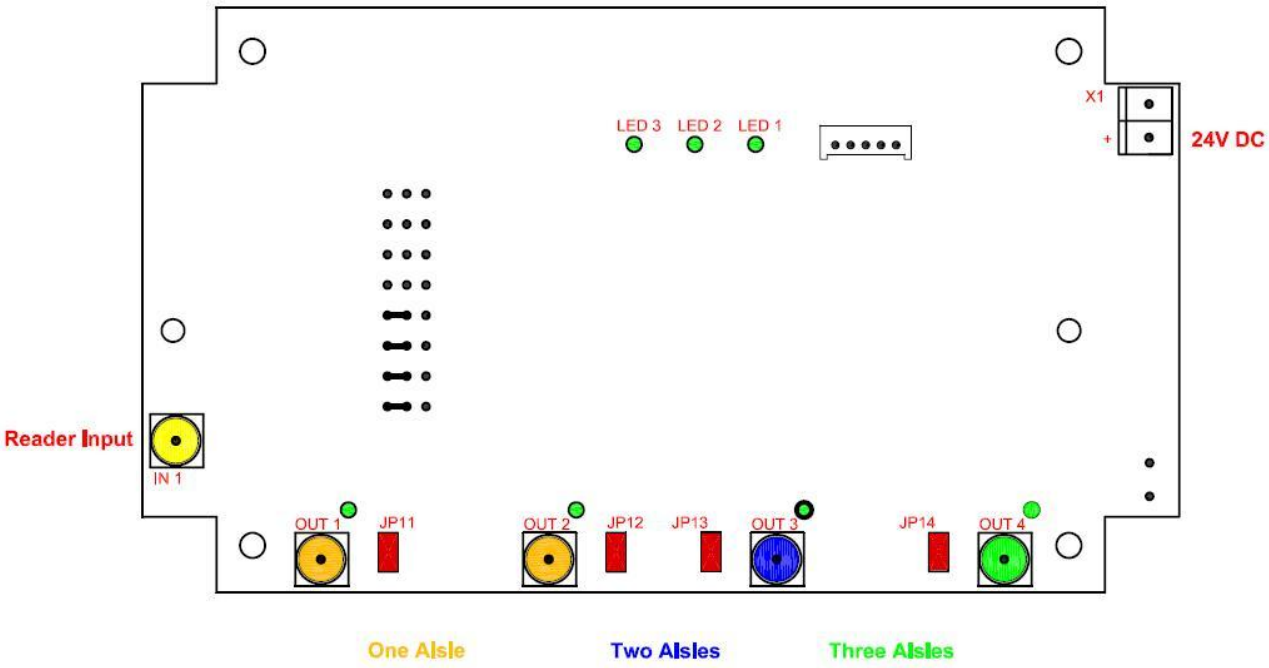
The antenna surface of the radar module must always face between the two antennas of the gate.

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11

See also corresponding chapter in the installation manual of the corresponding antenna.



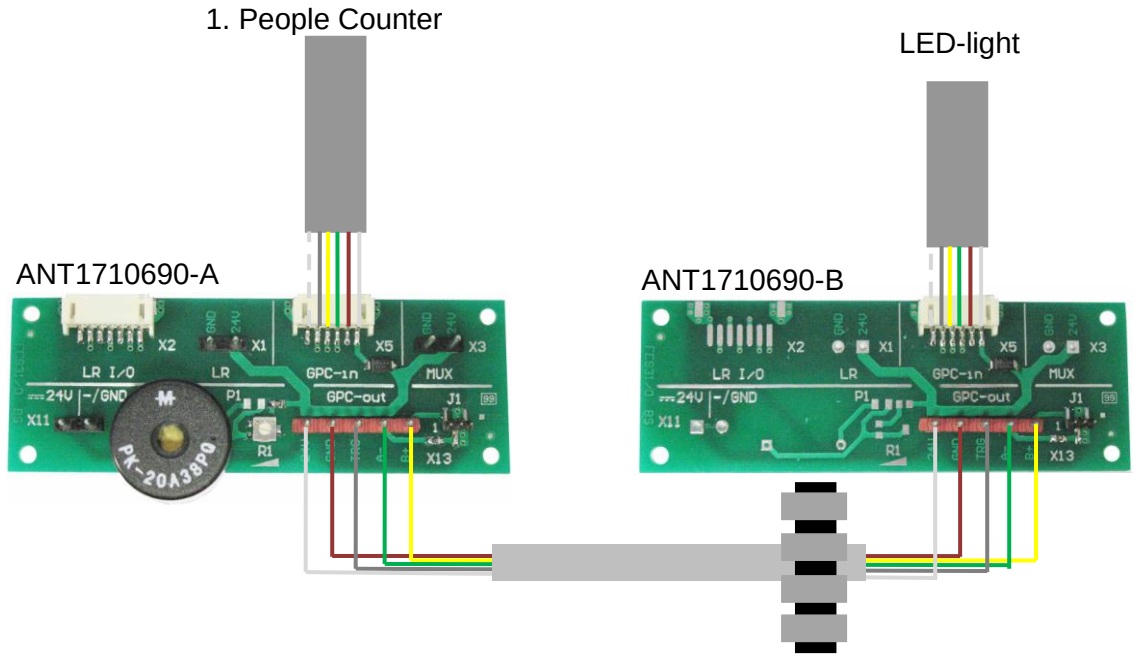
3.3. Antenna connections



Antenna 1: Type A is connected by default with Output 1 of the Multiplexer. (Orange)

Antenna 2: Type B has to be connected to Output 2 of the Multiplexer. (Orange)

3.4. Connecting the antennas

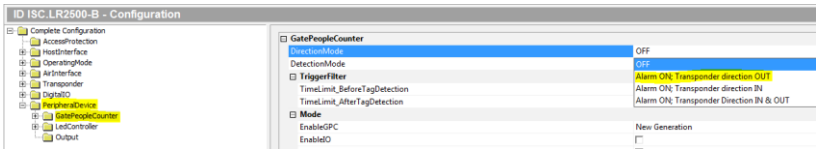
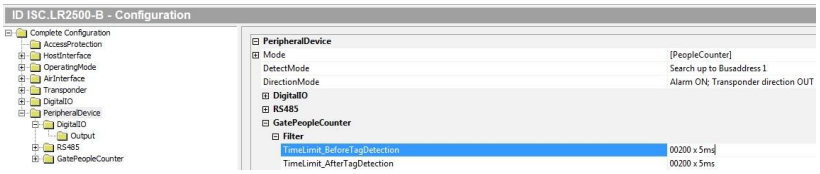
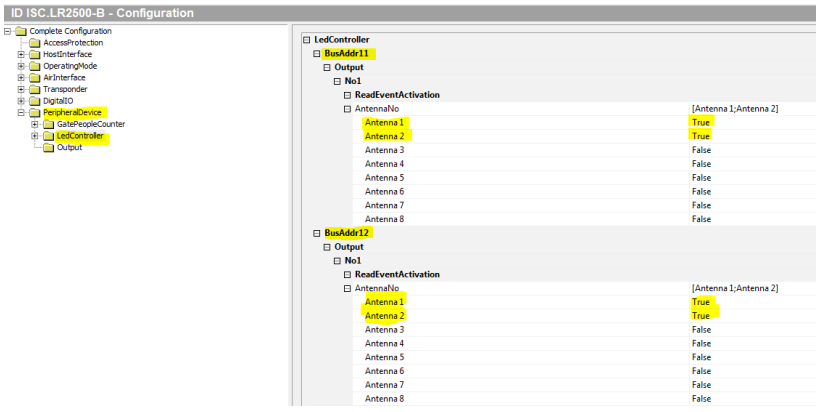
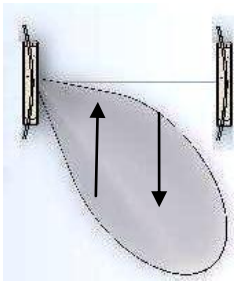


The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1 via the GPC.

X13 GPC-out of the terminal board in antenna 2 must be connected with X13 GPC-out of the terminal board in antenna 1 parallel 1:1.

The side with the ferrite core must be placed in the antenna Type B.

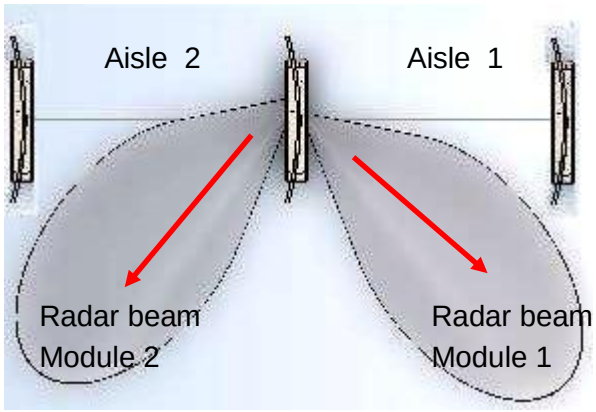
3.5. Configuration of the Direction Mode

Step	Action	Note
1	Select „Configuration“	
2	**Select Peripheral Device - Gate People Counter** Set Direction Mode to the needed alarm direction	
3	**Select Peripheral Device - Filter** Set “Time limit before and after Tag Detection” Here: 200x5ms=1000ms Do not set time to short or to long !	
4	**Select Peripheral Device - LEDController** Set: LED Controller Bus Adr.11 / OUT1 for Antenna 1+2 to “True” LED Controller Bus Adr.12 / OUT1 for Antenna 1+2 to “True”	
5	Confirm with „Apply“	
6	Walk through the gate with a valid transponder to check the set direction and the alarm LED	

4. Double gate (3 antennas)

4.1. Position overview

ANT3 (B) ANT1 (A) ANT2 (B)



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter
ANT2: Type B
ANT3: Type B

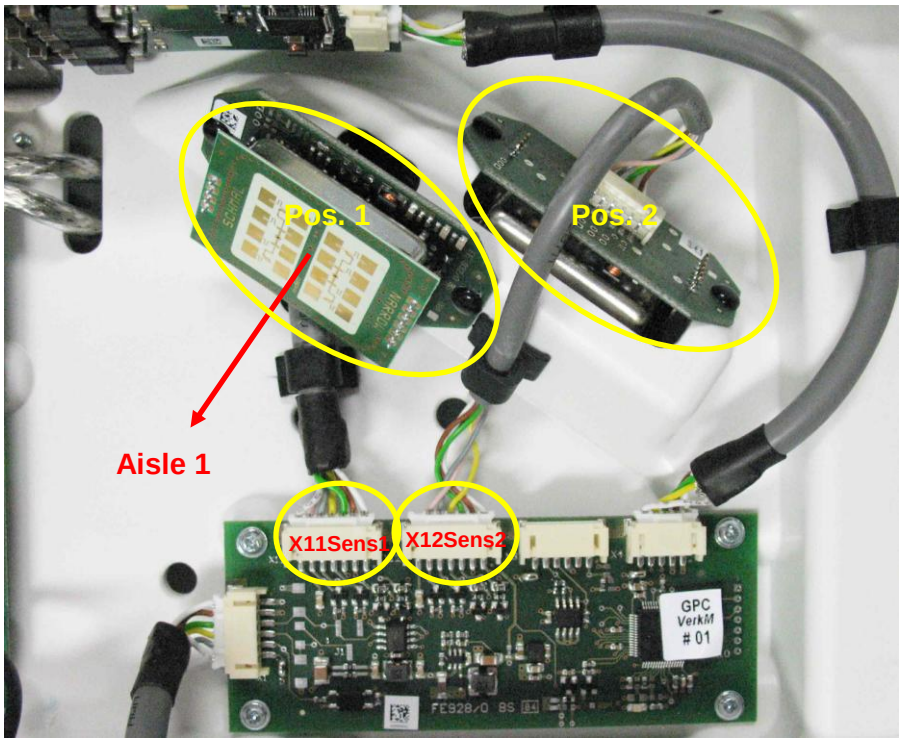
4.2. Installation and connection of the radar module

Install the radar module at the right position in the antenna foot.
Module 1 = Position 1
Module 2 = Position 2

The antenna surface of the radar module must always face between the two antennas of the gate.

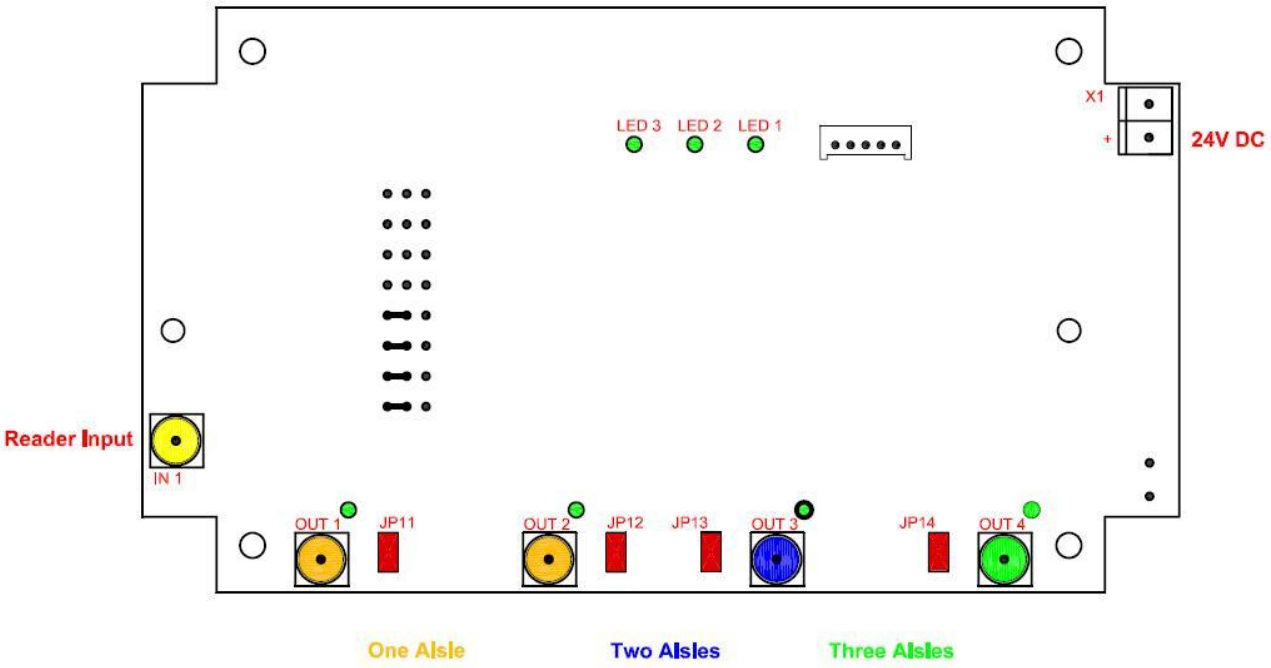
Module 1 = Aisle 1
Module 2 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11
Module 2 = Sens2 X12



See also corresponding chapter in the installation manual of the corresponding antenna.	

4.3. Antenna connections

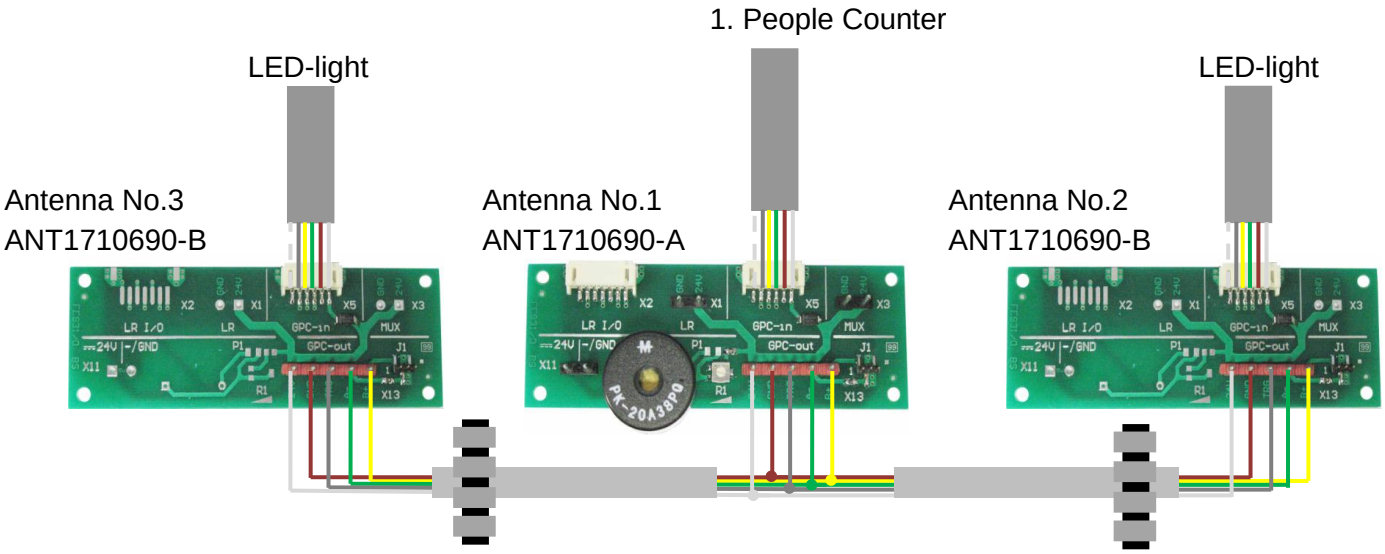


Antenna 1: Type A is connected by default with Output 1 of the Multiplexer. (Orange)

Antenna 2: Type B has to be connected to Output 2 of the Multiplexer. (Orange)

Antenna 3: Type B has to be connected to Output 3 of the Multiplexer. (Blue)

4.4. Connecting the antennas

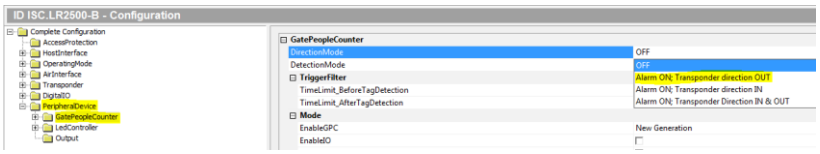
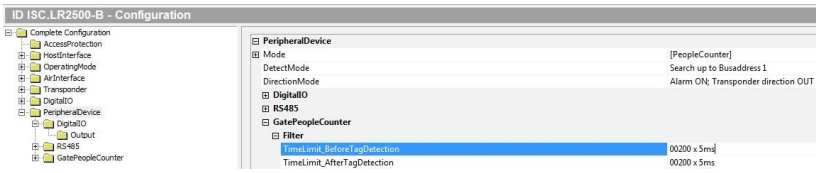
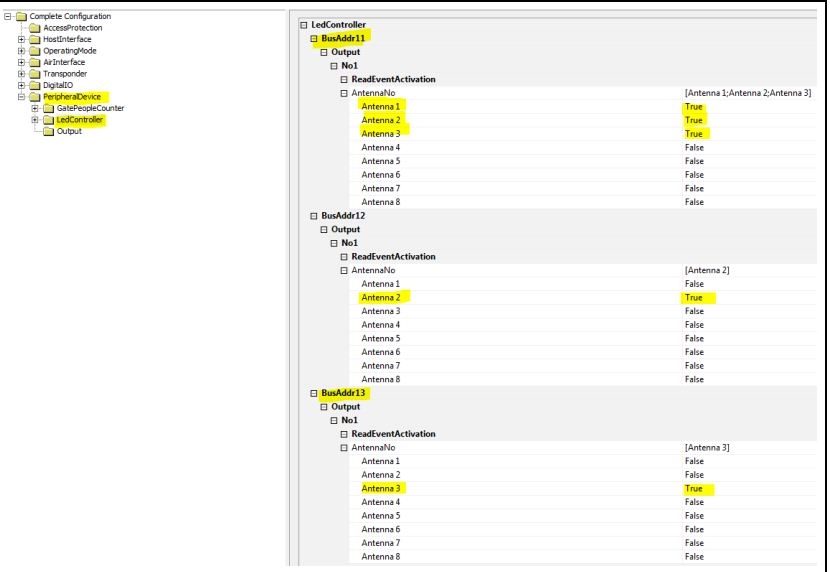
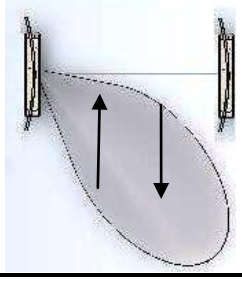


The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1 via the GPC.

X13 GPC-out of the terminal board in antenna 2 + 3 must be connected with X13 GPC-out of the terminal board in antenna 1 parallel 1:1.

The sides with the ferrite core must be placed in the antenna Type B.

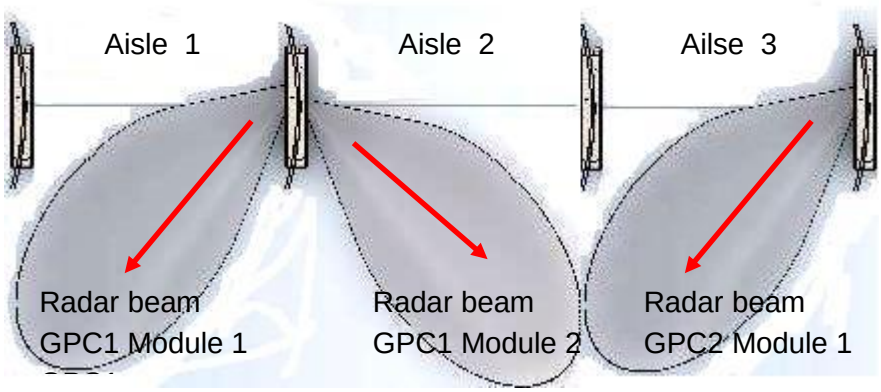
4.5. Configuration of the Direction Mode

Step	Action	Note
1	Select „Configuration“	
2	**Select Peripheral Device - Gate People Counter** Set Direction Mode to the needed alarm direction	
3	**Select Peripheral Device - Filter** Set “Time limit before and after Tag Detection” Here: 200x5ms=1000ms Do not set time to short or to long !	
4	**Select Peripheral Device - LED Controller** Set: LED Controller Bus Adr.11 / OUT1 for Antenna 1+2+3 to “True” LED Controller Bus Adr.12 / OUT1 for Antenna 2 to “True” LED Controller Bus Adr.13 / OUT1 for Antenna 3 to “True”	
5	Confirm with „Apply“	
6	Walk through the gate with a valid transponder to check the set direction and the alarm LED	

5. Triple gate (4 antennas)

5.1. Position overview setup possibility No.1

ANT2 (B) ANT1 (A) ANT3 (B) ANT4 (B)



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)

5.2. Installation and connection of the radar module setup possibility No.1

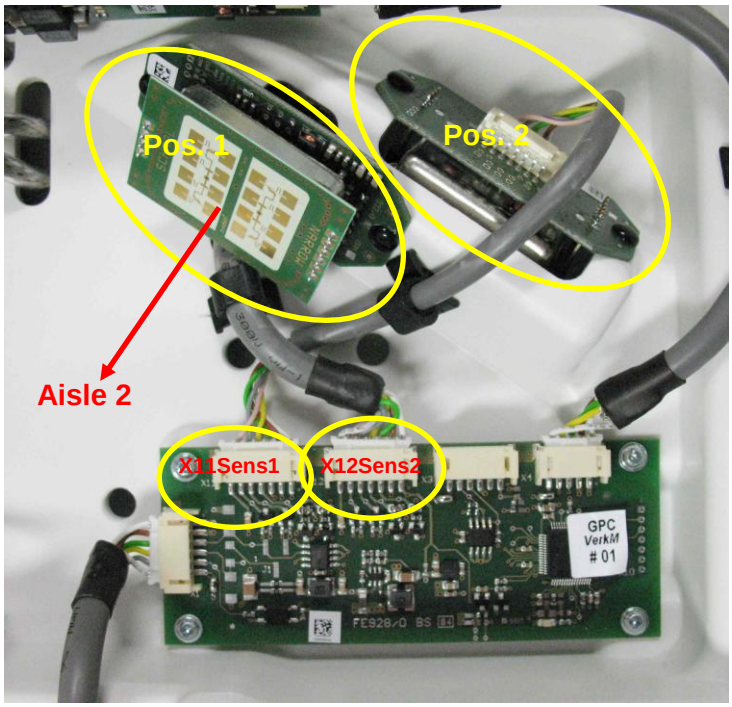
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 2
Module 2 = Position 1

Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



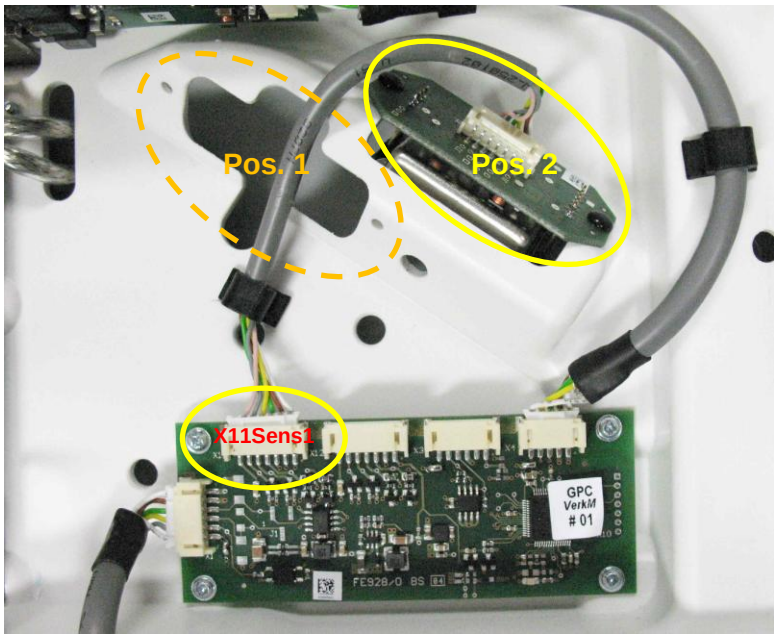
GPC2 in ANT4

Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 2

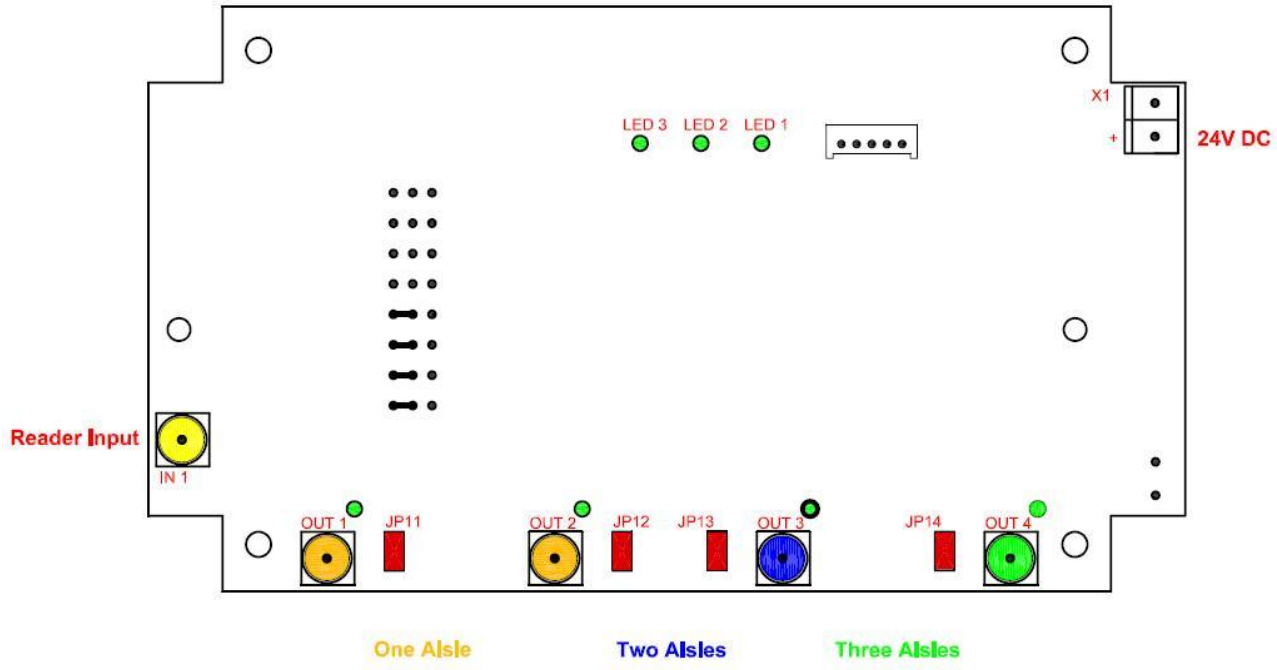
Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2



5.3. Antenna connections



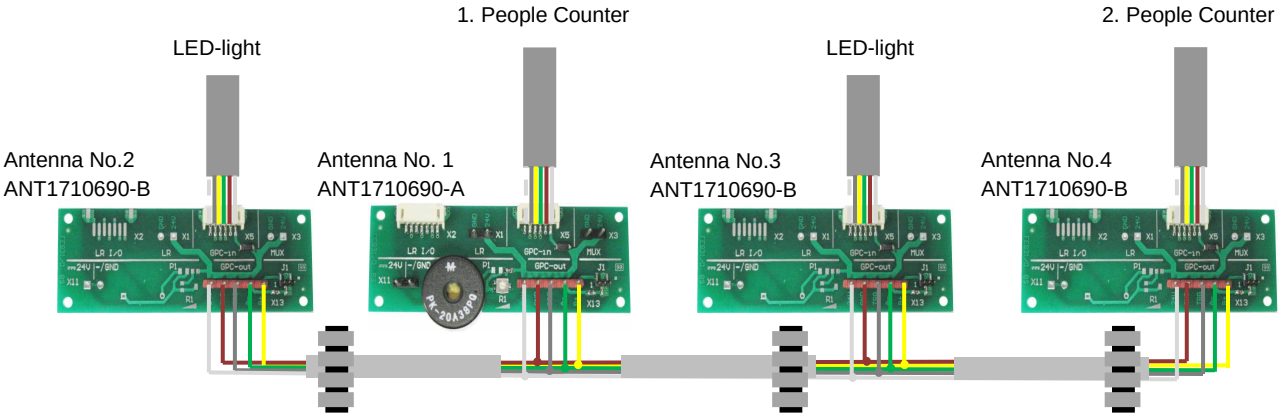
Antenna 1: Type A is connected by default with Output 1 of the Multiplexer. (Orange)

Antenna 2: Type B has to be connected to Output 2 of the Multiplexer. (Orange)

Antenna 3: Type B has to be connected to Output 3 of the Multiplexer. (Blue)

Antenna 4: Type B has to be connected to Output 4 of the Multiplexer. (Green)

5.4. Connecting the antennas

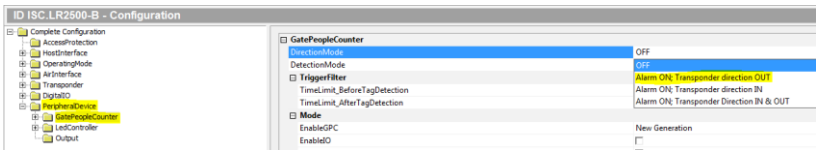
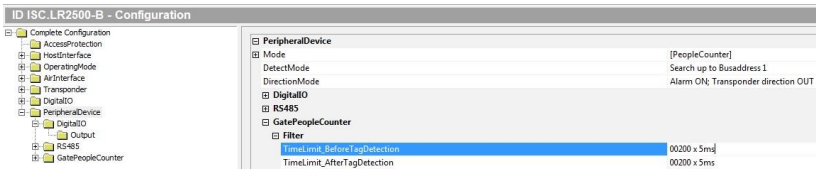


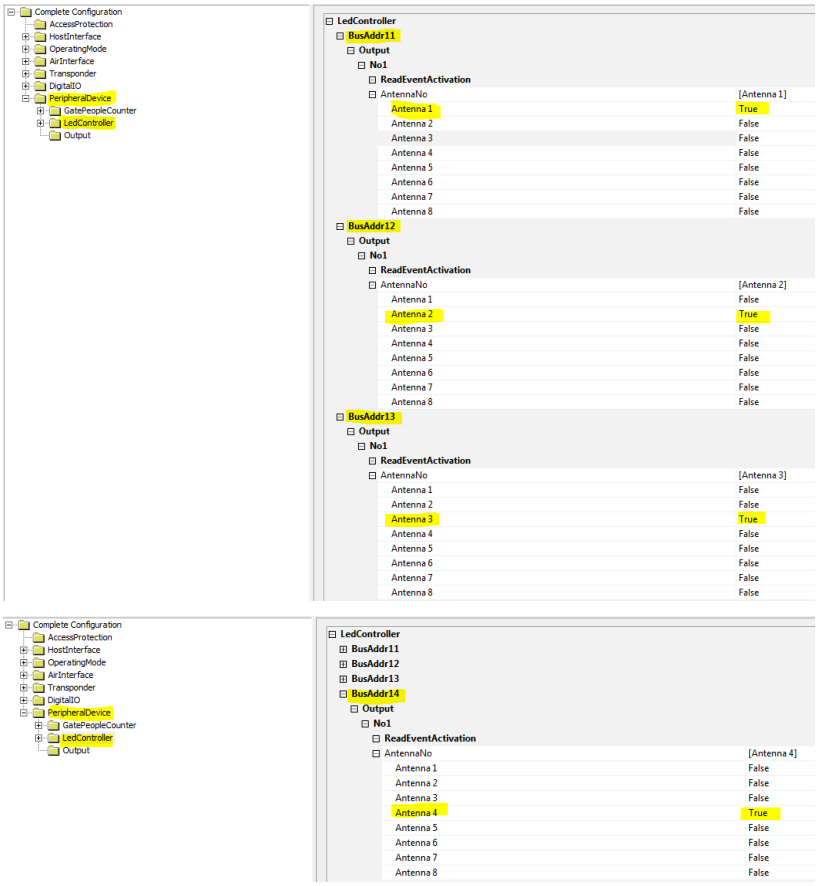
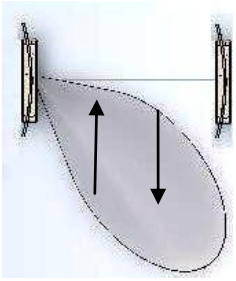
The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

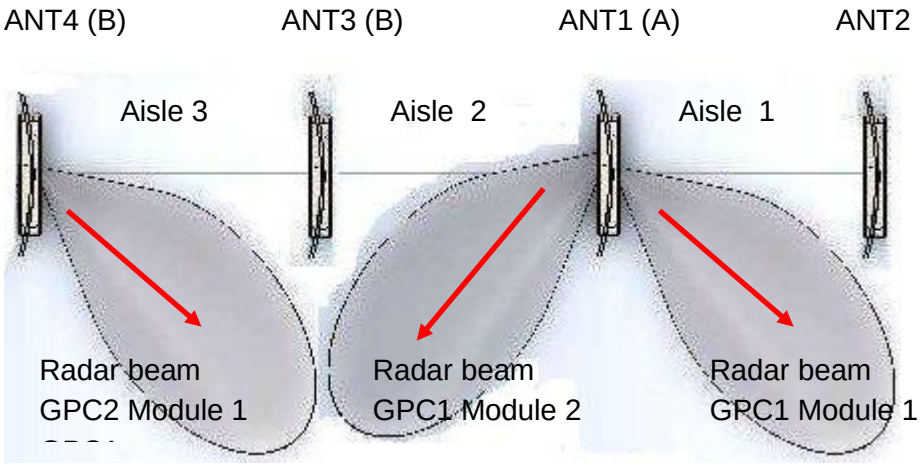
The sides with the ferrite core must be placed in the antenna Type B.

5.5. Configuration of the Direction Mode

Step	Action	Note
1	Select „Configuration“	
2	**Select Peripheral Device - Gate People Counter** Set Direction Mode to the needed alarm direction	
3	**Select Peripheral Device - Filter** Set “Time limit before and after Tag Detection” Here: 200x5ms=1000ms Do not set time to short or to long !	
4	**Select Peripheral Device**	

	-LED Controller Set: LED Controller Bus Adr.11 / OUT1 for Antenna 1 to “True” LED Controller Bus Adr.12 / OUT1 for Antenna 2 to “True” LED Controller Bus Adr.13 / OUT1 for Antenna 3 to “True” LED Controller Bus Adr.14 / OUT1 for Antenna 4 to “True”	
5	Confirm with „Apply“	
6	Walk through the gates with a valid transponder to check the set direction and alarm LED.	

5.6. Position overview setup possibility No.2



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)

5.7. Installation and connection of the radar module setup possibility No.2

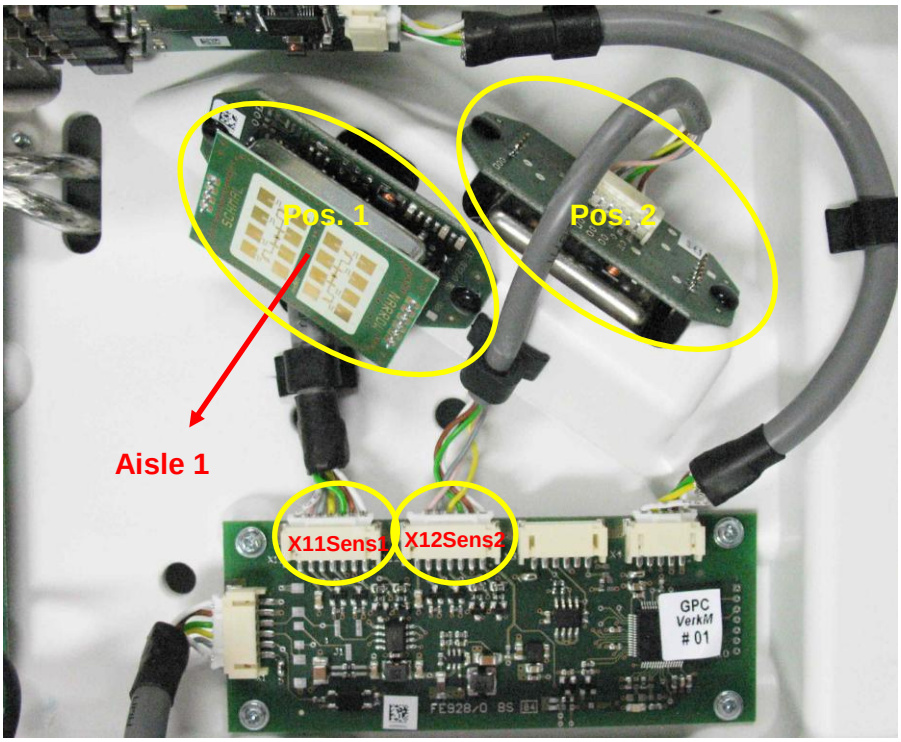
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 1
Module 2 = Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



GPC2 in ANT4

Install the radar module at the right position in the antenna foot.

Module 1 GPC2 = Position 1

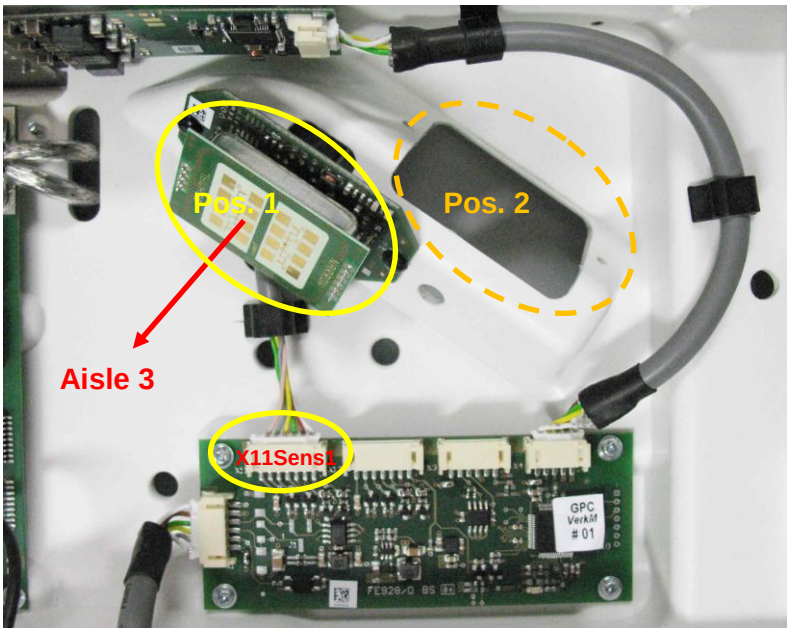
Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.

Module 1 GPC2 = Aisle 3

Connect the radar module to the right Input at the GPC:

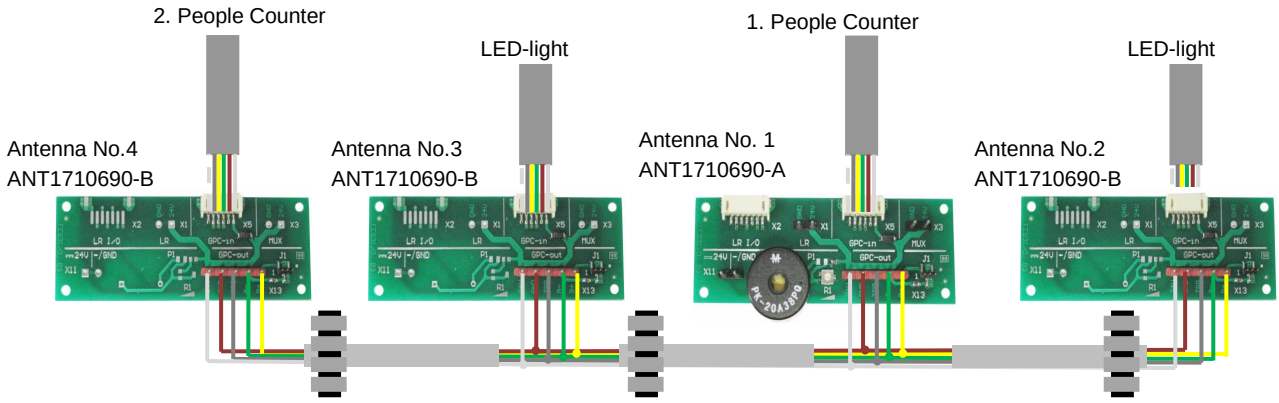
Module 1 = Sens1 X11 GPC2



5.8. Antenna connections

See chapter 5.3

5.9. Connecting the antennas



The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

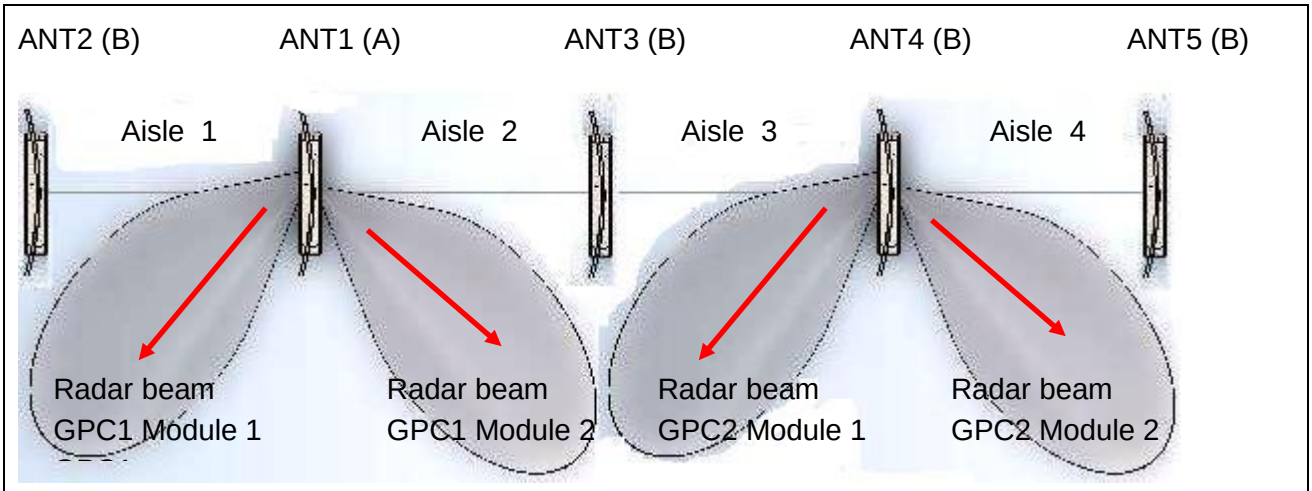
The sides with the ferrite core must be placed in the antenna Type B.

5.10. Configuration of the Direction Mode

See chapter 5.5

6. Quad gate (5 antennas)

6.1. Position overview setup possibility No.1



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)
ANT5: Type B

6.2. Installation and connection of the radar module setup possibility No.1

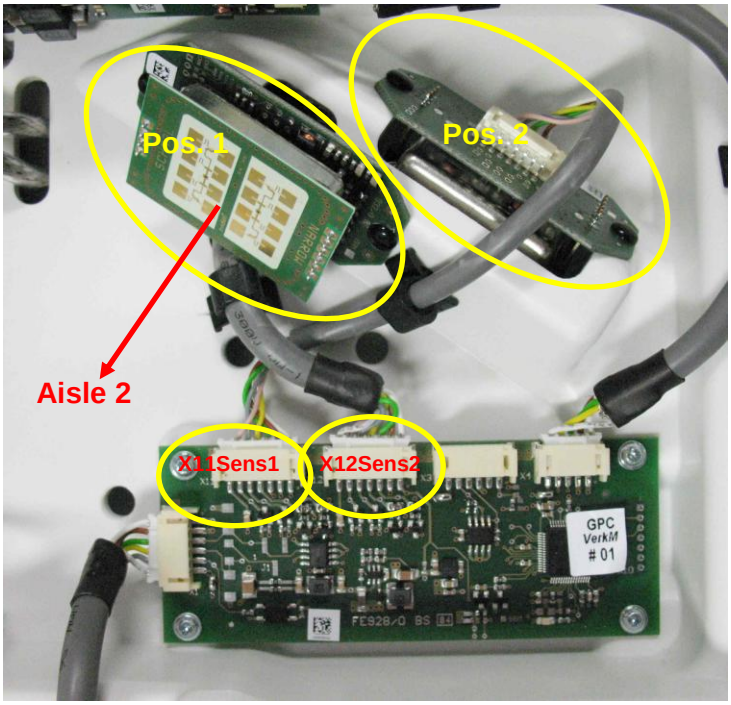
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 2
Module 2 = Position 1

Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



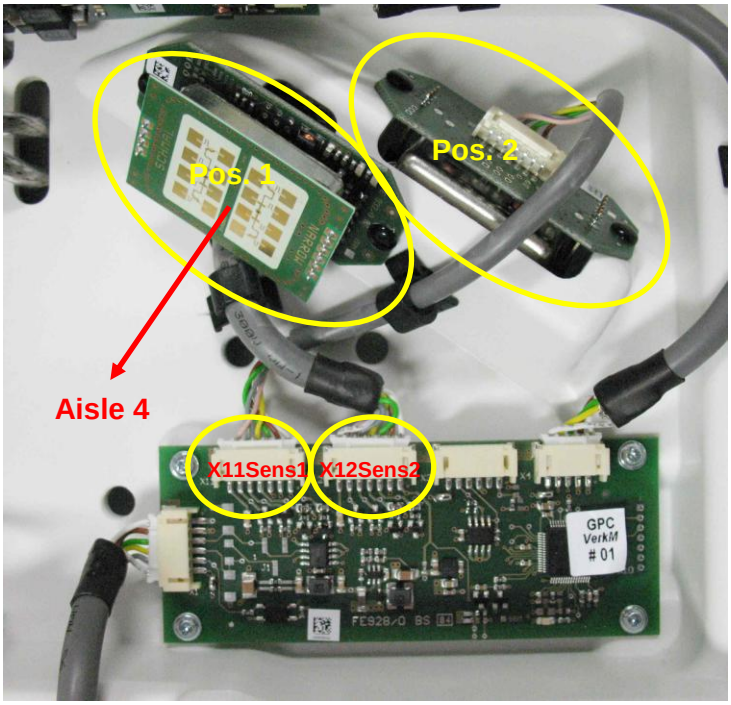
GPC2 in ANT4

Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 2
Module 2 GPC2= Position 1

Difference to possibility No.2

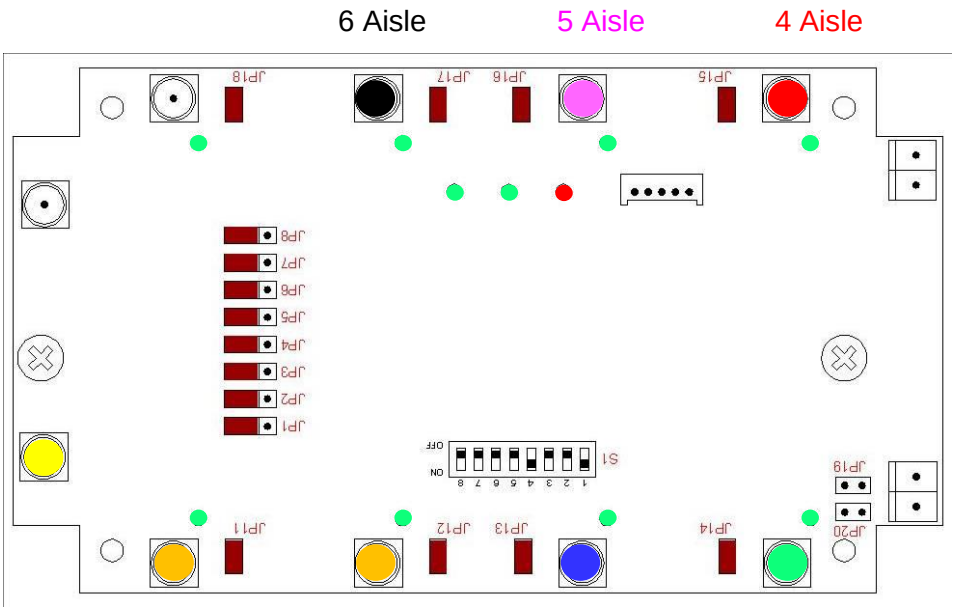
The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3
Module 2 GPC2 = Aisle 4

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2
Module 2 = Sens2 X12 GPC2



6.3. Antenna connections

Change 4-times Multiplexer against 8-times Multiplexer



Antenna 1: Type A is connected by default with Output 1 of the Multiplexer. (Orange)

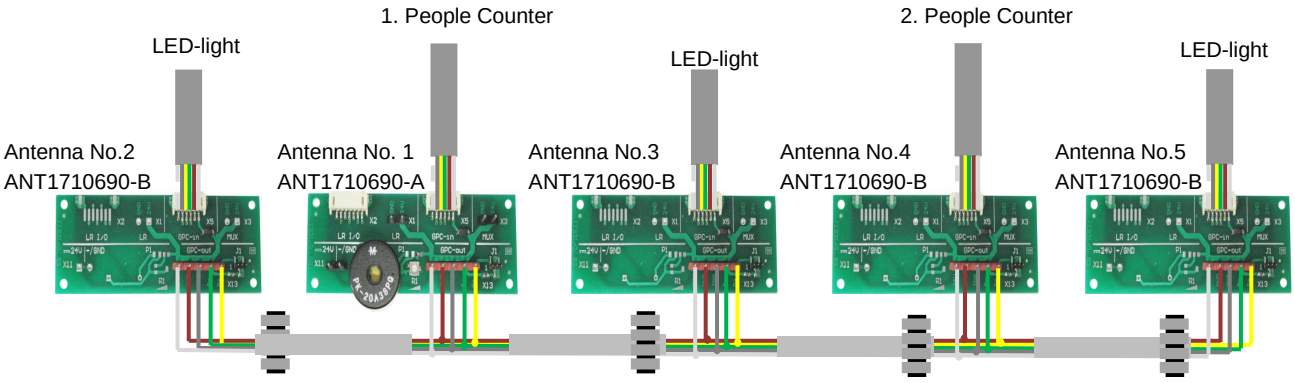
Antenna 2: Type B has to be connected to Output 2 of the Multiplexer. (Orange)

Antenna 3: Type B has to be connected to Output 3 of the Multiplexer. (Blue)

Antenna 4: Type B has to be connected to Output 4 of the Multiplexer. (Green)

Antenna 5: Type B has to be connected to Output 5 of the Multiplexer. (Red)

6.4. Connecting the antennas

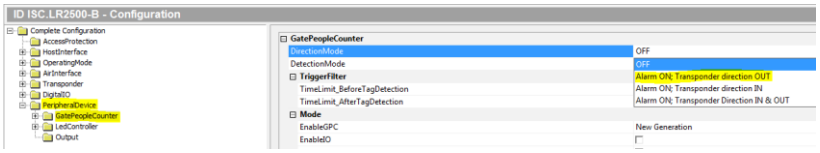
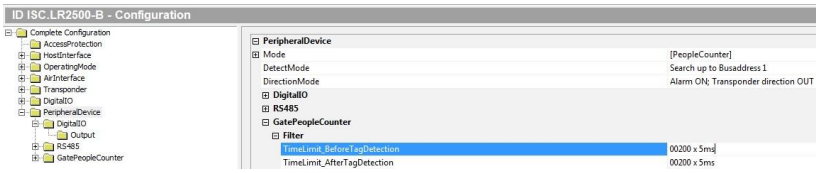
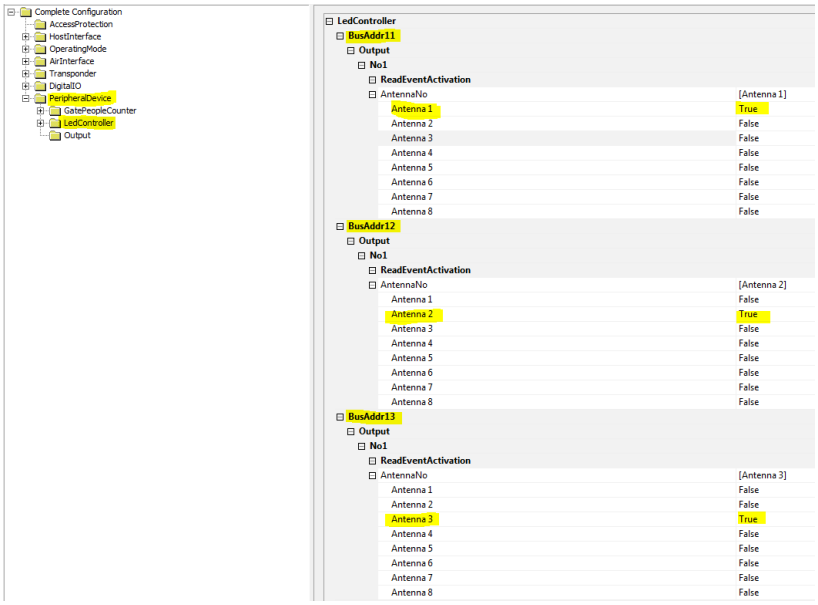


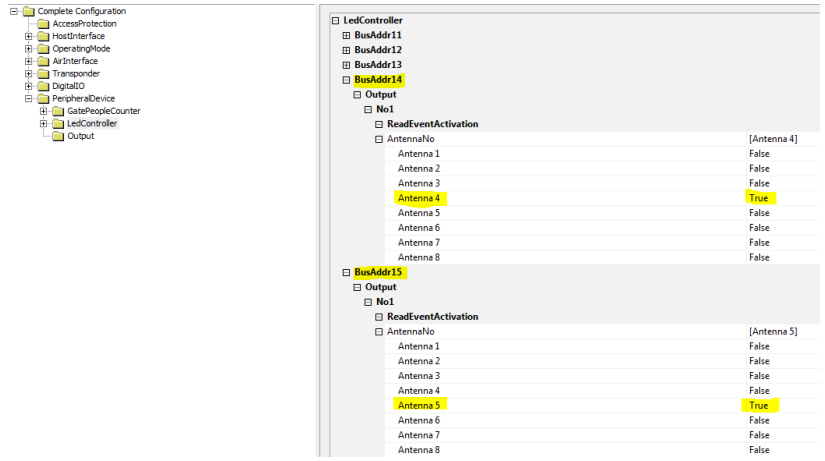
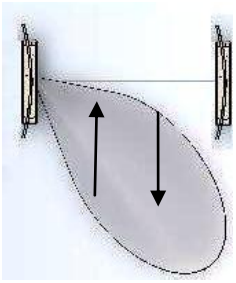
The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

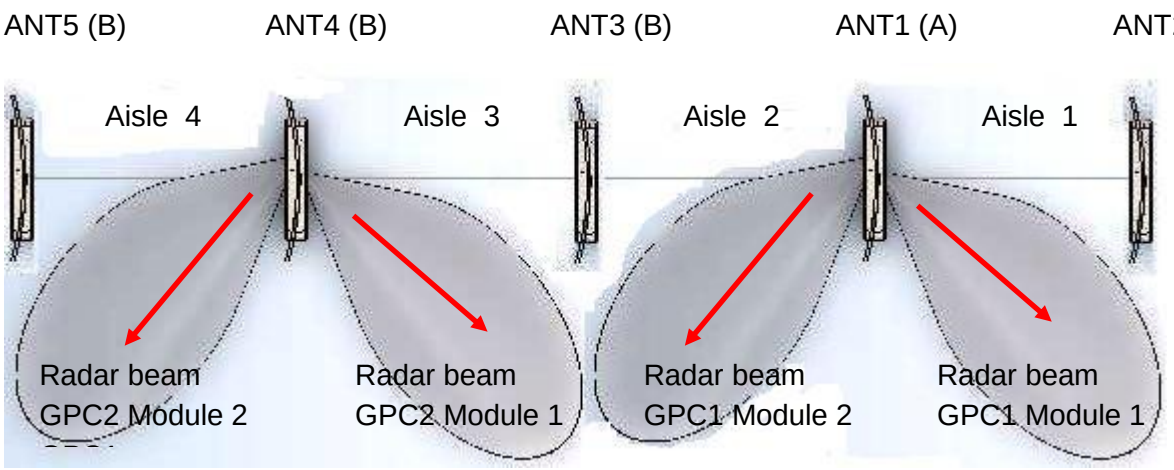
The sides with the ferrite core must be placed in the antenna Type B.

6.5. Configuration of the Direction Mode

Step	Action	Note
1	Select „Configuration“	
2	**Select Peripheral Device - Gate People Counter** Set Direction Mode to the needed alarm direction	
3	**Select Peripheral Device - Filter** Set “Time limit before and after Tag Detection” Here: 200x5ms=1000ms Do not set time to short or to long !	
4	**Select Peripheral Device -LED Controller** Set: LED Controller Bus Adr.11 / OUT1 for Antenna 1 to “True” LED Controller Bus Adr.12 / OUT2 for Antenna 2 to “True” LED Controller Bus Adr.13 / OUT3 for Antenna 3 to “True” See also next page	

	LED Controller Bus Adr.14 / OUT4 for Antenna 4 to “True” LED Controller Bus Adr.15 / OUT5 for Antenna 5 to “True”	
5	Confirm with „Apply“	
6	Walk through the gates with a valid transponder to check the set direction and alarm LED.	

6.6. Position overview setup possibility No.2



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)
ANT5: Type B

6.7. Installation and connection of the radar module setup possibility No.2

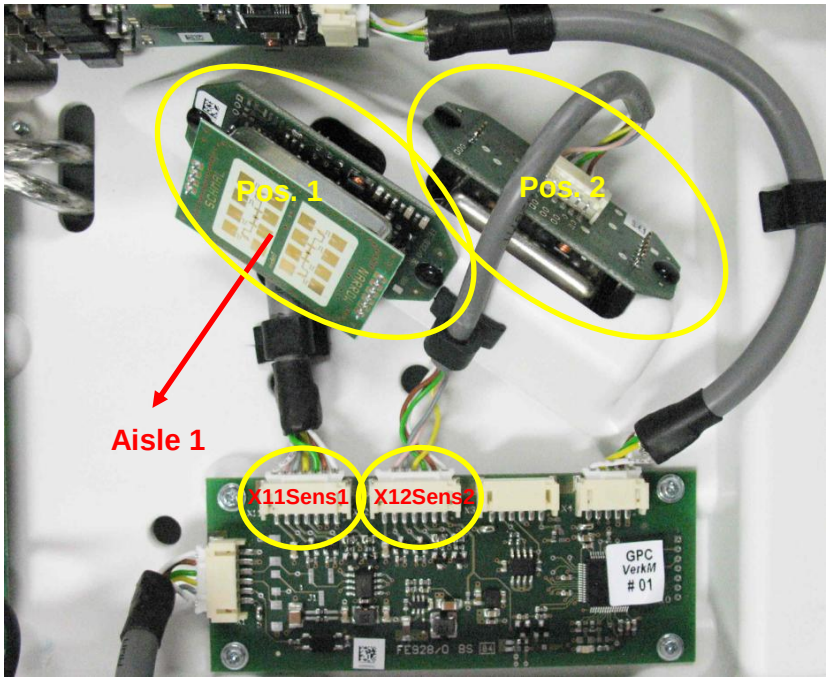
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 1
Module 2 = Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



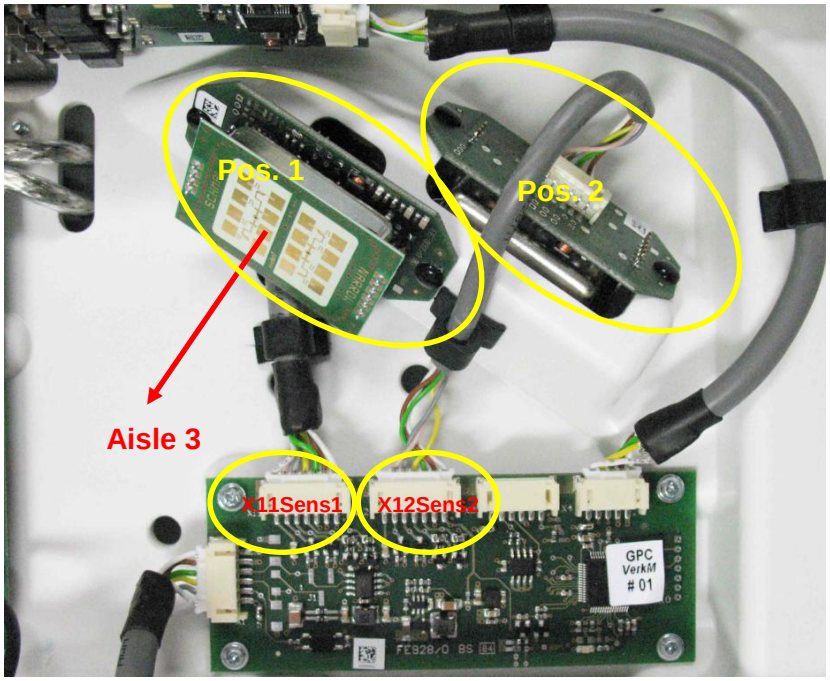
GPC2 in ANT4

Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 1
Module 2 GPC2= Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3
Module 2 GPC2 = Aisle 4

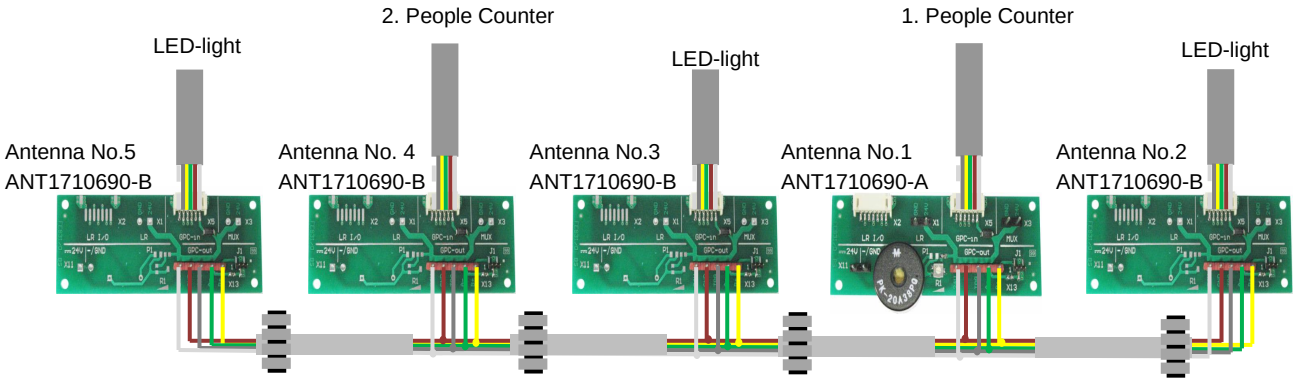
Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2
Module 2 = Sens2 X12 GPC2



6.8. Antenna connections

See chapter 6.3

6.9. Connecting the Alarm LED and 2. GPC setup possibility No.2



The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

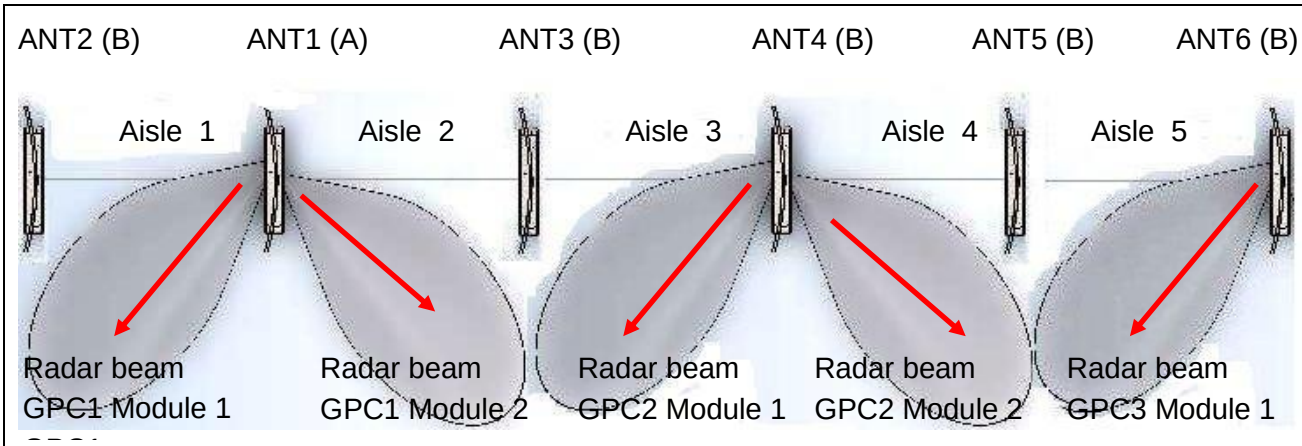
The sides with the ferrite core must be placed in the antenna Type B.

6.10. Configuration of the Direction Mode

See Chapter 6.5

7. Fivefold gate (6 antennas)

7.1. Position overview setup possibility No.1



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)
ANT5: Type B
ANT6: Type B with Gate People Counter (GPC3 = Bus Address 3)

7.2. Installation and connection of the radar module setup possibility No.1

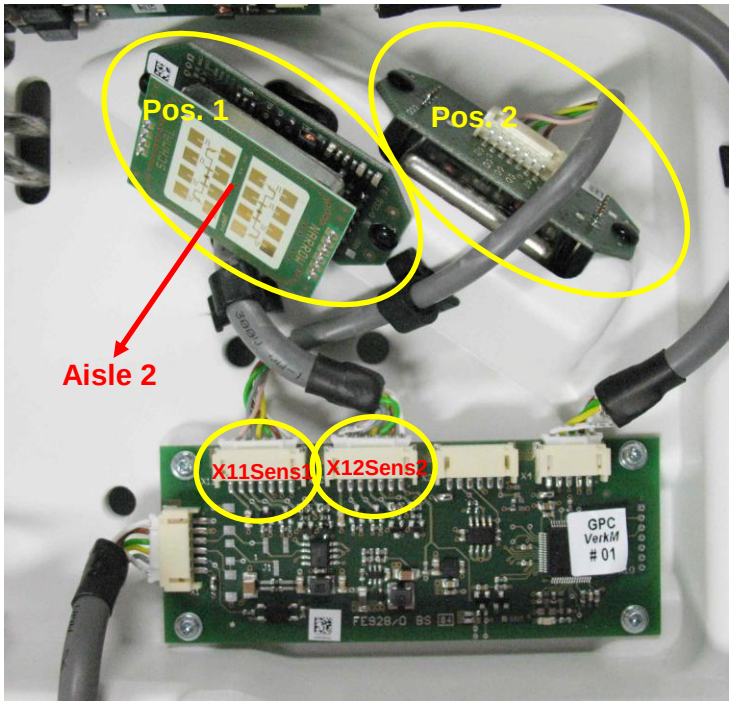
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 2
Module 2 = Position 1

Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



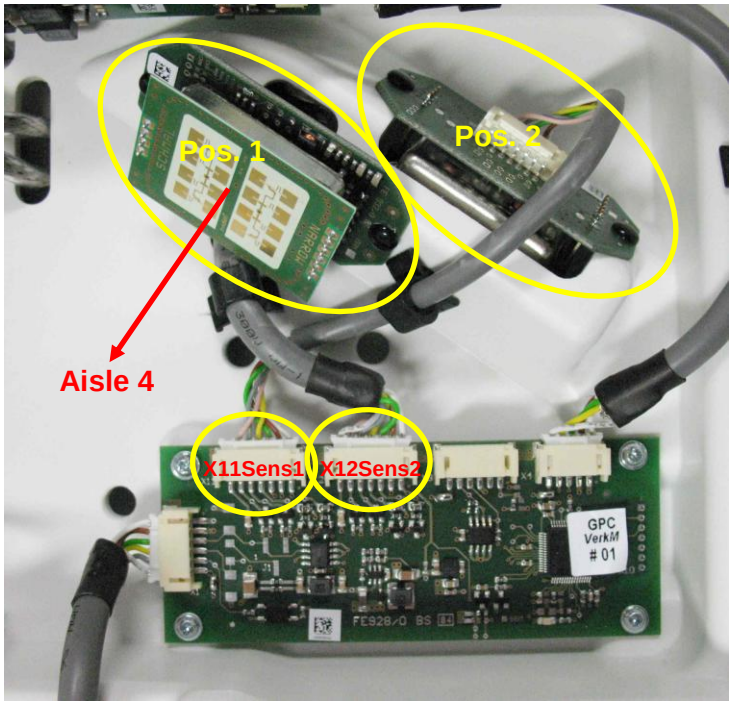
GPC2 in ANT4

Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 2
Module 2 GPC2= Position 1

Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3
Module 2 GPC2 = Aisle 4

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2
Module 2 = Sens2 X12 GPC2



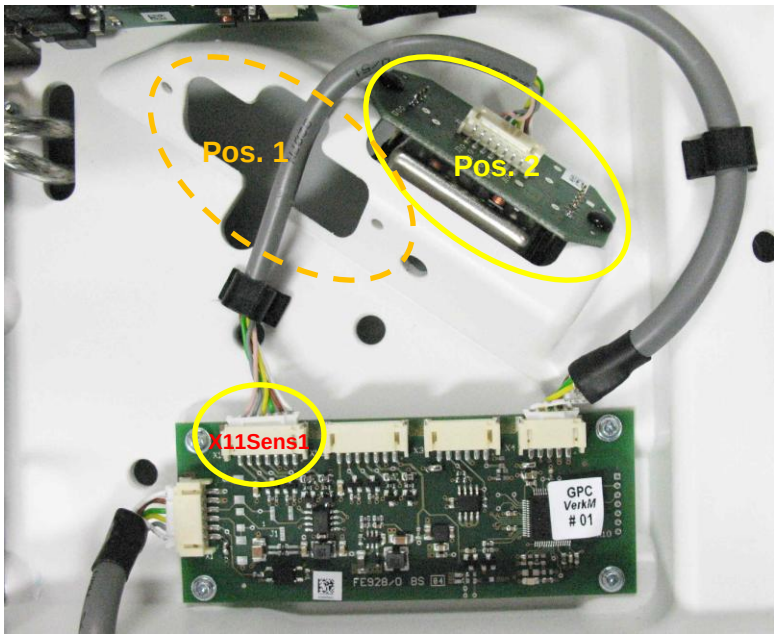
GPC3 in ANT6

Install the radar module at the right position in the antenna foot.
Module 1 GPC3 = Position 2

Difference to possibility No.2

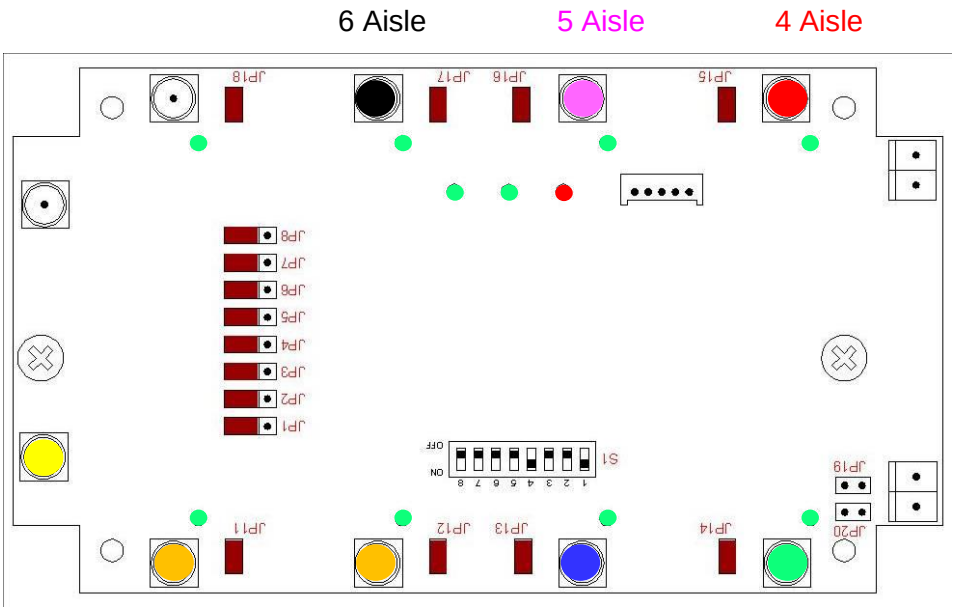
The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC3 = Aisle 5

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC3



7.3. Antenna connections

Change 4-times Multiplexer against 8-times Multiplexer



Antenna 1: Type A is connected by default with Output 1 of the Multiplexer. (Orange)

Antenna 2: Type B has to be connected to Output 2 of the Multiplexer. (Orange)

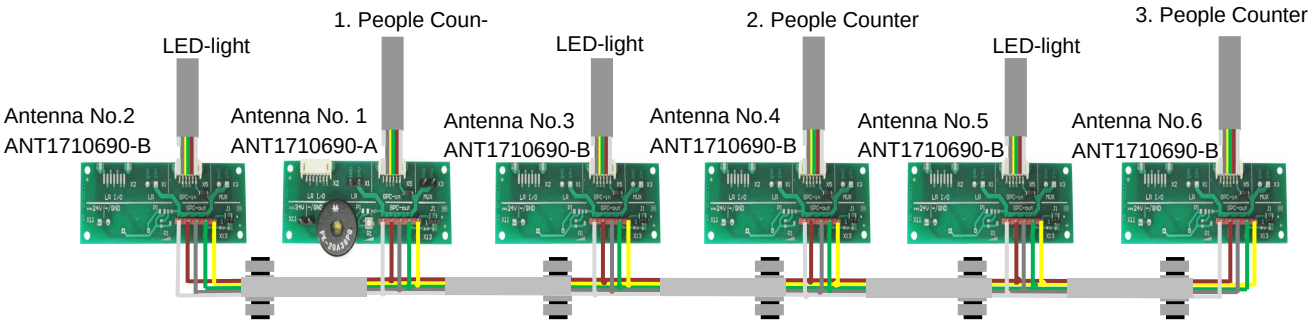
Antenna 3: Type B has to be connected to Output 3 of the Multiplexer. (Blue)

Antenna 4: Type B has to be connected to Output 4 of the Multiplexer. (Green)

Antenna 5: Type B has to be connected to Output 5 of the Multiplexer. (Red)

Antenna 6: Type B has to be connected to Output 6 of the Multiplexer. (Pink)

7.4. Connecting the antennas

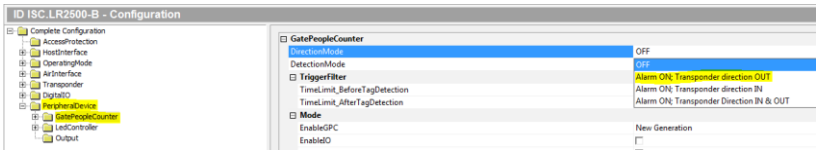
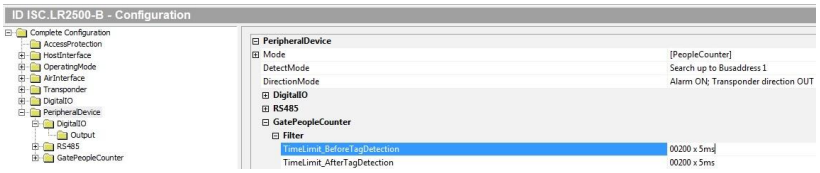
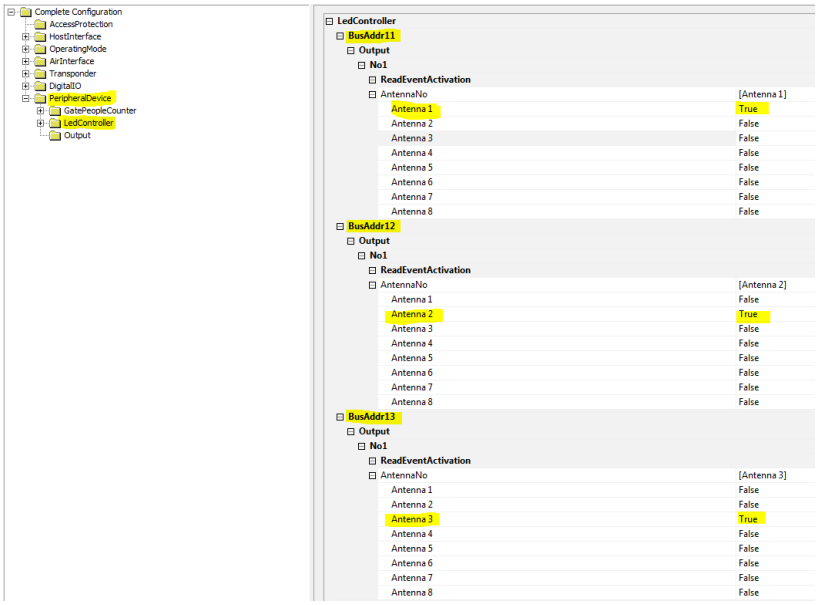


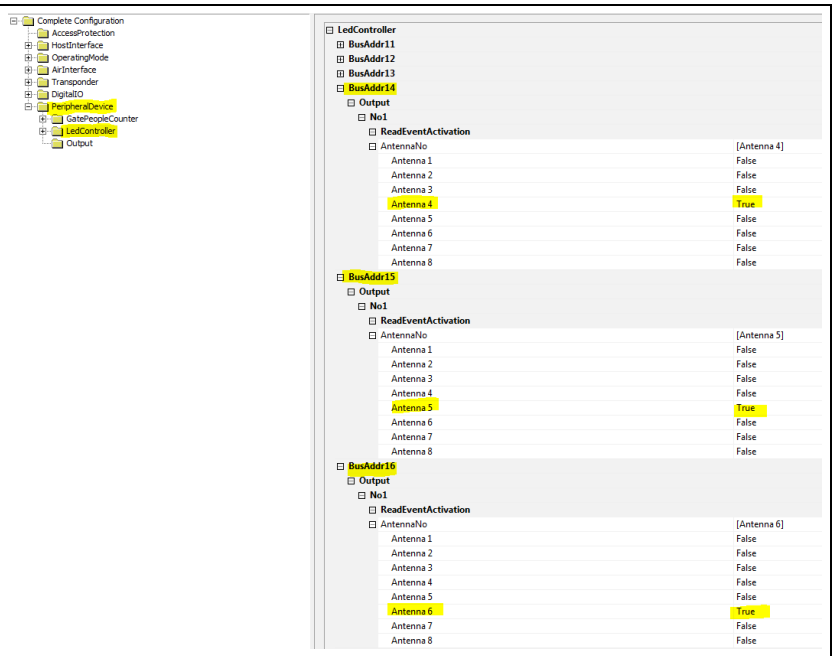
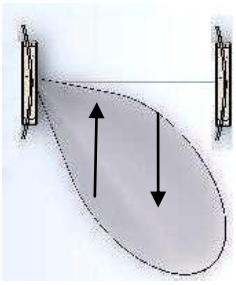
The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4+6 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

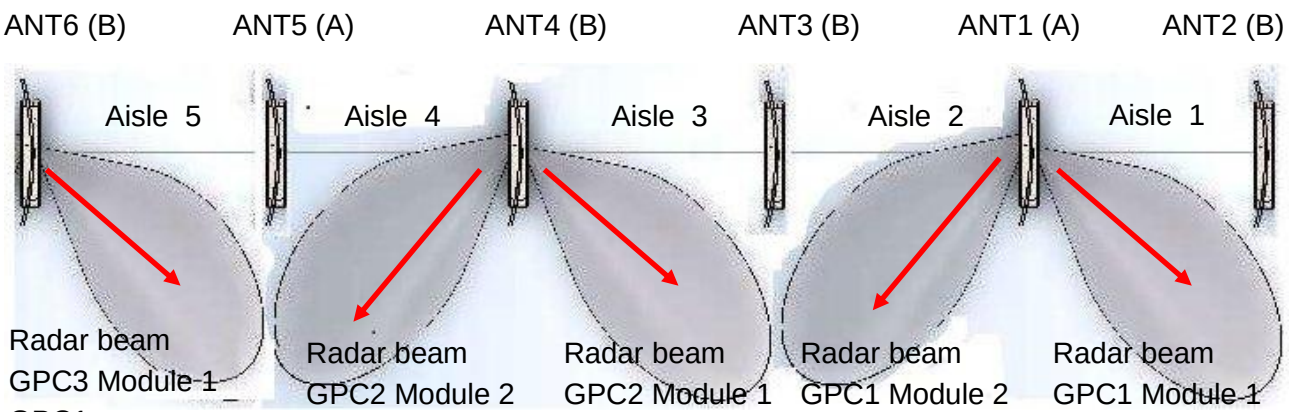
The sides with the ferrite core must be placed in the antenna Type B.

7.5. Configuration of the Direction Mode

Step	Action	Note
1	Select „Configuration“	
2	**Select Peripheral Device - Gate People Counter** Set Direction Mode to the needed alarm direction	
3	**Select Peripheral Device - Filter** Set “Time limit before and after Tag Detection” Here: 200x5ms=1000ms Do not set time to short or to long !	
4	**Select Peripheral Device -LED Controller** Set: LED Controller Bus Adr.11 / OUT1 for Antenna 1 to “True” LED Controller Bus Adr.12 / OUT2 for Antenna 2 to “True” LED Controller Bus Adr.13 / OUT3 for Antenna 3 to “True” See also next page	

	LED Controller Bus Adr.14 / OUT4 for Antenna 4 to “True” LED Controller Bus Adr.15 / OUT5 for Antenna 5 to “True” LED Controller Bus Adr.16 / OUT6 for Antenna 6 to “True”	
5	Confirm with „Apply“	
6	Walk through the gates with a valid transponder to check the set direction and alarm LED.	

7.6. Position overview setup possibility No.2



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)
ANT5: Type B
ANT6: Type B with Gate People Counter (GPC3 = Bus Address 3)

7.7. Installation and connection of the radar module setup possibility No.2

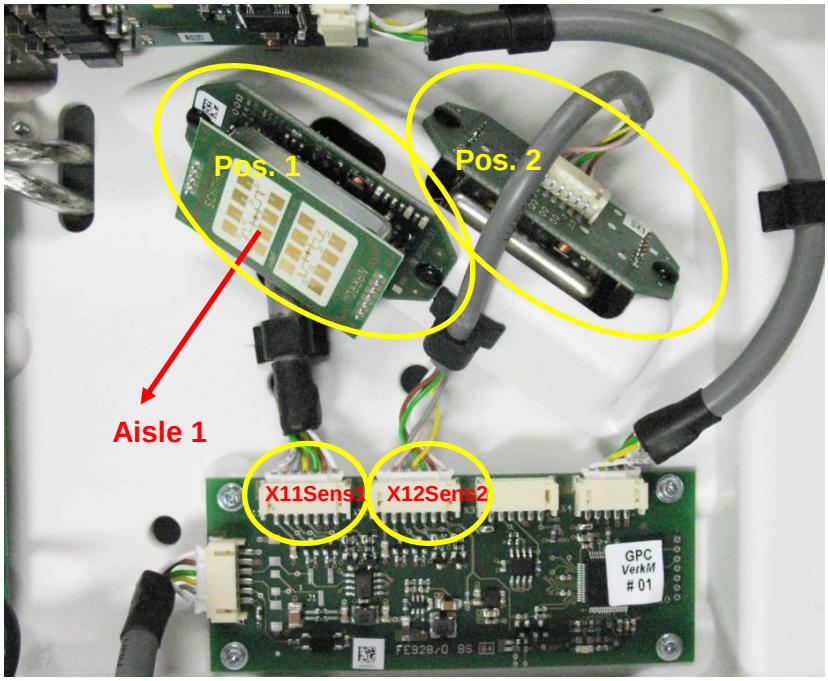
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 1
Module 2 = Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



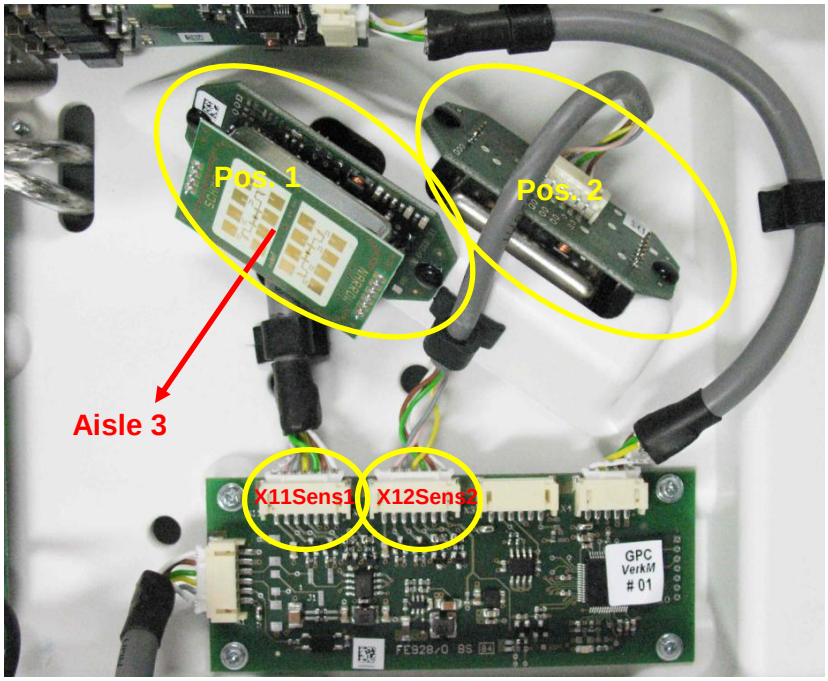
GPC2 in ANT4

Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 1
Module 2 GPC2= Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3
Module 2 GPC2 = Aisle 4

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2
Module 2 = Sens2 X12 GPC2



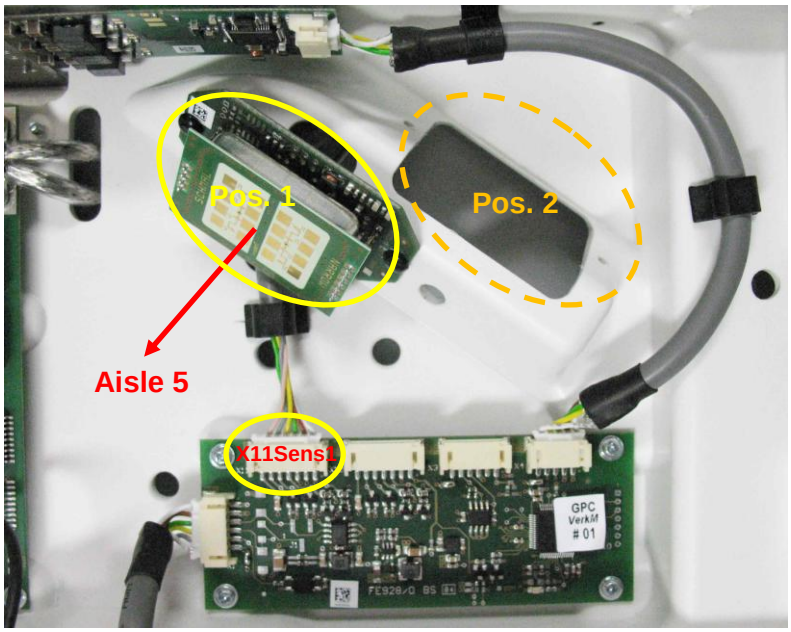
GPC3 in ANT6

Install the radar module at the right position in the antenna foot.
Module 1 GPC3 = Position 1

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC3 = Aisle 5

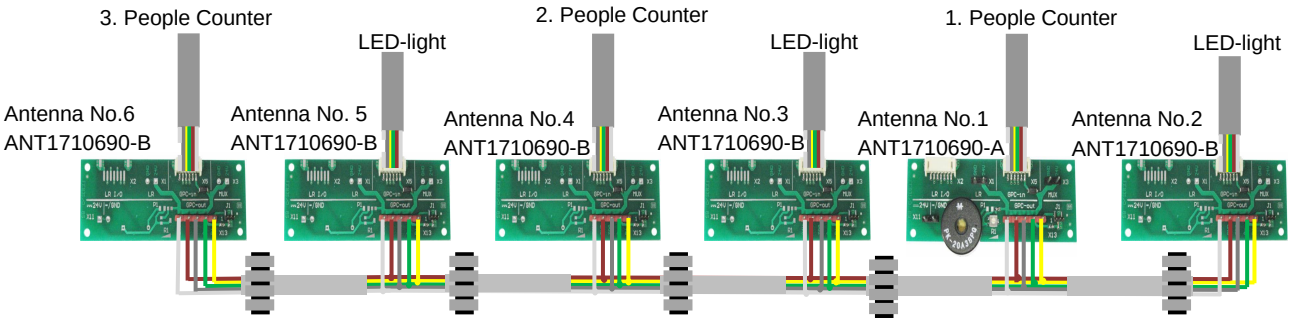
Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC3



7.8. Antenna connections

See Chapter 7.3

7.9. Connecting the antennas



The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4+6 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

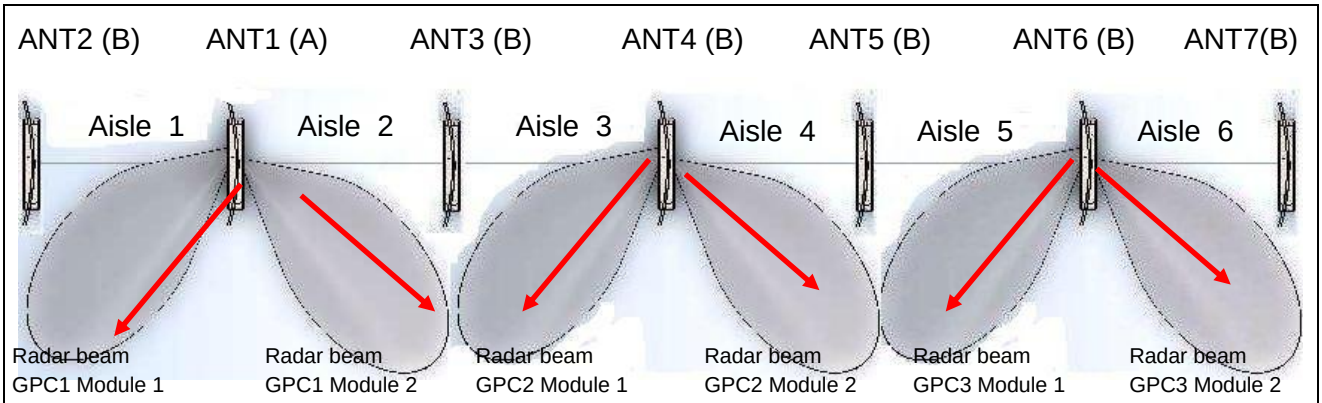
The sides with the ferrite core must be placed in the antenna Type B.

7.10. Configuration of the Direction Mode

See chapter 7.5

8. Sixfold gate (7 antennas)

8.1. Position overview setup possibility No.1



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)
ANT5: Type B
ANT6: Type B with Gate People Counter (GPC3 = Bus Address 3)
ANT7: Type B

8.2. Installation and connection of the radar module setup possibility No.1

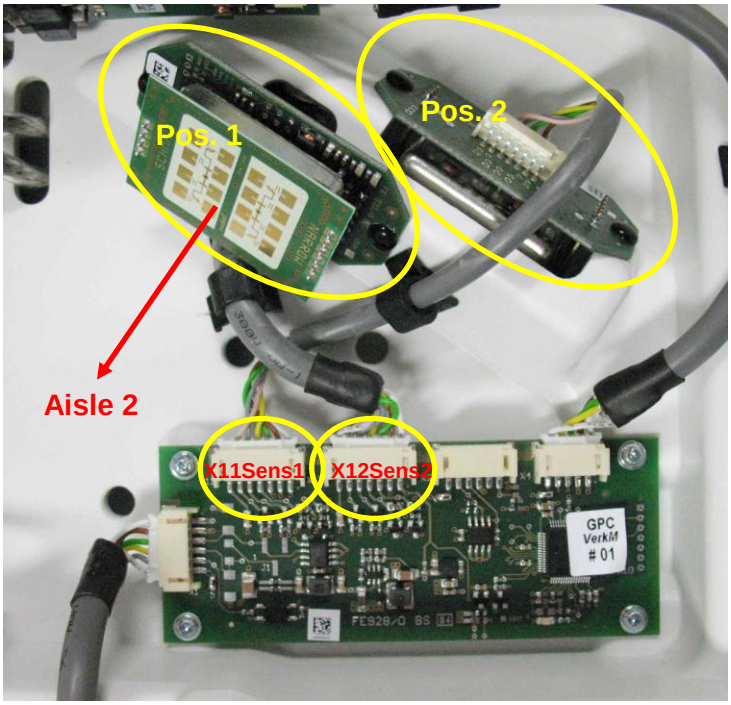
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 2
Module 2 = Position 1

Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



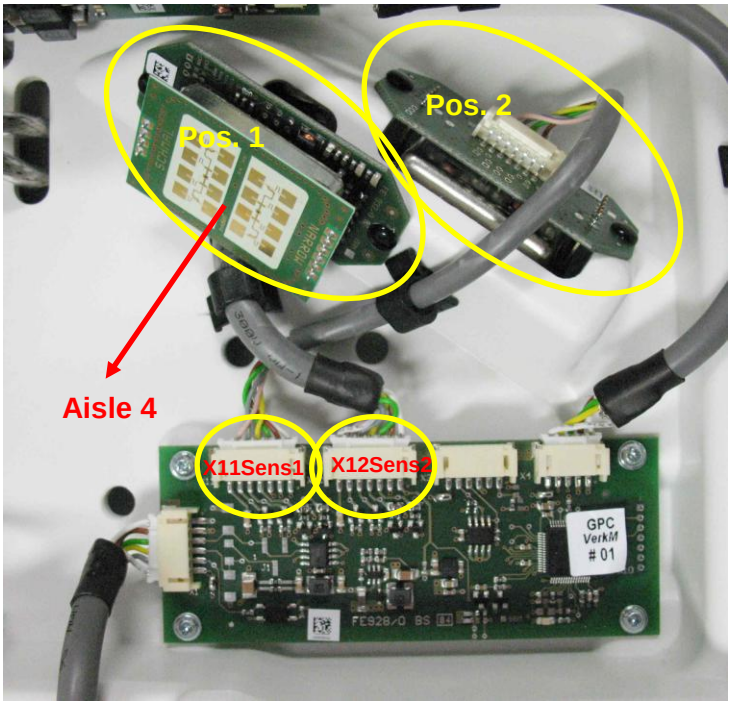
GPC2 in ANT4

Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 2
Module 2 GPC2= Position 1

Difference to possibility No.2

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3
Module 2 GPC2 = Aisle 4

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2
Module 2 = Sens2 X12 GPC2



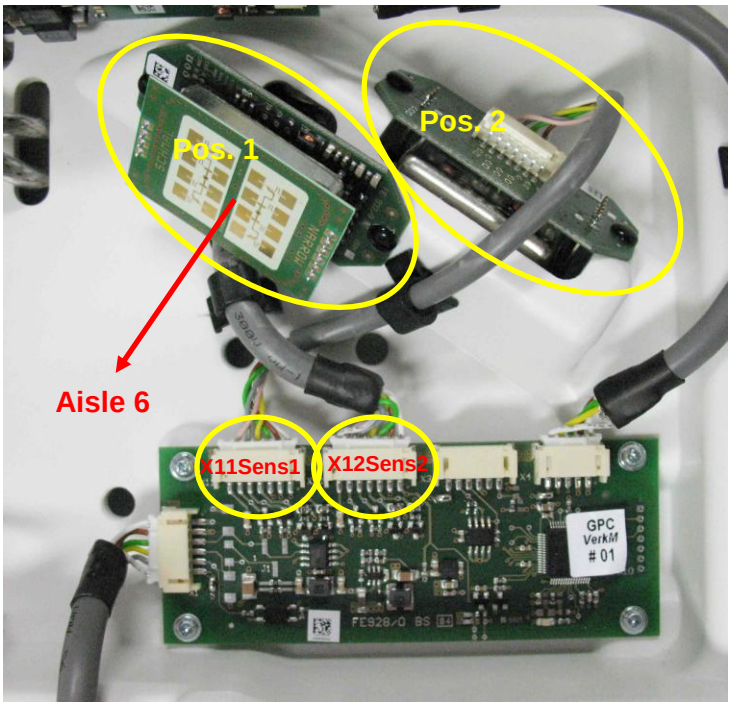
GPC3 in ANT6

Install the radar module at the right position in the antenna foot.
Module 1 GPC3 = Position 2
Module 2 GPC3 = Position 1

Difference to possibility No.2

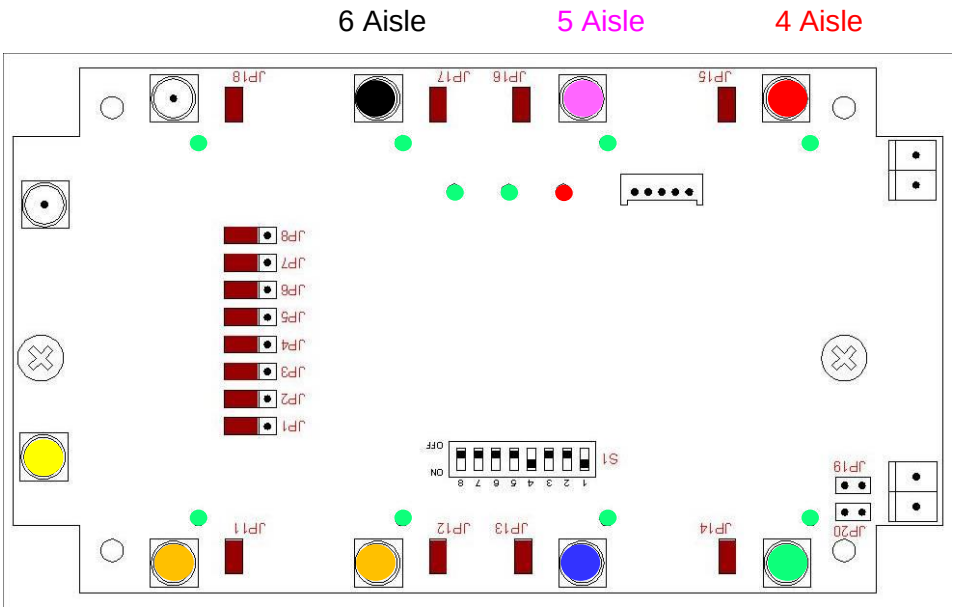
The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC3 = Aisle 5
Module 2 GPC3 = Aisle 6

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC3
Module 2 = Sens2 X12 GPC3



8.3. Antenna connections

Change 4-times Multiplexer against 8-times Multiplexer



Antenna 1: Type A is connected by default with Output 1 of the Multiplexer. (Orange)

Antenna 2: Type B has to be connected to Output 2 of the Multiplexer. (Orange)

Antenna 3: Type B has to be connected to Output 3 of the Multiplexer. (Blue)

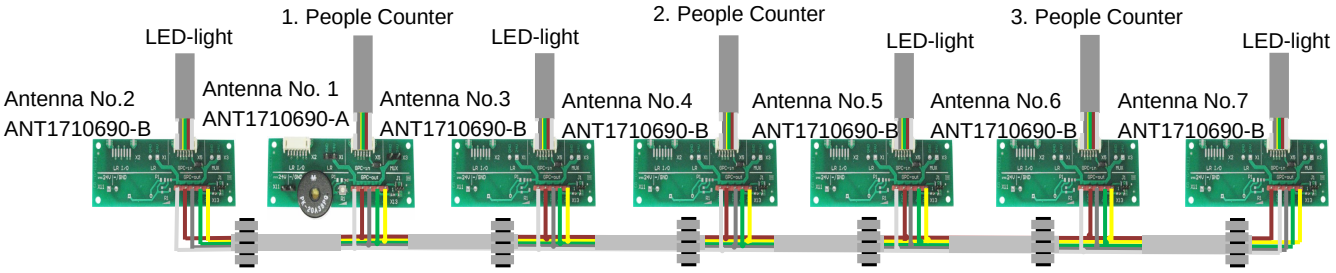
Antenna 4: Type B has to be connected to Output 4 of the Multiplexer. (Green)

Antenna 5: Type B has to be connected to Output 5 of the Multiplexer. (Red)

Antenna 6: Type B has to be connected to Output 6 of the Multiplexer. (Pink)

Antenna 7: Type B has to be connected to Output 7 of the Multiplexer. (Black)

8.4. Connecting the antennas

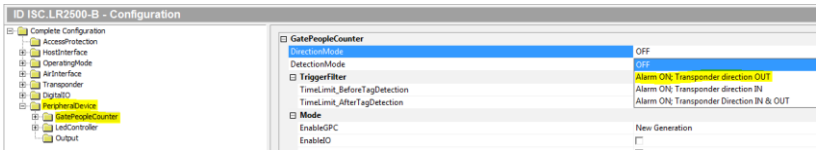
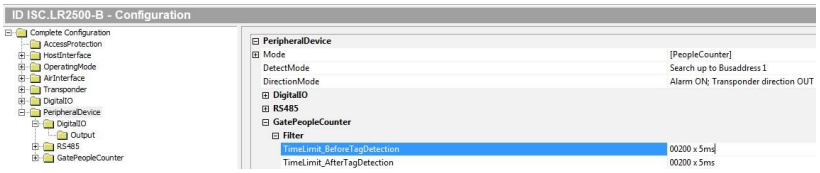
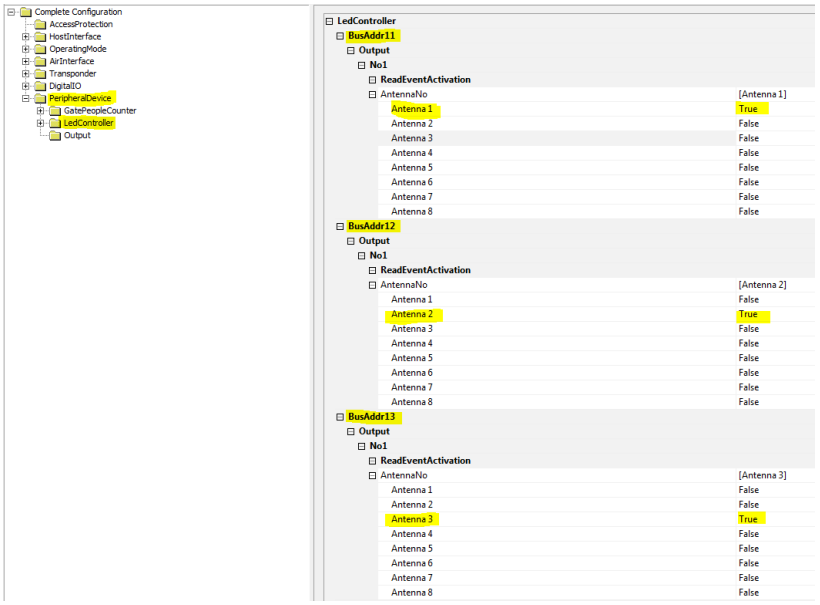


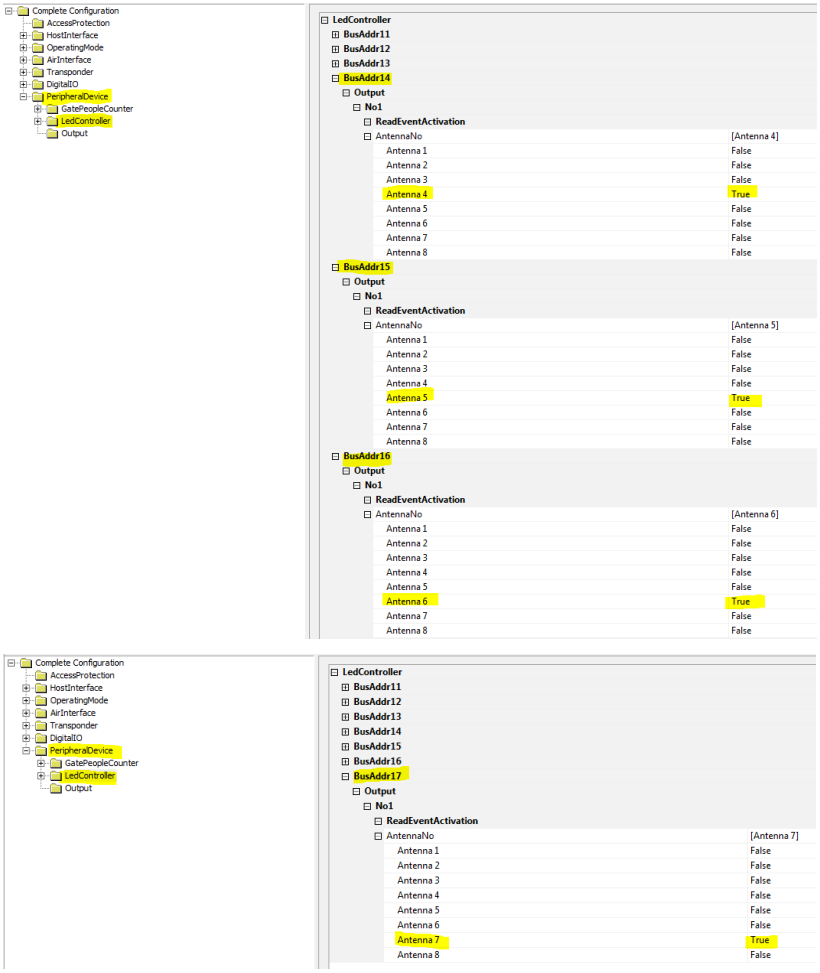
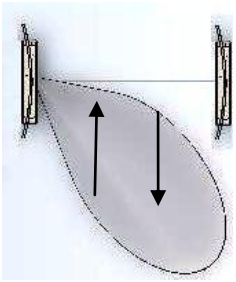
The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4+6 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

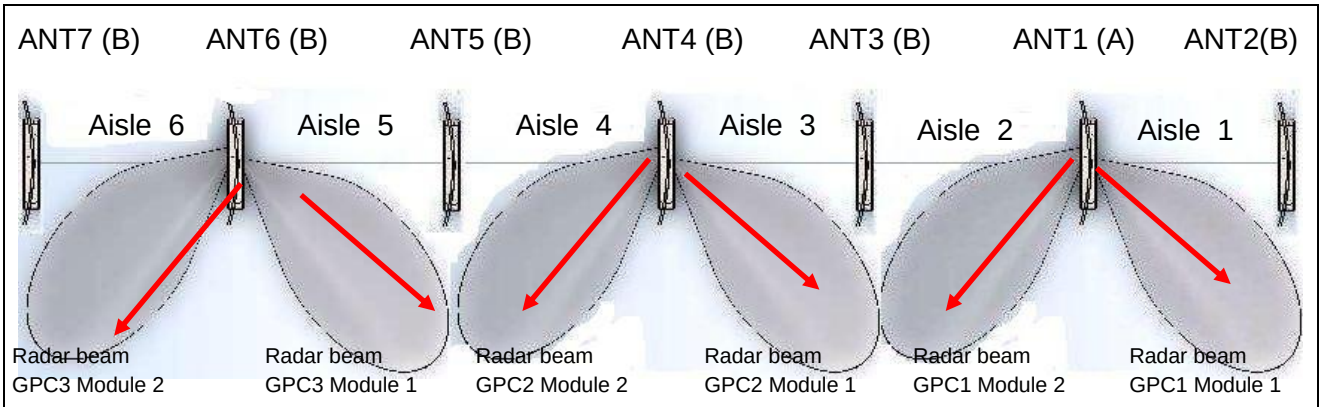
The sides with the ferrite core must be placed in the antenna Type B.

8.5. Configuration of the Direction Mode

Step	Action	Note
1	Select „Configuration“	
2	**Select Peripheral Device - Gate People Counter** Set Direction Mode to the needed alarm direction	
3	**Select Peripheral Device - Filter** Set “Time limit before and after Tag Detection” Here: 200x5ms=1000ms Do not set time to short or to long !	
4	**Select Peripheral Device -LED Controller** Set: LED Controller Bus Adr.11 / OUT1 for Antenna 1 to “True” LED Controller Bus Adr.12 / OUT2 for Antenna 2 to “True” LED Controller Bus Adr.13 / OUT3 for Antenna 3 to “True” See also next page.	

	LED Controller Bus Adr.14 / OUT4 for Antenna 4 to “True” LED Controller Bus Adr.15 / OUT5 for Antenna 5 to “True” LED Controller Bus Adr.16 / OUT6 for Antenna 6 to “True” LED Controller Bus Adr.17 / OUT7 for Antenna 7 to “True”	
5	Confirm with „Apply“	
6	Walk through the gates with a valid transponder to check the set direction and alarm LED.	

8.6. Position overview setup possibility No.2



Beams should face direction inside of the library. Not to the exit door.
Observe project notes of the corresponding installation manual !

ANT1: Type A with Reader, Multiplexer and Gate People Counter (GPC1 = Bus Address 1)
ANT2: Type B
ANT3: Type B
ANT4: Type B with Gate People Counter (GPC2 = Bus Address 2)
ANT5: Type B
ANT6: Type B with Gate People Counter (GPC3 = Bus Address 3)
ANT7: Type B

8.7. Installation and connection of the radar module setup possibility No.2

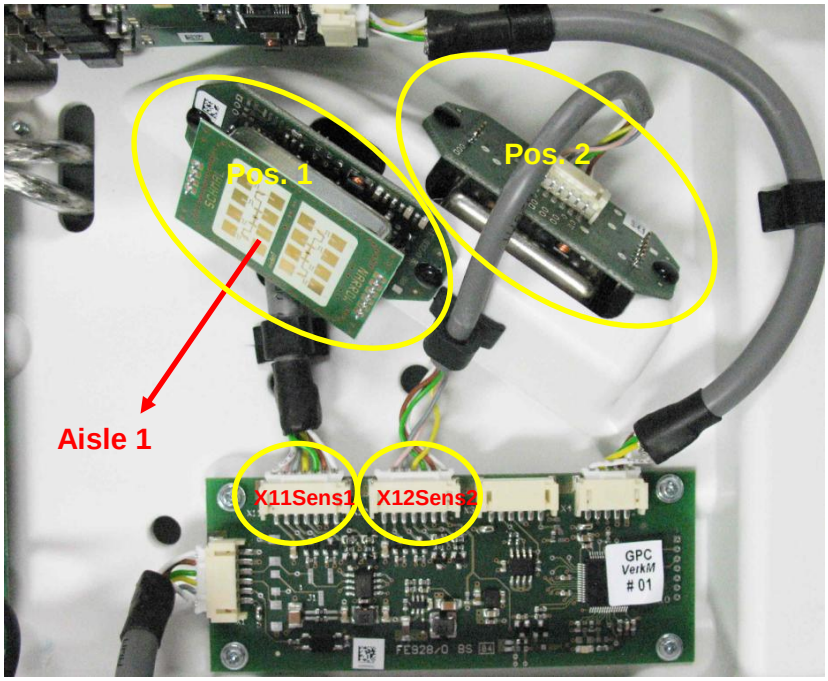
GPC1 in ANT1

Install the radar module at the right position in the antenna foot.
Module 1 = Position 1
Module 2 = Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC1 = Aisle 1
Module 2 GPC1 = Aisle 2

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC1
Module 2 = Sens2 X12 GPC1



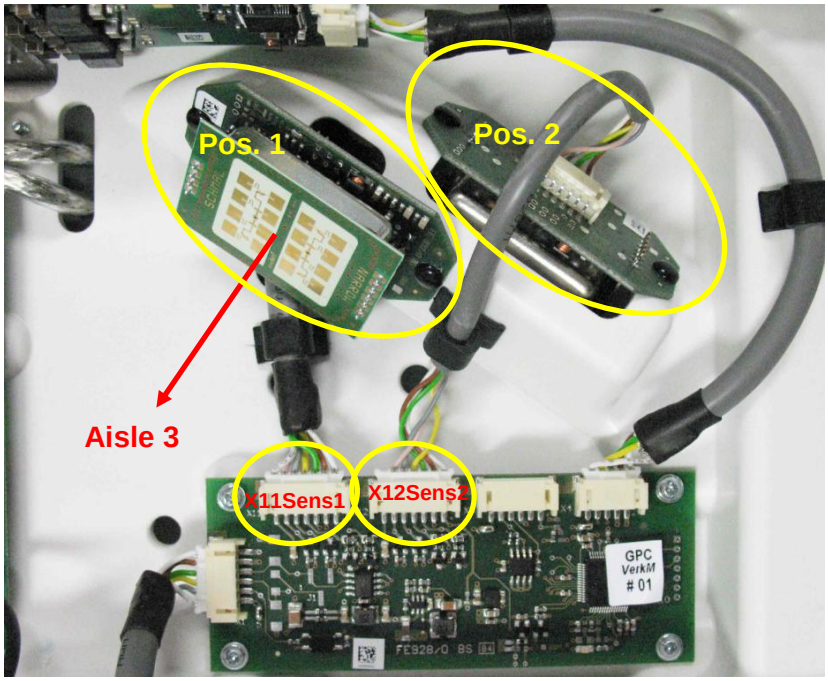
GPC2 in ANT4

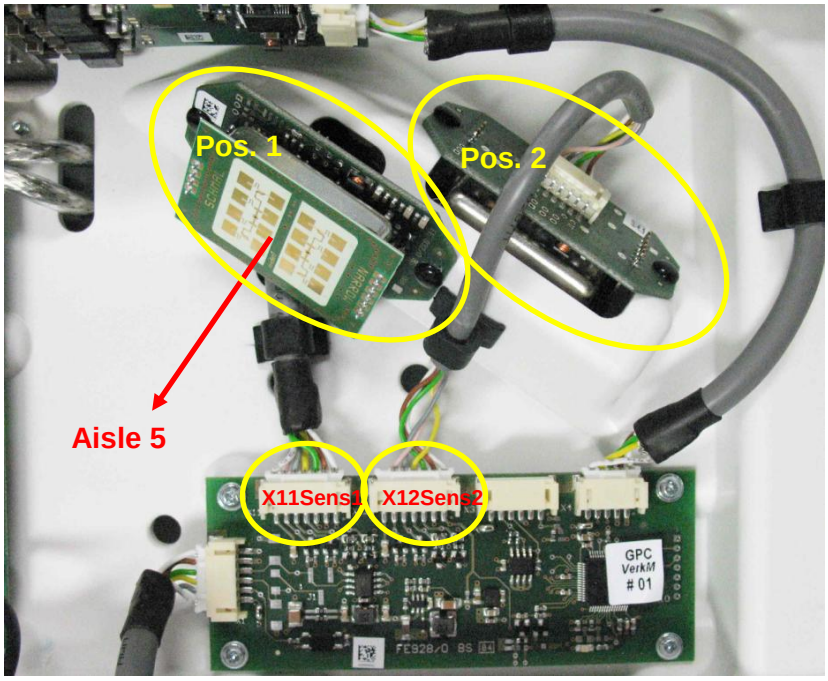
Install the radar module at the right position in the antenna foot.
Module 1 GPC2 = Position 1
Module 2 GPC2= Position 2

Difference to possibility No.1

The antenna surface of the radar module must always face between the two antennas of the gate.
Module 1 GPC2 = Aisle 3
Module 2 GPC2 = Aisle 4

Connect the radar module to the right Input at the GPC:
Module 1 = Sens1 X11 GPC2
Module 2 = Sens2 X12 GPC2

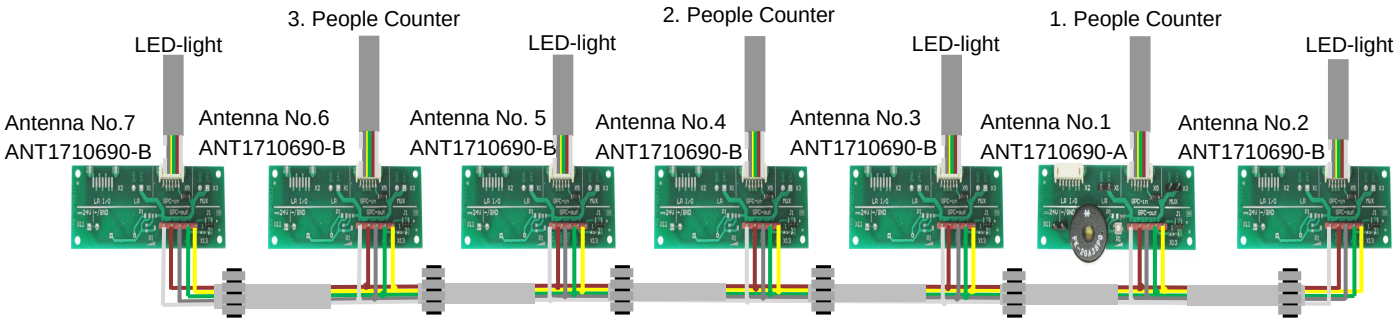


GPC3 in ANT6 Install the radar module at the right position in the antenna foot. **Module 1 GPC3 = Position 1** **Module 2 GPC3 = Position 2** **Difference to possibility No.1** The antenna surface of the radar module must always face between the two antennas of the gate. **Module 1 GPC3 = Aisle 5** **Module 2 GPC3 = Aisle 6** Connect the radar module to the right Input at the GPC: **Module 1 = Sens1 X11 GPC3** **Module 2 = Sens2 X12 GPC3**	

8.8. Antenna connections

See Chapter 8.4

8.9. Connection between the antennas



The LED`s of the antenna are connected by default with X5 terminal board. In antenna 1+4+6 via the GPC.

Basically all X13 GPC-out of the terminal board in the antennas must be connected with X13 GPC-out of the terminal board in the next antenna parallel 1:1.

The sides with the ferrite core must be placed in the antenna Type B.

8.10. Configuration of the Direction Mode

See chapter 8.5