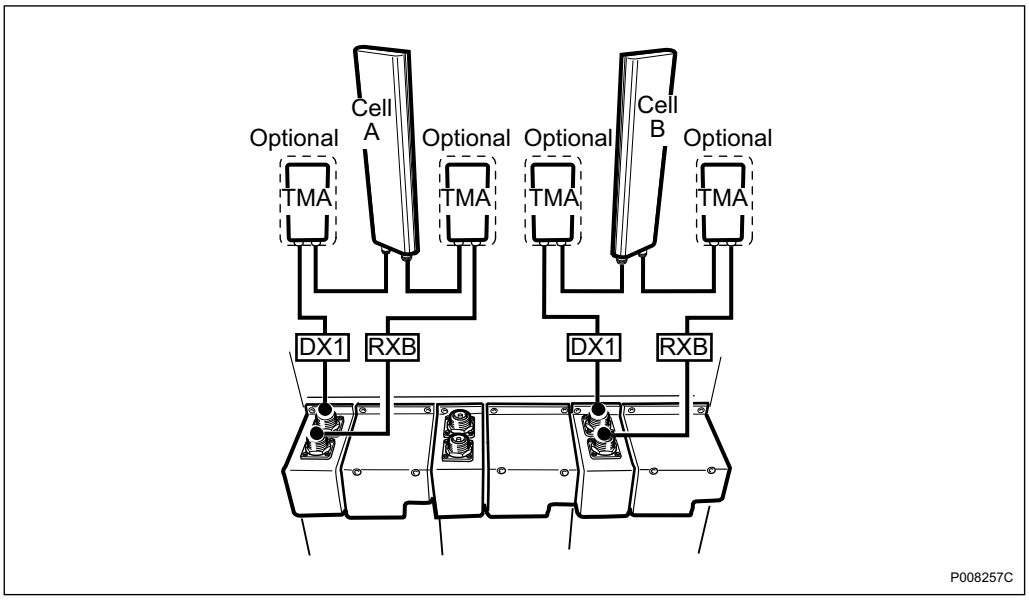
RBS 2206
Antenna Configurations
Description

This document describes the alternative antenna configurations for the RBS 2206.



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Contents

1 Introduction

The various configurations available for the RBS 2206 are described according to the following example:

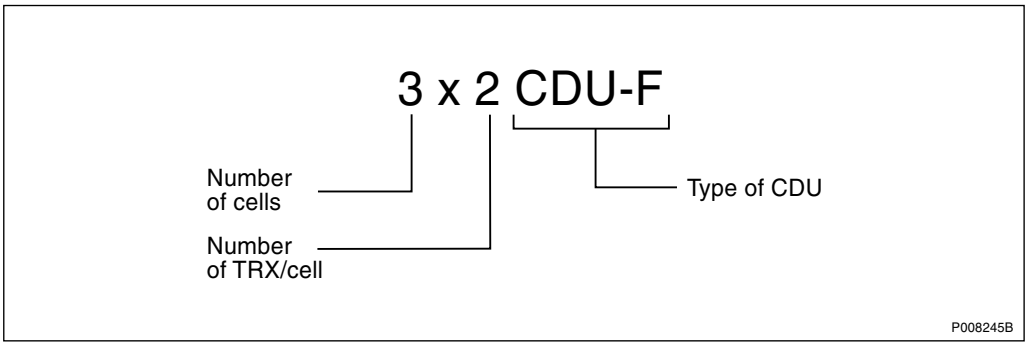


Figure 1 CDU Configuration Key

In the example above, the cabinet is configured for three cells, each using two Transceivers (TRX). The total number of TRXs is thus six in this case. The Combining and Distribution Unit (CDU) is of the type CDU-F.

Note: If a Tower Mounted Amplifier (TMA) is used, then the bias injectors must be installed.

2 Antenna Connection Field

This section describes the antenna connection fields in the RBS 2206.

Antenna jumpers are connected at the connection field shown in the figure below. The example shown, in this case, is for CDU-G.

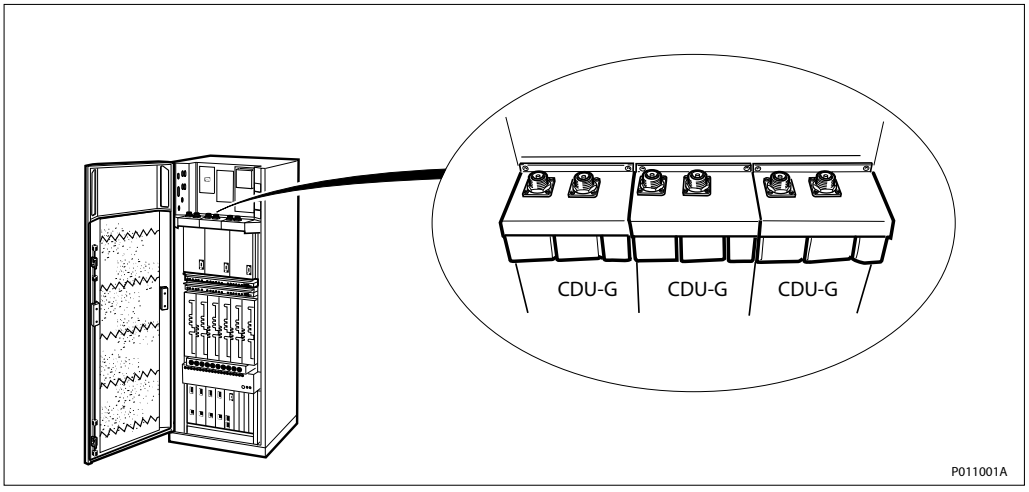


Figure 2 Antenna Connection Field (CDU-G)

The RF cables between each CDU and its associated TRansceiver Units (TRU) are standardised and do not normally change.

Certain configurations require the use of an Antenna Sharing Unit (ASU). In these cases, the signal is shared between RBSs through the antenna sharing connection fields

The figure below provides an overview of the antenna sharing connectors and the cabling from the ASU.

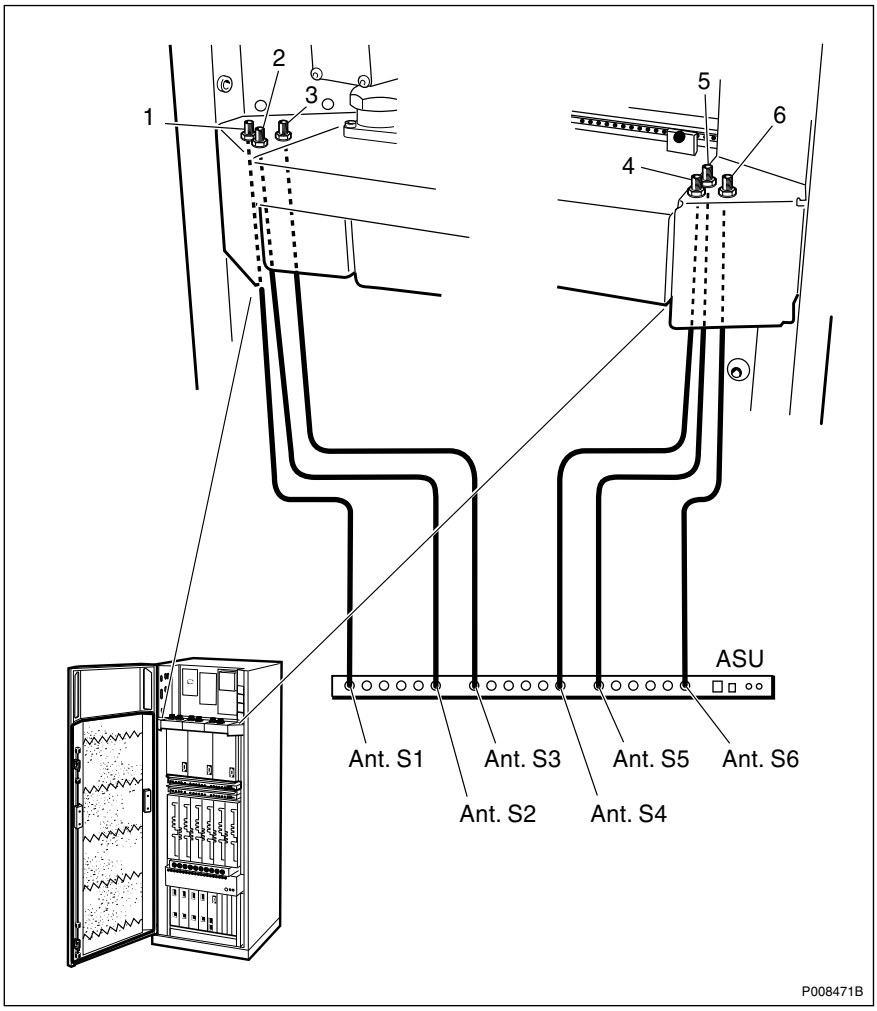


Figure 3 Cabling between ASU and Antenna Sharing Connectors

3 CDU-F Antenna Connections

The antenna connectors are located on the top of the CDU, *see the figures below.*

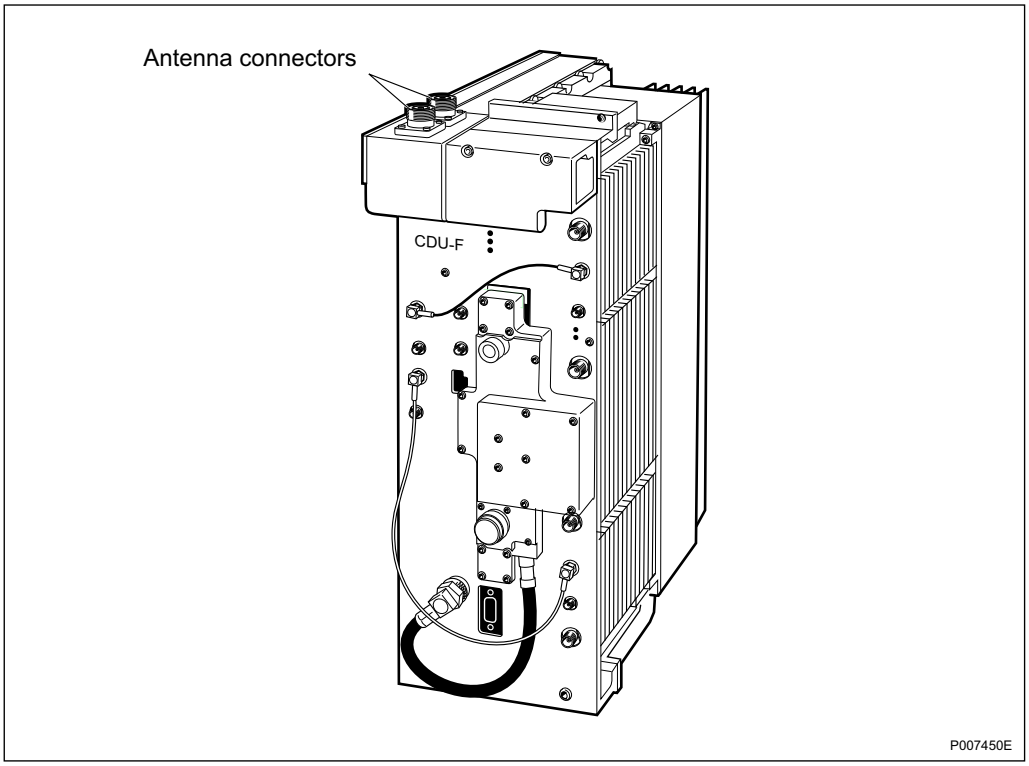


Figure 4 CDU-F Layout

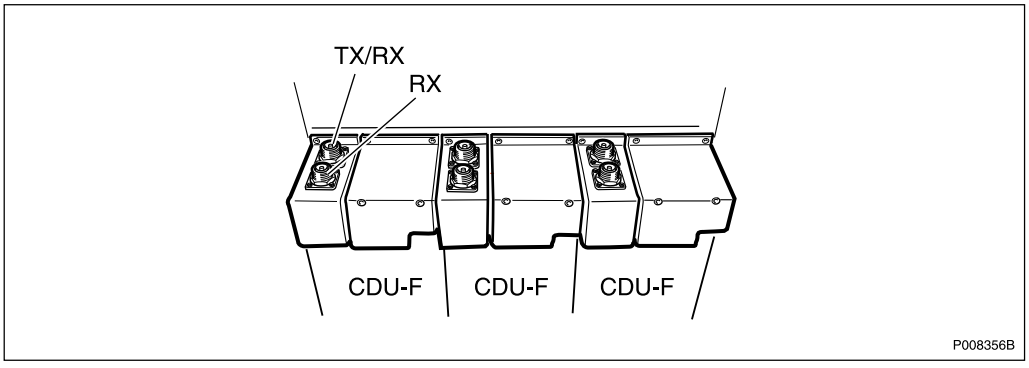


Figure 5 CDU-F Antenna Feeder Connectors

4 CDU-F Configurations

Note: In the figures and tables that follow, only cabinets that are fully-equipped are shown. Configurations consisting of part of the fully-equipped cabinet can also be extracted from the following figures and tables.

See Figure 3 on page 4 and *Figure 5 on page 5* for an illustration of each of the column headers in the tables below.

4.1 3x4 CDU-F Configuration

The figure below shows the 3x4 CDU-F configuration.

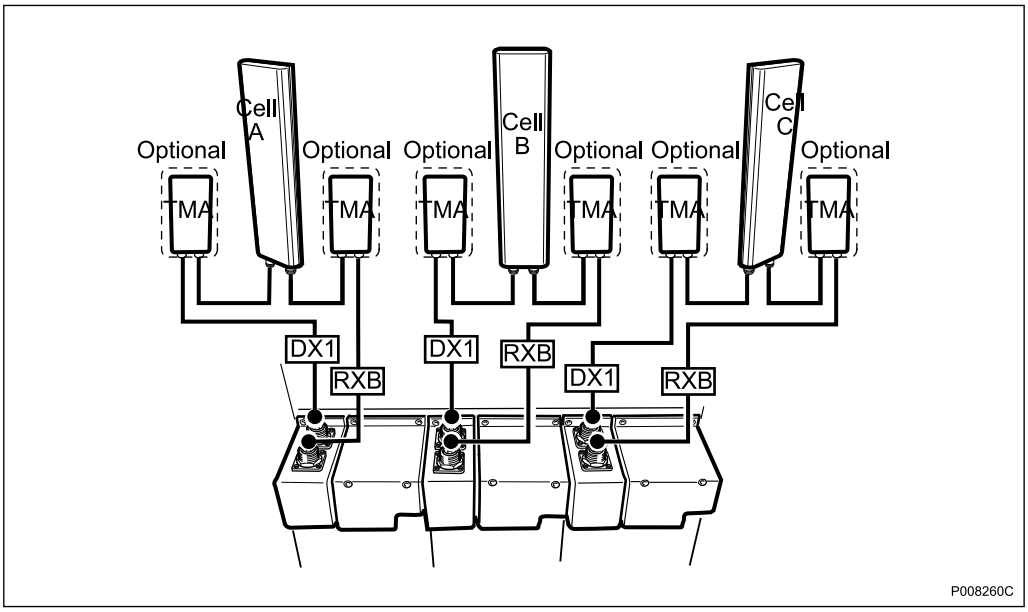


Figure 6 3x4 CDU-F Configuration

Table 1 3x4 CDU-F Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX	TX/RX A	1
		CellA: RXB	RX	RX B	2
B	2	CellB: DX1	TX/RX	TX/RX A	3
		CellB: RXB	RX	RX B	4
C	3	CellC: DX1	TX/RX	TX/RX A	5
		CellC: RXB	RX	RX B	6

4.2 1x8 CDU-F Configuration

The figure below shows the 1x8 CDU-F configuration.

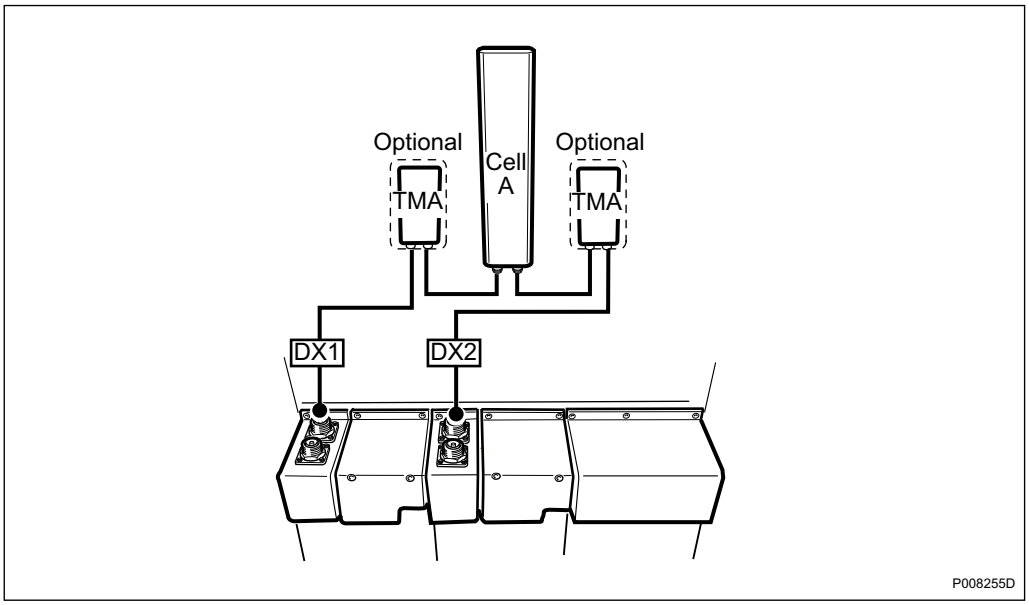


Figure 7 1x8 CDU-F Configuration

Table 2 1x8 CDU-F Configuration

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	CDU Connector	Signal	
A	1	CellA: DX1	TX/RX	TX/RX A	1
	2	CellA: DX2	TX/RX	TX/RX B	3

4.3 1x12 CDU-F Configuration

The figure below shows the 1x12 CDU-F configuration.

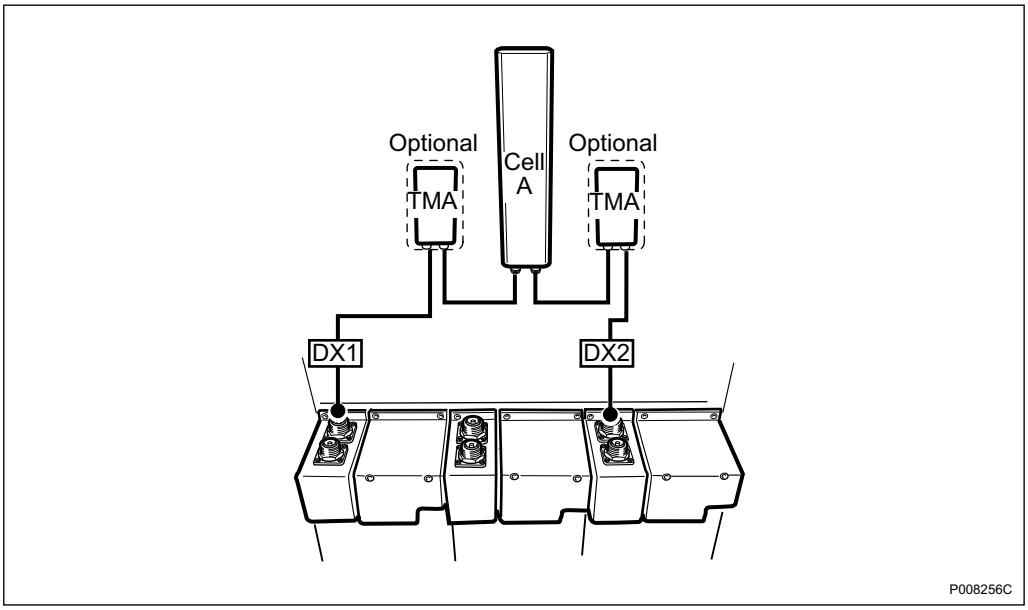


Figure 8 1x12 CDU-F Configuration

Table 3 1x12 CDU-F Configuration

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	CDU Connector	Signal	
A	1	CellA: DX1	TX/RX	TX/RX A	1
	3	CellA: DX2	TX/RX	TX/RX B	5

4.4 2x6 CDU-F Configuration

The figure below shows the 2x6 CDU-F configuration.

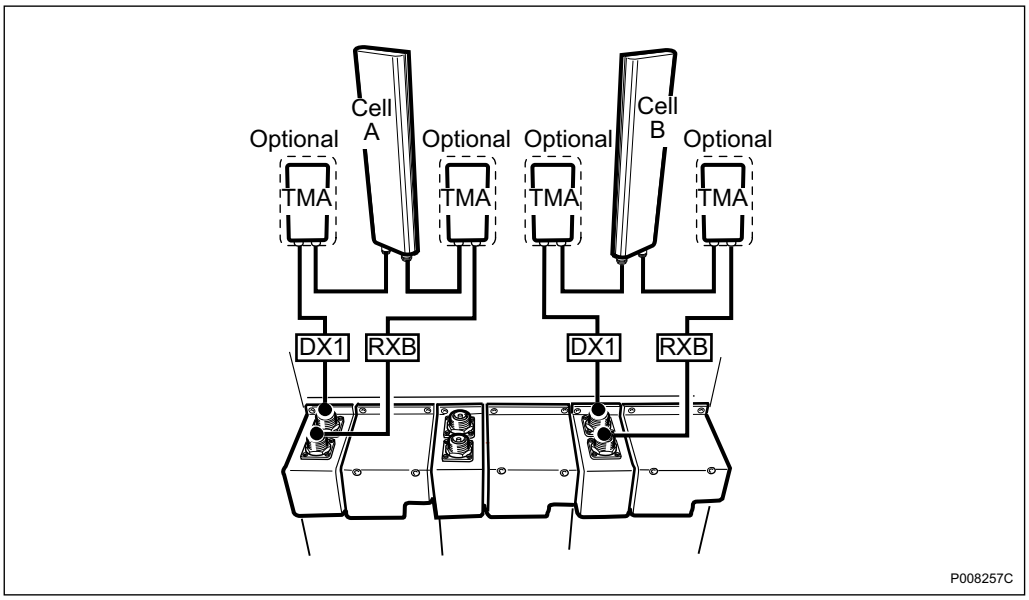


Figure 9 2x6 CDU-F Configuration

Table 4 2x6 CDU-F Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX	TX/RX A	1
		CellA: RXB	RX	RX B	2
B	3	CellB: DX1	TX/RX	TX/RX A	5
		CellB: RXB	RX	RX B	6

4.5 1x4 + 1x8 CDU-F Configuration

The figure below shows the 1x4 + 1x8 CDU-F configuration.

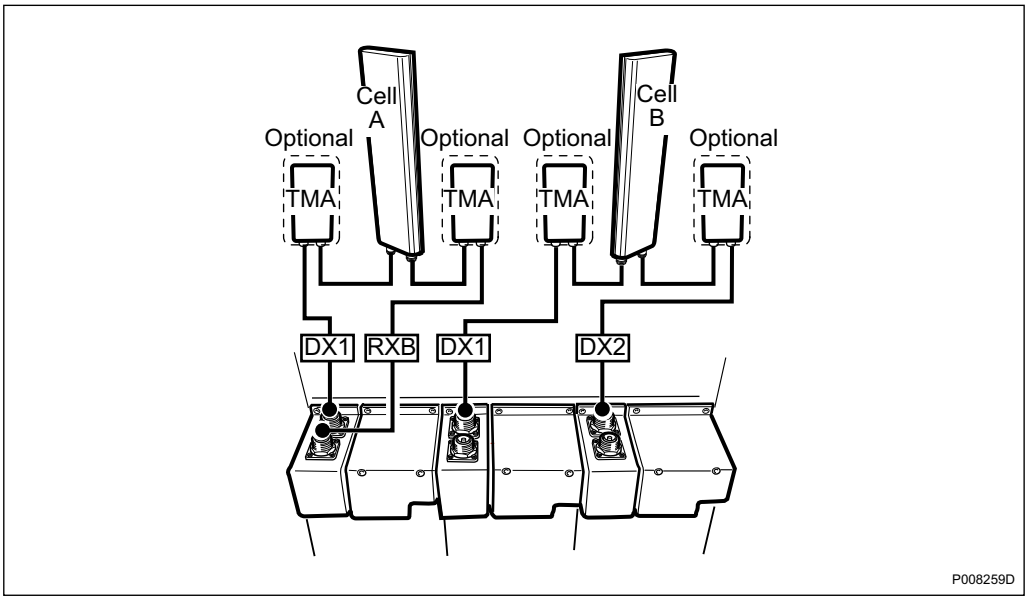


Figure 10 1x4 + 1x8 CDU-F Configuration

Table 5 1x4+1x8 CDU-F Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX	TX/RX A	1
		CellA: RXB	RX	RX B	2
B	2	CellB: DX1	TX/RX	TX/RX B	3
	3	CellB: DX2	TX/RX	TX/RX B	5

4.6 1x8 + 1x4 CDU-F Configuration

The figure below shows the 1x8 + 1x4 CDU-F configuration.

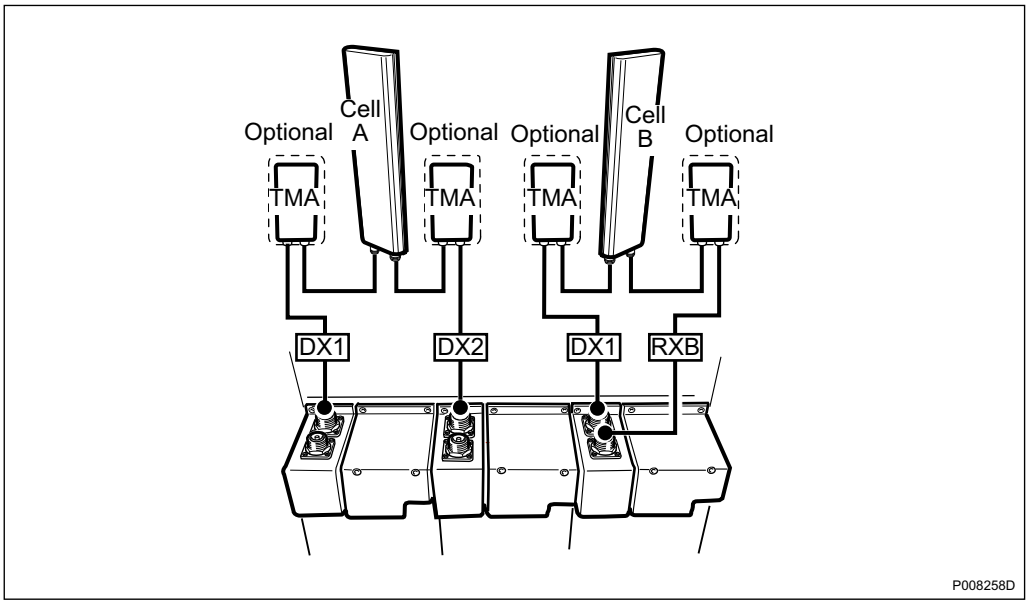


Figure 11 1x8 + 1x4 Configuration

Table 6 1x8 + 1x4 CDU-F Configuration

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	CDU Connector	Signal	
A	1	CellA: DX1	TX/RX	TX/RX A	1
	2	CellA: DX2	TX/RX	TX/RX B	3
B	3	CellB: DX1	TX/RX	TX/RX A	5
		CellB: RXB	RX	RX B	6

4.7 3x8 CDU-F Configuration

The figure below shows the 3x8 CDU-F configuration.

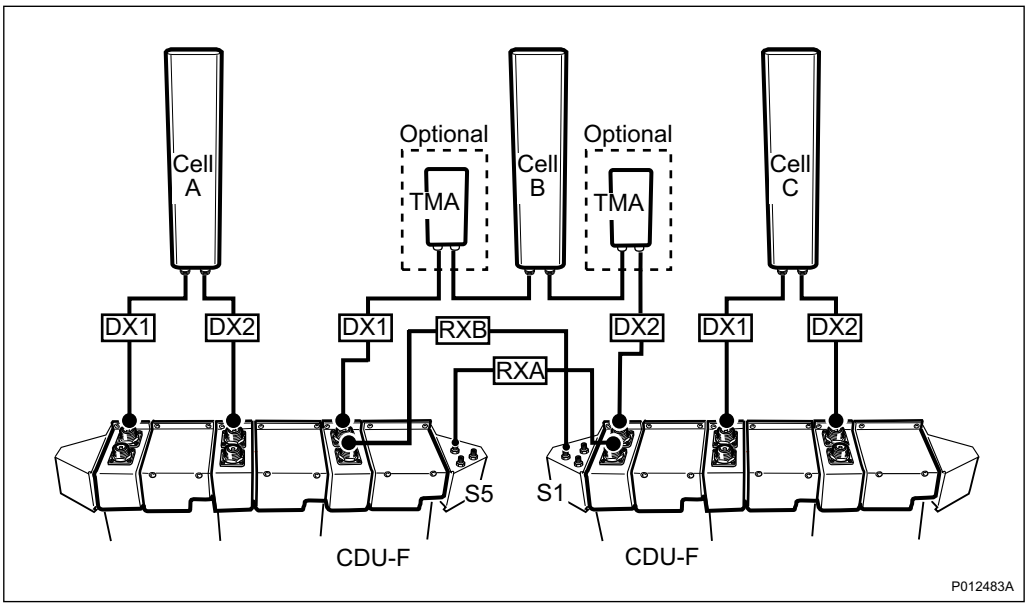


Figure 12 3x8 CDU-F Configuration

Table 7 3x8 CDU-F Configuration, Mid-sector

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	Connector CDU	Signal	
A Cab. 1	1	CellA: DX1	TX/RX	TX/RX A	1
	2	CellA: DX2	TX/RX	TX/RX B	3
B	3 Cab. 1	CellB: DX1	TX/RX	TX/RX A	5
		CellB: RXB	RX	RX B	–
	1 Cab. 2	CellB: DX2	TX/RX	TX/RX B	1
		CellB: RXA	RX	RX A	–
C Cab. 2	2	CellC: DX1	TX/RX	TX/RX A	3
	3	CellC: DX2	TX/RX	TX/RX B	5

5 CDU-G Antenna Connections

The antenna connectors are located on the top of the CDU, *see the figures below.*

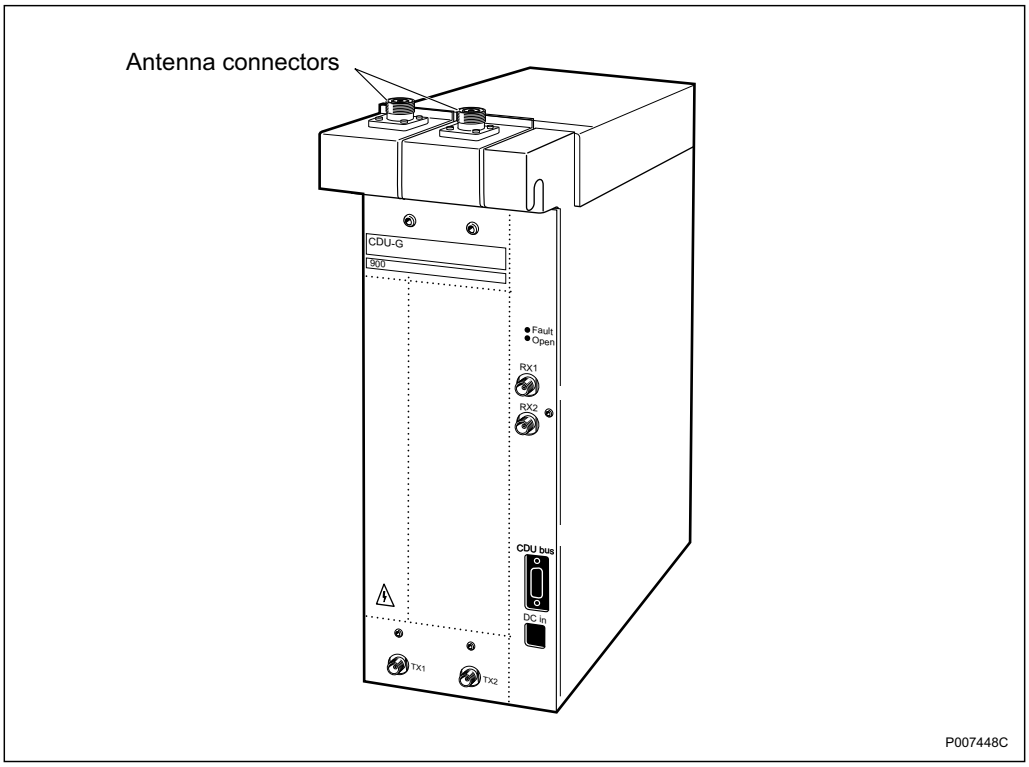


Figure 13 CDU-G Layout

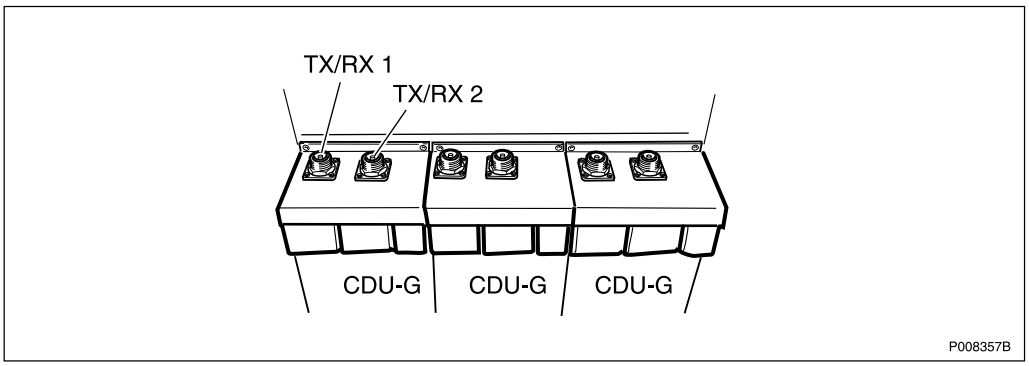


Figure 14 CDU-G Antenna Feeder Connectors

6 CDU-G Configurations

Note: In the figures and tables that follow, only cabinets that are fully-equipped are shown. Configurations consisting of part of the fully-equipped cabinet can also be extracted from the following figures and tables.

See Figure 3 on page 4 and *Figure 14 on page 13* for an illustration of each of the column headers in the tables below.

6.1 3x2 CDU-G and 3x4 CDU-G Configuration

The figure below shows the 3x2 CDU-G and 3x4 CDU-G configuration.

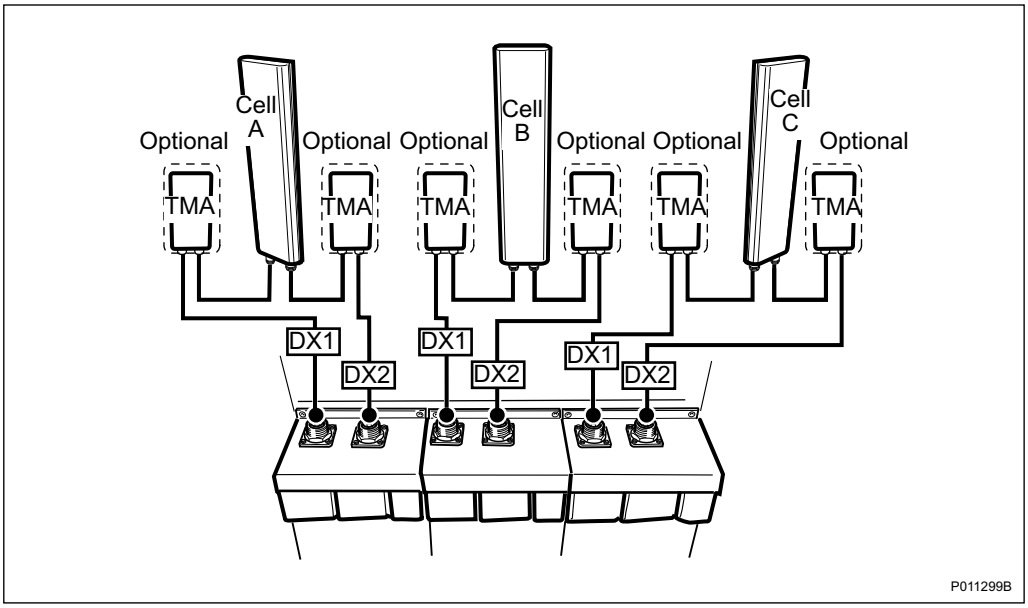


Figure 15 3x2 CDU-G and 3x4 CDU-G Configuration

Table 8 3x2 CDU-G and 3x4 CDU-G Configuration

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	CDU Connector	Signal	
A	1	CellA: DX1	TX/RX1	TX/RX A	1
		CellA: DX2	TX/RX2	TX/RX B	2
B	2	CellB: DX1	TX/RX1	TX/RX A	3
		CellB: DX2	TX/RX2	TX/RX B	4
C	3	CellC: DX1	TX/RX1	TX/RX A	5
		CellC: DX2	TX/RX2	TX/RX B	6

6.2 2x1 CDU-G Configuration

The figure below shows the 2x1 CDU-G configuration.

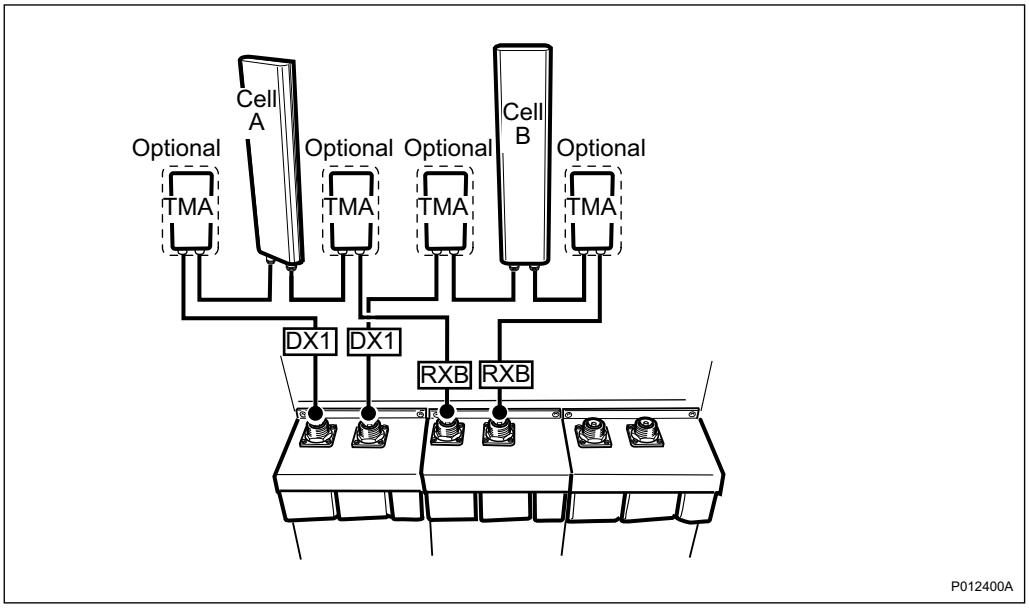


Figure 16 2x1 CDU-G Configuration

Table 9 2x1 CDU-G Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX1	TX/RX A	1
	2	CellA: RXB	TX/RX1	RX B	3
B	1	CellB: DX1	TX/RX2	TX/RX A	2
	2	CellB: RXB	TX/RX2	RX B	4

For the configuration for cell C, see *Section 6.1 3x2 CDU-G and 3x4 CDU-G Configuration on page 14*

6.3 2x3 CDU-G Configuration

The figure below shows the 2x3 CDU-G configuration.

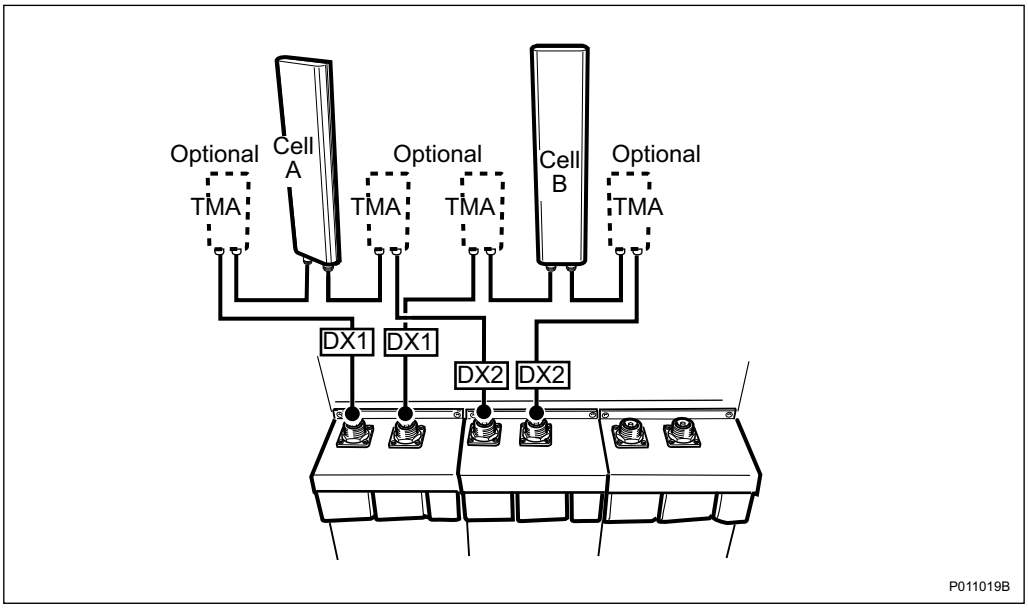


Figure 17 2x3 CDU-G Configuration

Table 10 2x3 CDU-G Configuration

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	Connector CDU	Signal	
A	1	CellA: DX1	TX/RX1	TX/RX A	1
	2	CellA: DX2	TX/RX1	TX/RX B	3
B	1	CellB: DX1	TX/RX2	TX/RX A	2
	2	CellB: DX2	TX/RX2	TX/RX B	4

6.4 1x4 CDU-G without HCU and 1x8 CDU-G with HCU Configuration

The figure below shows the 1x4 CDU-G without Hybrid Combiner Unit (HCU) and 1x8 CDU-G with HCU configuration.

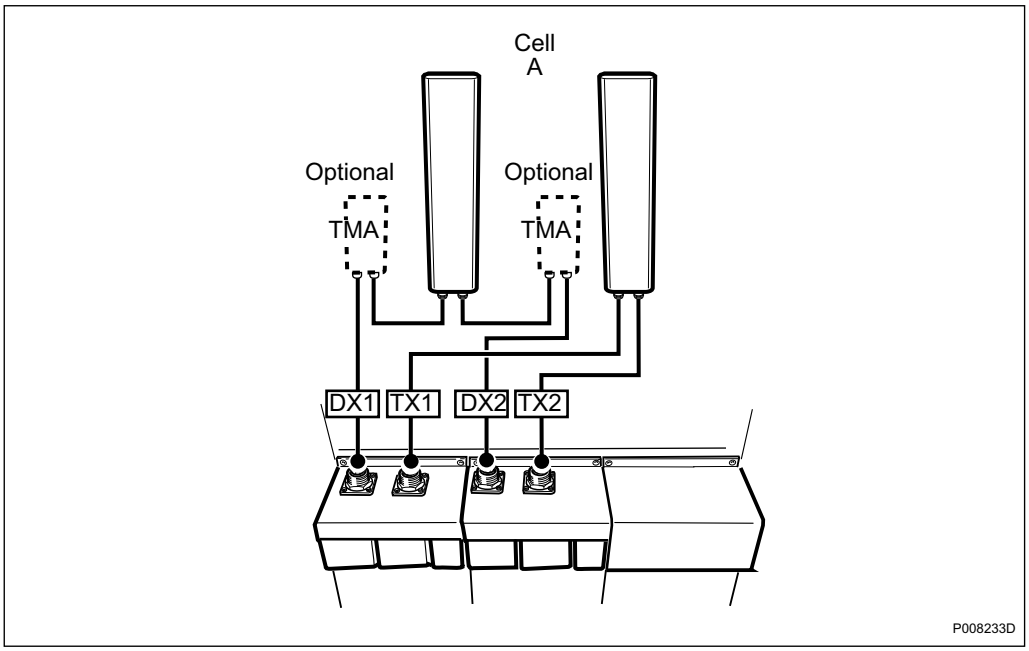


Figure 18 1x4 CDU-G without HCU and 1x8 CGU-G with HCU Configuration

Table 11 1x4 CDU-G without HCU and 1x8 CDU-G with HCU Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX1	TX/RX A	1
		CellA: TX1	TX/RX2	TX	–
	2	CellA: DX2	TX/RX1	TX/RX B	3
		CellA: TX2	TX/RX2	TX	–

6.5 1x6 CDU-G without HCU and 1x12 CDU-G with HCU Configuration

The figure below shows the 1x6 CGU-G without HCU and 1x12 CDU-G with HCU configuration.

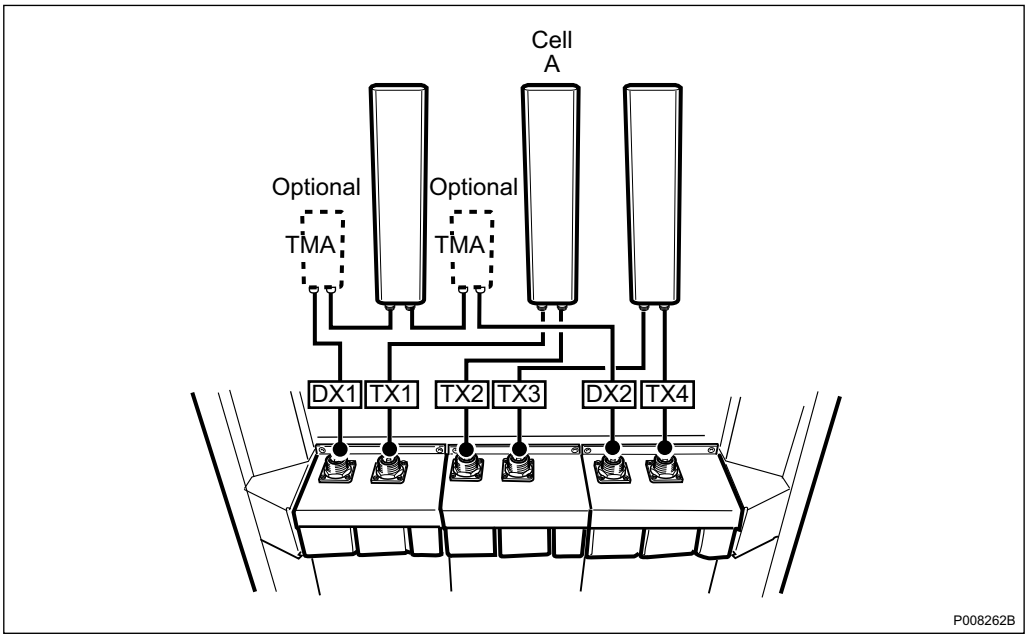


Figure 19 1x6 CDU-G without HCU and 1x12 with HCU Configuration

Table 12 1x6 CDU-G without HCU and 1x12 CDU-G with HCU Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX1	TX/RX A	1
		CellA: TX1	TX/RX2	TX	–
	2	CellA: TX2	TX/RX1	TX	–
		CellA: TX3	TX/RX2	TX	–
	3	CellA: DX2	TX/RX1	TX/RX B	5
		CellA: TX4	TX/RX2	TX	–

6.6 1x8 CDU-G with HCU Configuration

The figure below shows the 1x8 CDU-G with HCU configuration.

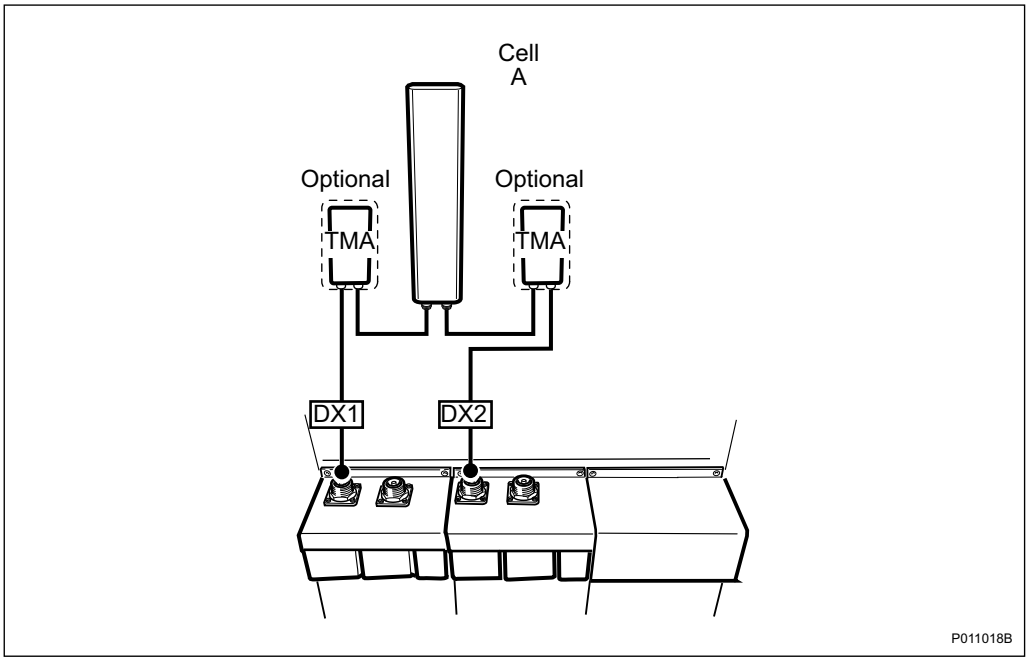


Figure 20 1x8 CDU-G with HCU Configuration

Table 13 1x8 CDU-G with HCU Configuration

Cell	CDU				ASU Connector
	CDU No.	Feeder Label	Connector		
			CDU	Signal	
A	1	CellA: DX1	TX/RX1	TX/RX A	1
	2	CellA: DX2	TX/RX1	TX/RX A	3

6.7 1x12 CDU-G with HCU Configuration

The figure below shows the 1x12 CDU-G with HCU configuration.

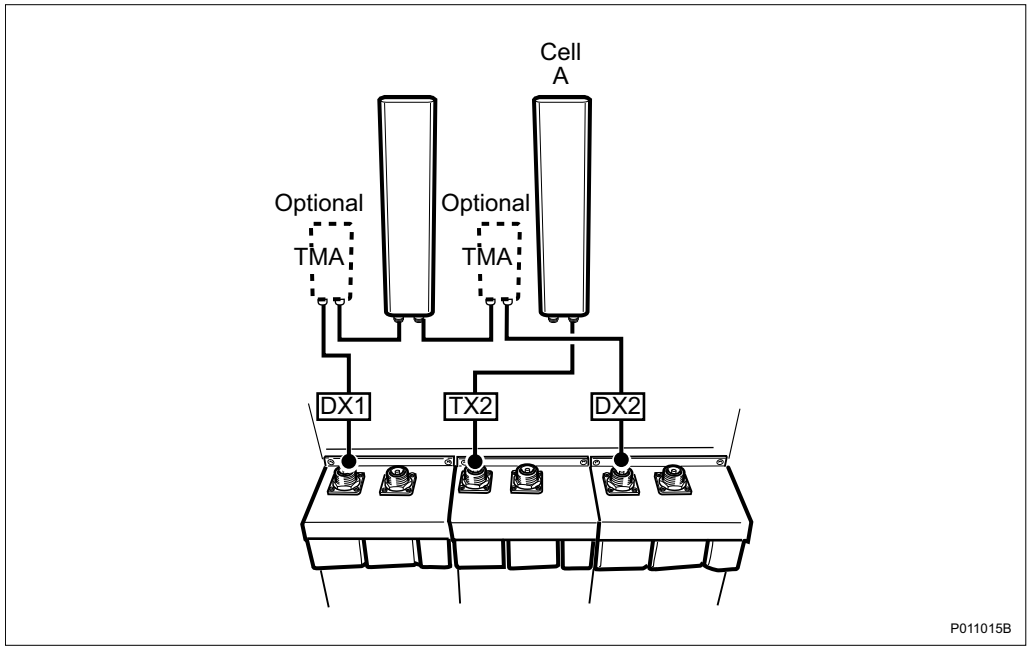


Figure 21 1x12 CDU-G with HCU Configuration

Table 14 1x12 CDU-G with HCU Configuration

	CDU				
Cell	CDU No.	Feeder Label	Connector CDU	Signal	ASU Connector
A	1	CellA: DX1	TX/RX 1	TX/RX A	1
	2	CellA: TX1	TX/RX 1	TX	–
	3	CellA: DX2	TX/RX 1	TX/RX B	5

6.8 2x6 CDU-G Configuration

The figure below shows the 2x6 CDU-G configuration.

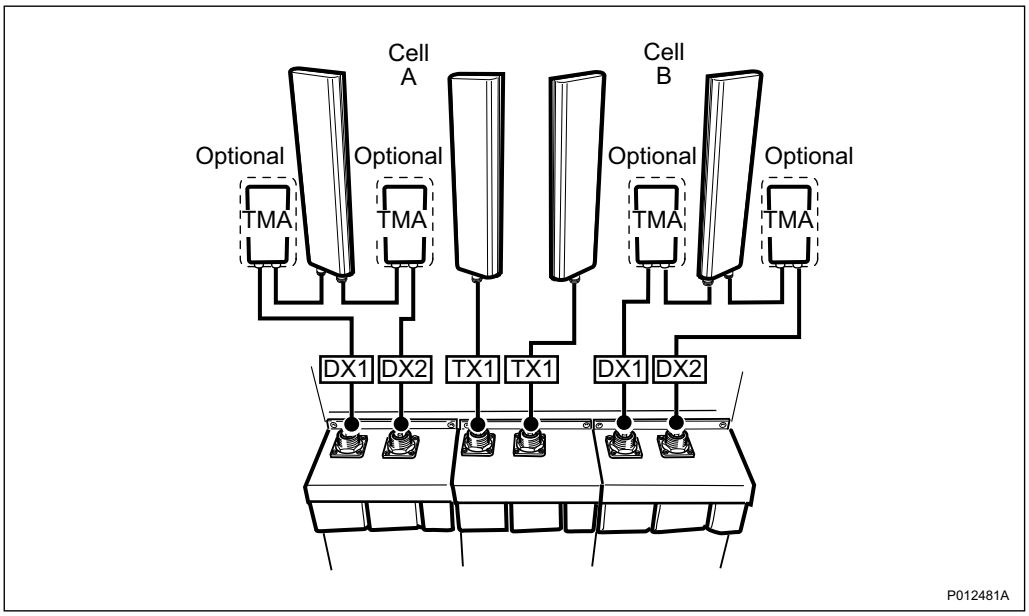


Figure 22 2x6 CDU-G Configuration

Table 15 2x6 CDU-G Configuration

	CDU				
Cell	**CDU No.**	**Feeder Label**	**CDU Connector**	**Signal**	**ASU Connector**
A	1	CellA: DX1	TX/RX1	TX/RX A	1
		CellA: DX2	TX/RX2	TX/RX B	2
	2	CellA: TX1	TX/RX1	TX	–
B		CellB: TX1	TX/RX2	TX	–
	3	CellB: DX1	TX/RX1	TX/RX A	5
		CellB: DX2	TX/RX2	TX/RX B	6

6.9 3x8 CDU-G with HCU Configuration

The figure below shows the 3x8 CDU-G with HCU configuration.

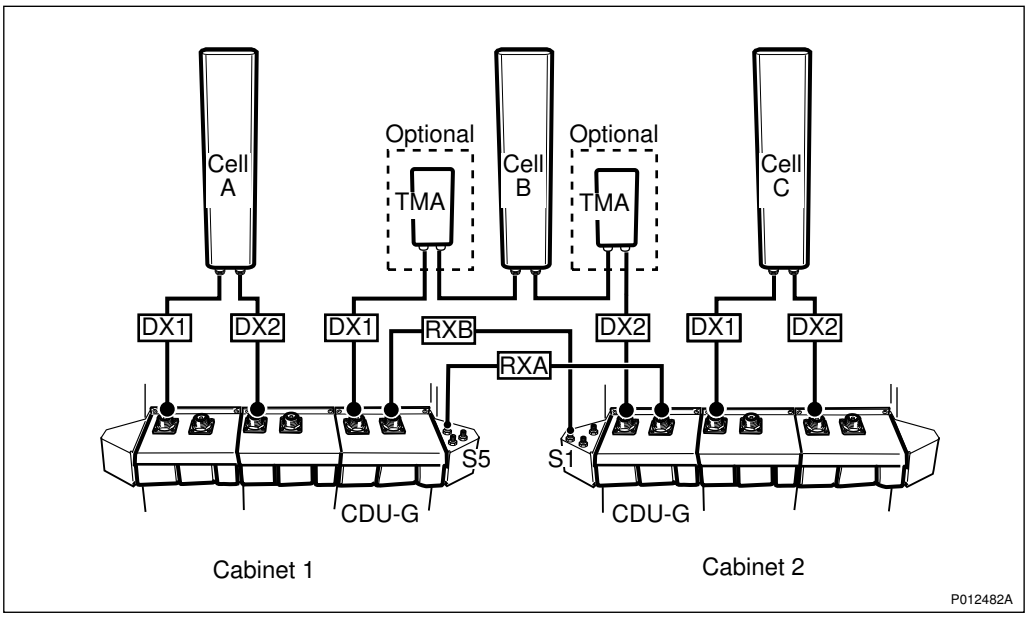


Figure 23 3x8 CDU-G with HCU Configuration

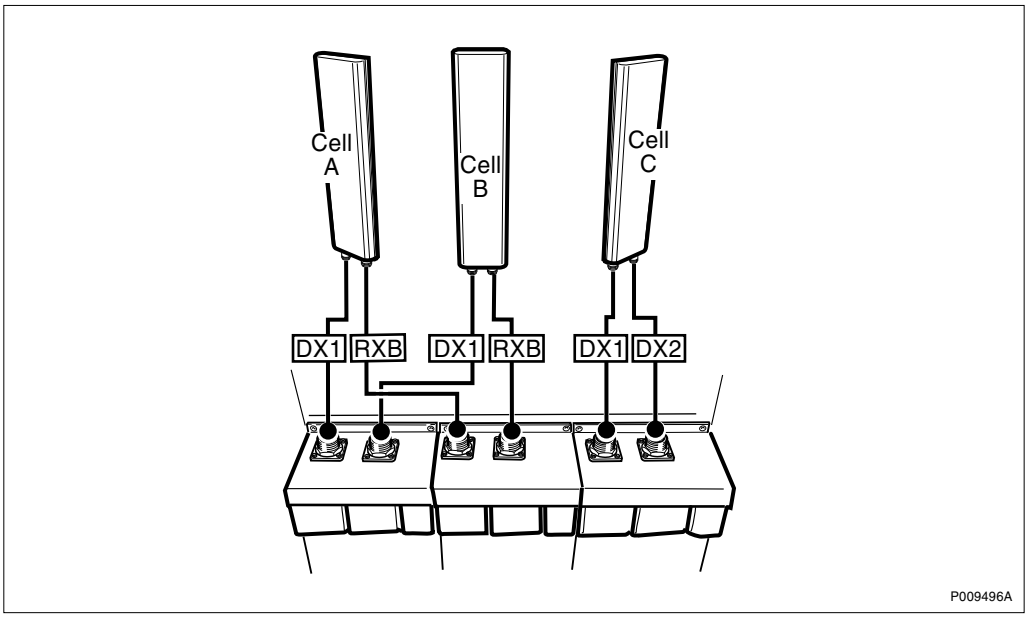
Table 16 3x8 CDU-G with HCU Configuration

	CDU					
			Connector		ASU	
Cell	**CDU No.**	**Feeder Label**	**CDU**	**Signal**	**Connector**	**Cabinet**
A	1 Cab. 1	CellA: DX1	TX/RX1	TX/RX A	1	1
	2 Cab. 1	CellA: DX2	TX/RX2	TX/RX B	3	
B	3 Cab. 1	CellB: DX 1	TX/RX1	TX/RX A	5	
		CellB: RX B	TX/RX2	RX B	–	
	1 Cab. 2	CellB: DX 2	TX/RX1	TX/RX B	1	2
		CellB: RX A	TX/RX2	RX A	–	
C	2 Cab. 2	CellC: DX1	TX/RX1	TX/RX A	3	
	3 Cab. 2	CellC: DX2	TX/RX1	TX/RX B	5	

Ericsson AB
SE-164 80 Stockholm
Sweden
asq.us@ericsson.com

RBS 2207
Antenna Configurations
Description

This document describes the possible antenna configurations for the RBS 2207.



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Contents

1 Introduction

The various configurations available for cabinets are described according to the following example:

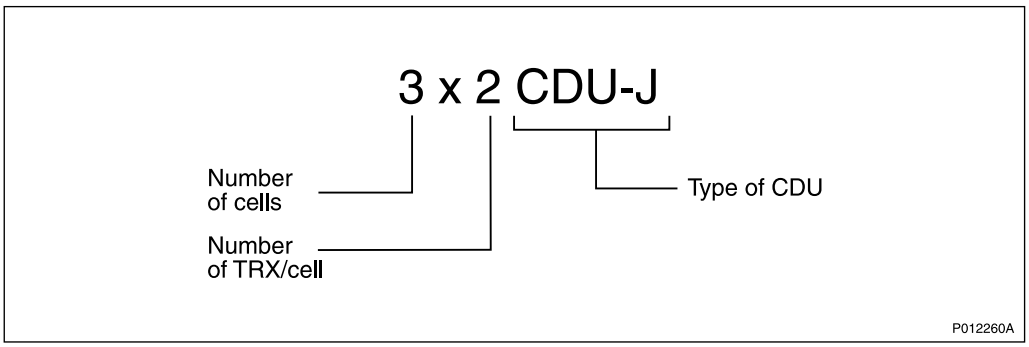

Figure 1 CDU configuration key

In the example above, the cabinet is configured for three cells, each using two TRXs. The total number of TRXs is thus six in this case. The CDU is type CDU-J.

Note: If a tower mounted amplifier (TMA) is used the bias injectors must be installed.

2 CDU-J Antenna Connections

The antenna connectors are located on the top of the CDU, *see figures below.*

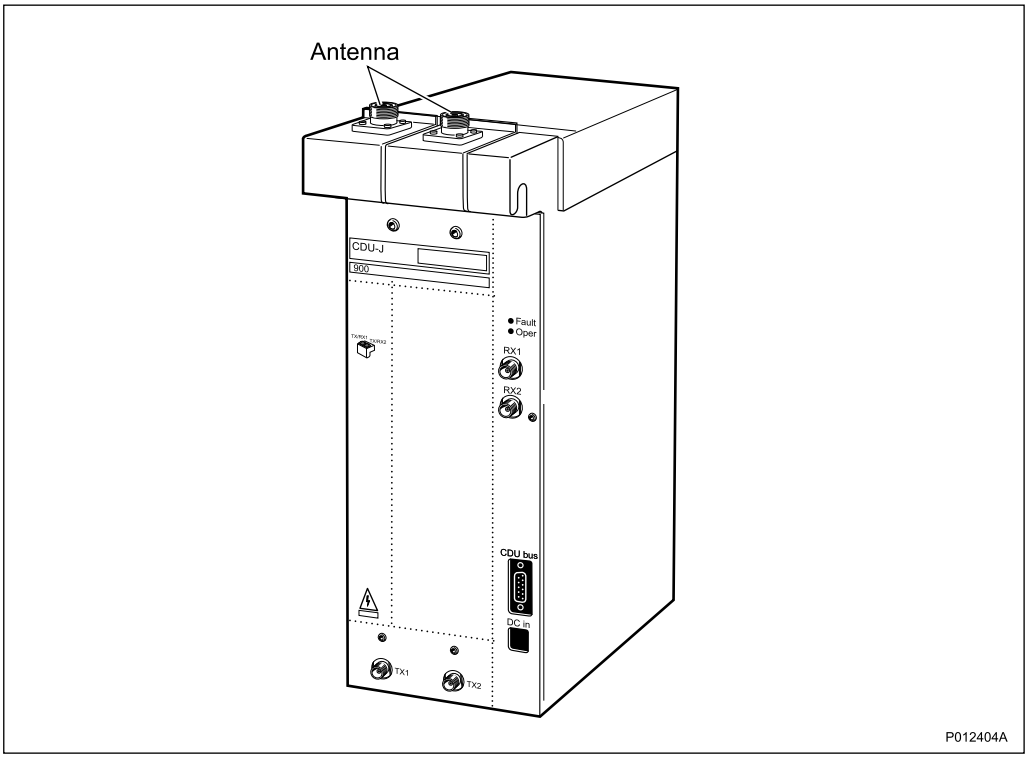

Figure 2 CDU-J layout

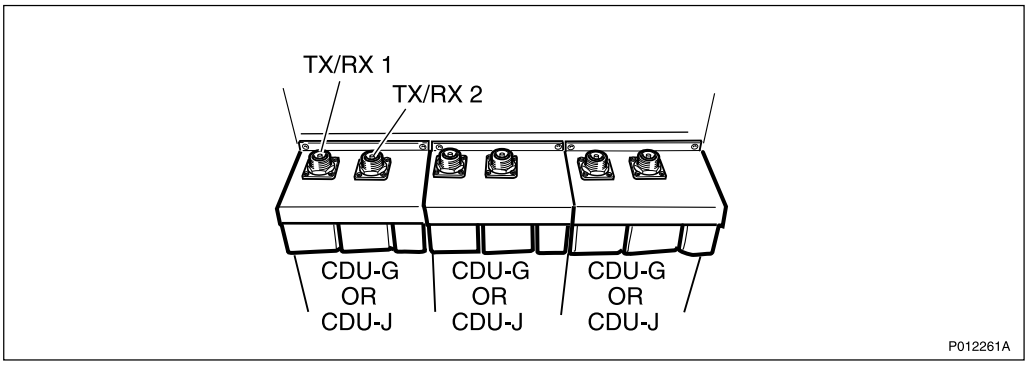

Figure 3 CDU antenna feeder connectors

3 CDU-J Configurations

This section shows different configurations for CDU-J. It can exist CDU-G in the RBS 2207 but it is configured the same way as CDU-J.

Note: In the figures and tables that follow, only cabinets that are fully-equipped are shown. Configurations consisting of part of the fully-equipped cabinet can also be extracted from the following figures and tables.

See Figure 1 on page 3 for a description of the column headers in the tables below.

3.1 3x2 CDU-J

This section describes the 3x2 combined and uncombined CDU-J configurations.

3x2 Uncombined CDU-J Configurations

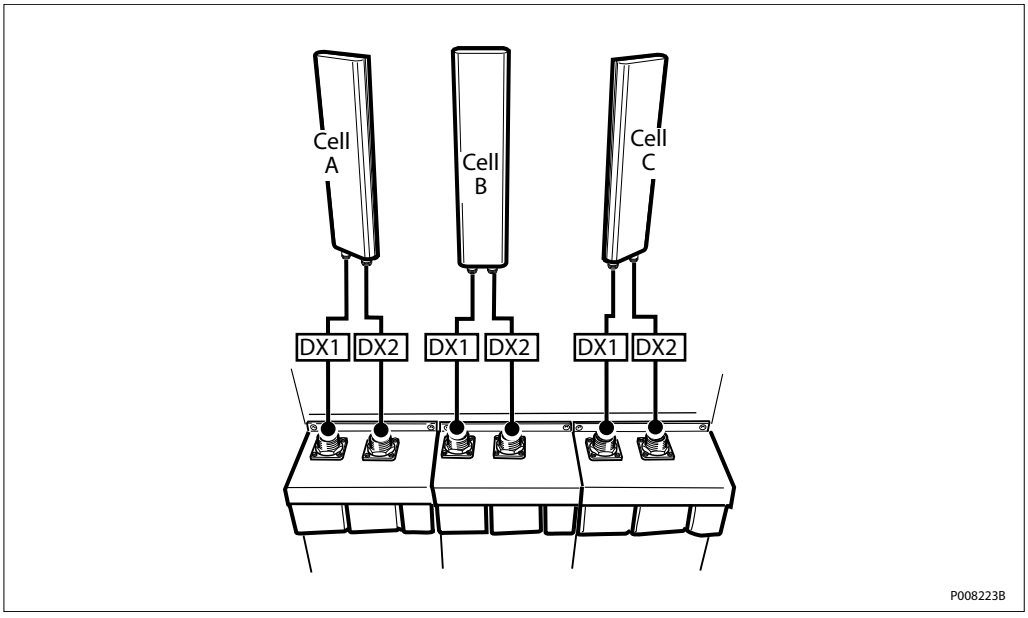

Figure 4 Uncombined configuration without TMA

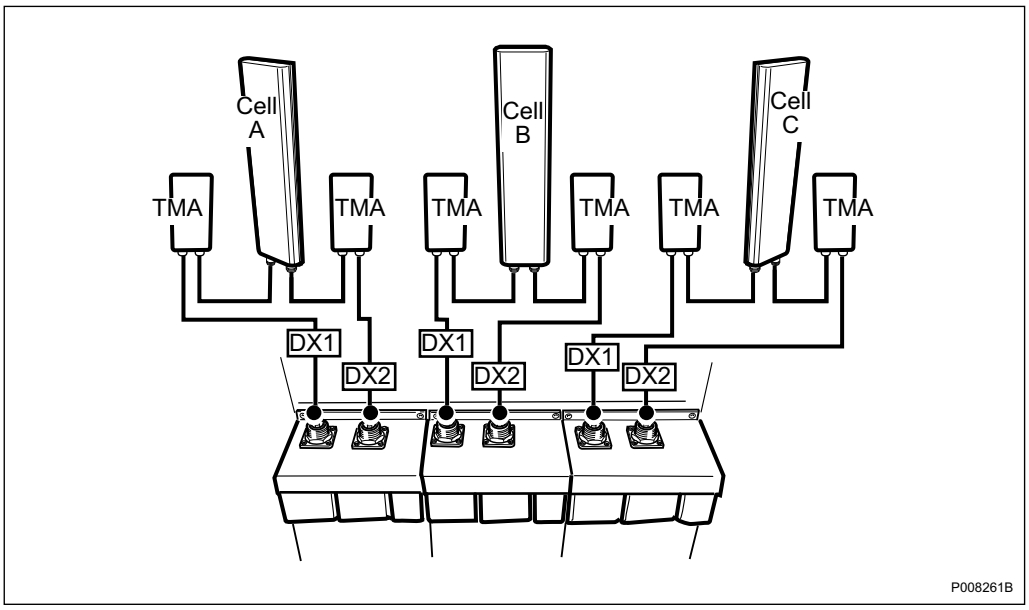

Figure 5 Uncombined configuration with TMA

Table 1 3x2 CDU-J uncombined

	CDU			
Cell	**CDU No.**	**Feeder label**	**CDU connector**	**Signal**
A	1	CellA: DX1	TX/RX1	TX/RX A
		CellA: DX2	TX/RX2	TX/RX B
B	2	CellB: DX1	TX/RX1	TX/RX A
		CellB: DX2	TX/RX2	TX/RX B
C	3	CellC: DX1	TX/RX1	TX/RX A
		CellC: DX2	TX/RX2	TX/RX B

From the configuration in the figure and table above, the following configurations can be derived:

- 1x2 CDU-J uncombined
- 2x2 CDU-J uncombined

3x2 Combined CDU-J Configurations

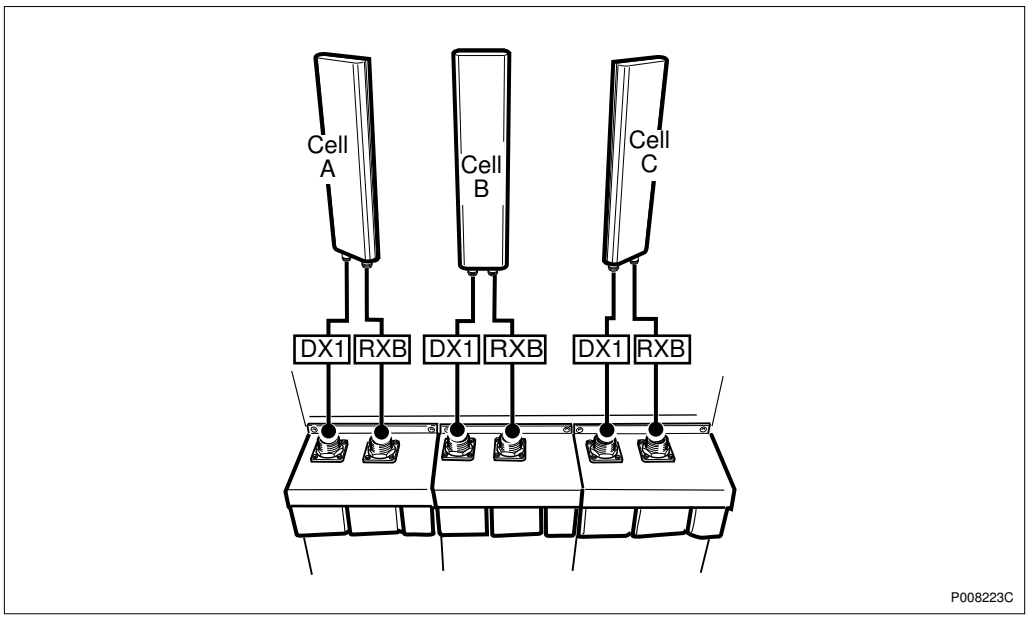

Figure 6 Combined configuration without TMA

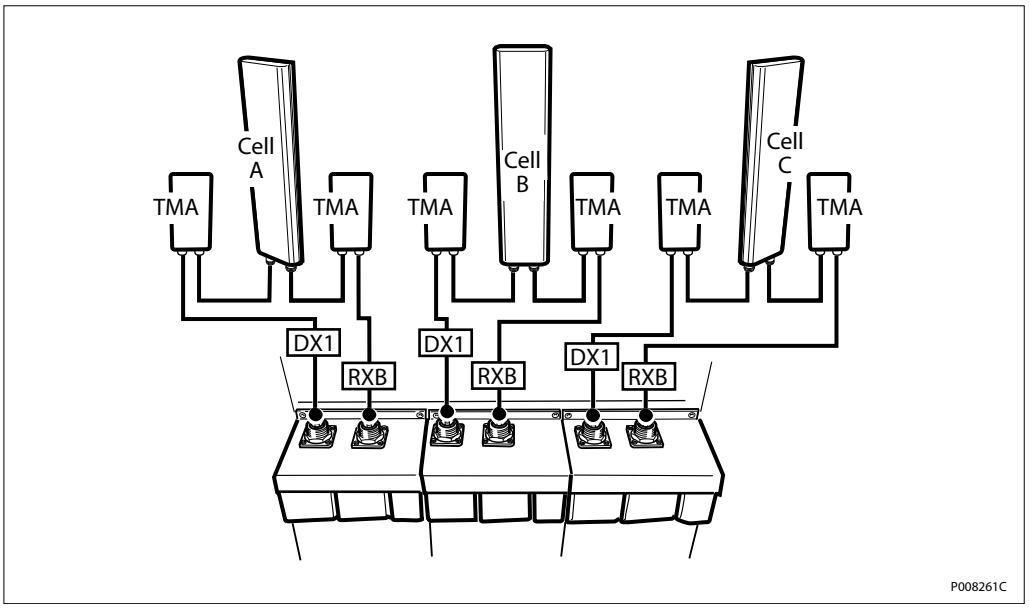

Figure 7 Combined configuration with TMA

Table 2 3x2 CDU-J combined

	CDU			
Cell	**CDU No.**	**Feeder label**	**CDU connector**	**Signal**
A	1	CellA: DX1	TX/RX1	TX/RX A
		CellA: RXB	TX/RX2	RX B
B	2	CellB: DX1	TX/RX1	TX/RX A
		CellB: RXB	TX/RX2	RX B
C	3	CellC: DX1	TX/RX1	TX/RX A
		CellC: RXB	TX/RX2	RX B

From the configuration in the figure and table above, the following configurations can be derived:

- 1x2 CDU-J combined
- 2x2 CDU-J combined

3.2 1+1+2 CDU-J uncombined

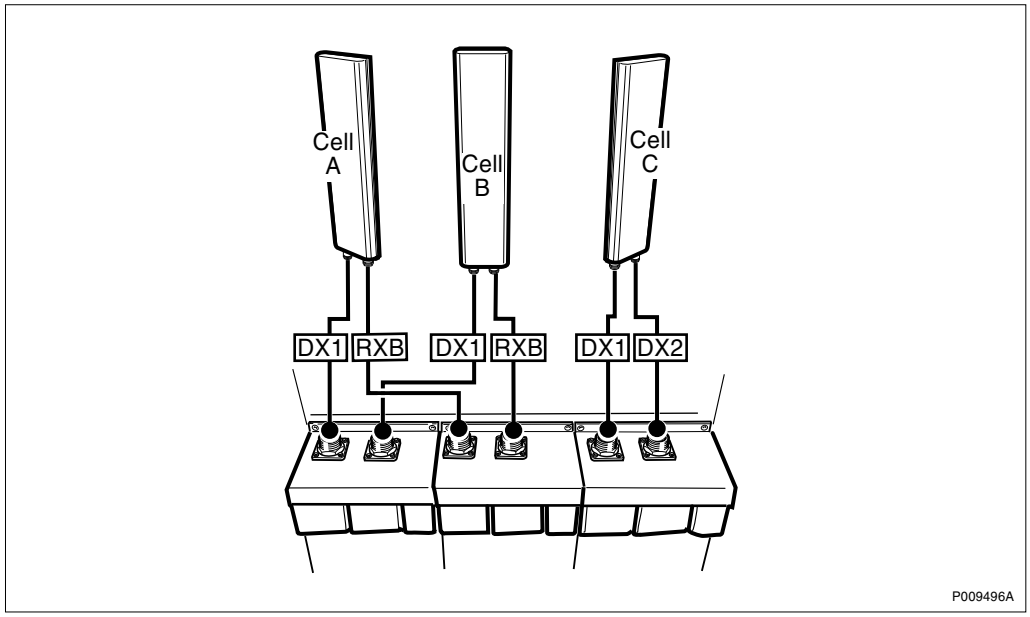

Figure 8 Configuration without TMA

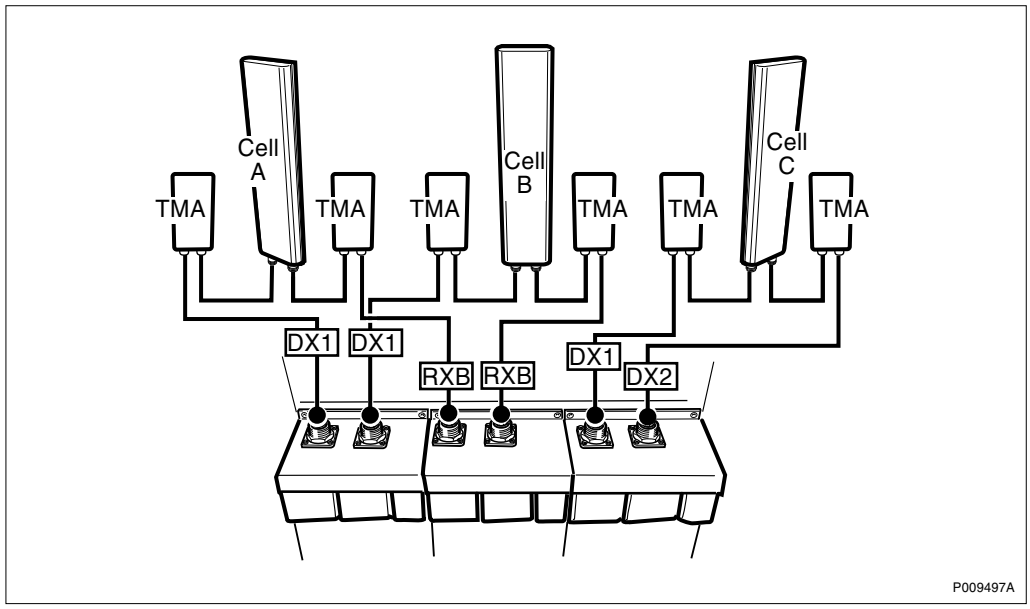

Figure 9 Configuration with TMA

Table 3 1+1+2 CDU-J

Cell	CDU			
	CDU No.	**Feeder label**	**CDU connector**	**Signal**
A	1	CellA: DX1	TX/RX1	TX/RX A
	2	CellA: RXB	TX/RX1	RX B
B	1	CellB: DX1	TX/RX2	TX/RX A
	2	CellB: RXB	TX/RX2	RX B
C	3	CellC: DX1	TX/RX1	TX/RX A
	3	CellC: DX2	TX/RX2	TX/RX B

From the configuration in the figure and table above, the following configuration can be derived:

- 2x1 CDU-J uncombined

Ericsson AB
SE-164 80 Stockholm
Sweden
asq.us@ericsson.com