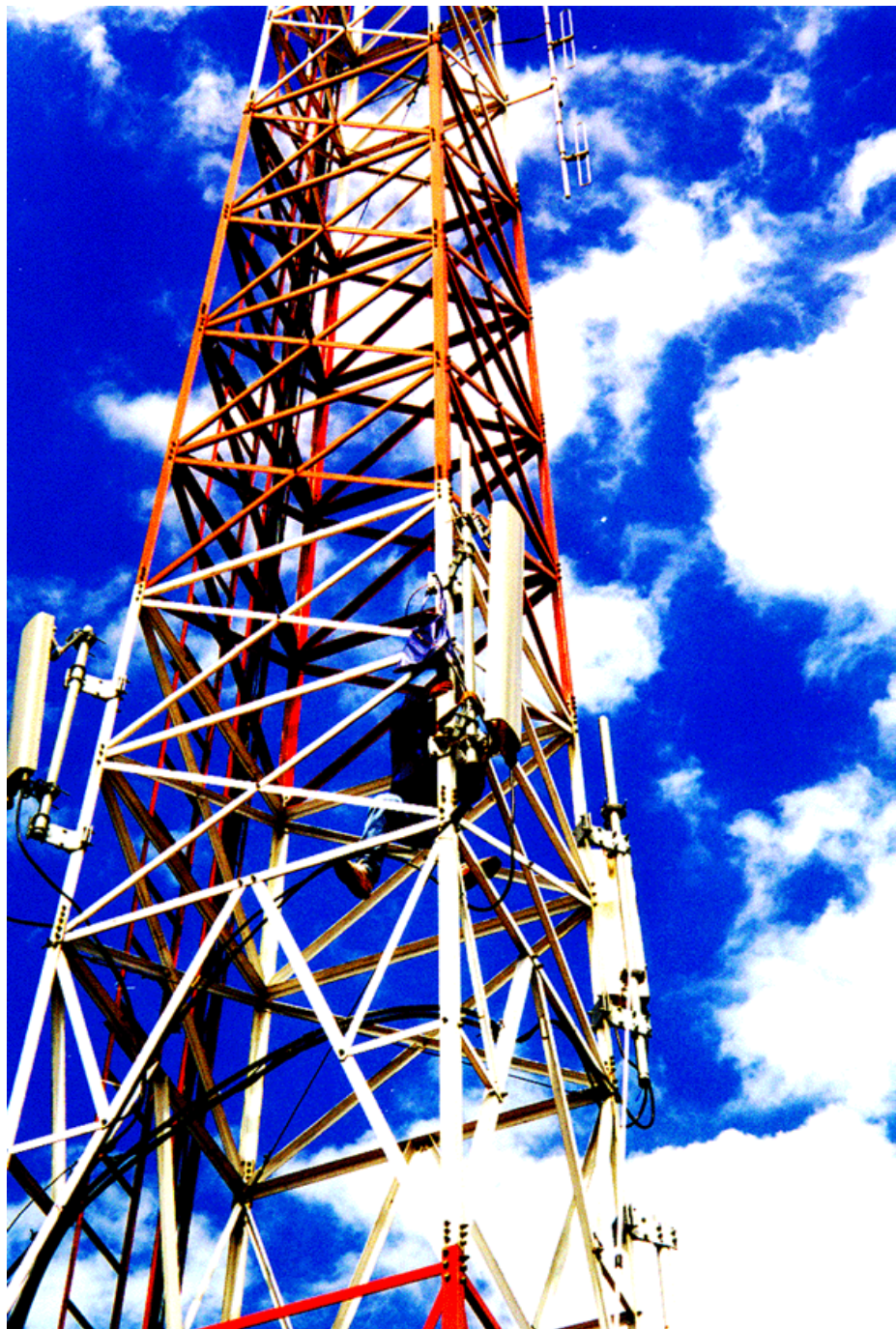




## High performance site components





## **Introduction**

**Egant AB is one of the leading suppliers of products for Cellular infrastructure.**

**Specialised in products that makes it possible to share antenna systems, combining signals and designing cost effective mobile networks.**

**Egant AB works close together with its customers to make solutions and projects optimized for today's demands.**

**Giving you products that is always in the latest design and highest technology.**

**Our design centre in Stockholm Sweden is always happy for new challenges and welcomes all new projects and design ideas.**

**More information can be found at: [www.egant.se](http://www.egant.se)**

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## Quad Band Combiner

[www.egant.se](http://www.egant.se)

**Frequency range**

*Quad Band Combiner*

380-960, 1800, 2100, 2600MHz

**Description**

Quad Band Combiner

**Connector**

7/16(f)

**Ordering number**

EG 601 0121



## **Quad Band Combiner** **TETRA/GSM900, GSM1800, UMTS, LTE2600**

### **Combines 4 RBSs into 1 antenna port**

This Quad Band Combiner enables the connection of 4 Radio Base Stations to the combiner:

- 1 TETRA/GSM900 Radio Base Station
- 1 GSM1800 Radio Base Station
- 1 UMTS Radio Base Station
- 1 LTE2600 Radio Base Station

The combiner combines the 4 signals to 1 antenna port, or splits the signal to the 4 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### **Reduces cost**

By utilizing our quad band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Quad Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0121
Passband:	
Port 1: Tetra - GSM900	380- 960 MHz
Port 2: GSM1800	1710 - 1880 MHz
Port 3: UMTS	1920 - 2170 MHz
Port 4: LTE2600	2500-2690MHz
Insertion loss:	≤ 0.30 dB
Input return loss:	> 18 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	
Port 1:	< 300 W
Port 2:	< 300 W
Port 3:	< 300 W
port 4:	< 200 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	≤-110 dBm (153 dBc)
DC by-pass between all inputs to output:	1A, max, per input

### Mechanical Specifications

Dimensions (W x H x D):	260 x 50 x 220 mm
Connectors:	7/16 (f)
Weight:	4 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP66

Egant reserves the right to change this product specification at any time without notice.

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## Triple Band Combiner

[www.egant.se](http://www.egant.se)

### Frequency range

### Description

### Connector

### Ordering number

#### *Triple Band Combiners*

DC-2170, 2400-2500, 5000-6000MHz	Triple Band Combiner	N(f)	EG 602 0151
88-108, 376-495, 1570-1580MHz	Triple Band Combiner	7/16(f)	EG 602 0044
376-480, 880-960, 1710-1880MHz	Triple Band Combiner	7/16(f)	EG 602 0178
376-500, 880-960, 1920-2170MHz	Triple Band Combiner	7/16(f)	EG 602 0080
806-960, 1710-1880, 1920-2170MHz	Triple Band Combiner	7/16(f)	EG 100 9012
880-960, 1710-1880, 1920-2170MHz	Triple Band Combiner	SMA(f)	EG 100 9019
880-960, 1710-1880, 1920-2170MHz	Triple Band Combiner	N(f)	EG 602 0041
880-960, 1920-2170, 2500-2690MHz	Triple Band Combiner	7/16(f)	EG 602 0150



**Triple Band Combiner**  
**DC-2170MHz, 2400-2500MHz,**  
**5000-6000MHz**

This triple band combiner combines cellular networks with local wireless networks. The combiner combines the 3 signals to 1 antenna port, or splits the signal in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing the Egant triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Triple Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0151
Passband:	
Port 1:	DC - 2170 MHz
Port 2:	2400 - 2500 MHz
Port 3:	5000 - 6000 MHz
Insertion loss:	
Port 1: - ANT	≤ 1.2 dB
Port 2: - ANT	≤ 1.5 dB
Port 3: - ANT	≤ 0.7 dB
Input return loss:	> 14.0 dB
Isolation between systems:	≥ 45 dB
Max input power/port:	50W, (max 50W total)
Impedance in/out:	50 Ohm
Intermodulation:	
IM 3, 2 x 43 dBm:	<-107 dBm (150 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	222 x 25 x 127 mm
Connectors:	N (f)
Weight:	1.6 kg

### Environmental Specifications

Temp. range (normal operation):	-0 to +55° C
Humidity:	Relative 5 - 100%

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## **Triple Band Combiner 160MHz, TETRA, GPS**

### **Combines 3 Radio Systems into 1 Antenna Port**

This triple band combiner enables the connection of 3 Systems to the combiner:

- 1 160MHz System
- 1 TETRA System
- 1 GSP System

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 Systems in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple Radio Systems to the shared antennas.

### **Reduces cost**

By utilizing the Egant triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Triple Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0044
Passband:	
Port 1: 160MHz	88 - 180 MHz
Port 2: TETRA	376 - 495 MHz
Port 3: GPS	1570 - 1580 MHz

#### Insertion loss:

Port 1: 160MHz - ANT	≤ 0.9 dB
Port 2: TETRA - ANT	≤ 0.9 dB
Port 3: GPS - ANT	≤ 0.5 dB

Input return loss: > 14.0 dB

Isolation between systems: ≥ 30 dB

#### Max input power/port:

Port 1: 160MHz	10 W
Port 2: TETRA	20 W
Port 3: GPS	10 W

Impedance in/out: 50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	350 x 130 x 60 mm
Connectors:	7/16 (f)
Weight:	3,5 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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## **Triple Band Combiner TETRA, GSM900, GSM1800**

### **Combines 3 RBSs into 1 antenna port**

This triple band combiner enables the connection of 3 Radio Base Stations to the combiner:

- 1 TETRA Radio Base Station
- 1 GSM900 Radio Base Station
- 1 GSM1800 Radio Base Station

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### **Reduces cost**

By utilizing our triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Triple Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0178
Passband:	
Port 1: TETRA	376 - 480 MHz
Port 2: GSM900	880 - 960 MHz
Port 3: GSM1800	1710 - 1880 MHz
Insertion loss:	
Port 1: TETRA - ANT	≤ 0.30 dB, typ 0,15dB
Port 2: GSM900 - ANT	≤ 0.55 dB, typ 0,3dB
Port 3: GSM1800 - ANT	≤ 0.65 dB, typ 0,4dB
Input return loss:	> 18.0 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	< 100 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	153 dBc

### Mechanical Specifications

Dimensions (W x H x D):	300 x 150 x 500 mm
Connectors:	7/16 (f)
Weight:	8 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP66

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## **Triple Band Combiner TETRA, GSM900, UMTS**

### **Combines 3 RBSs into 1 antenna port**

This triple band combiner enables the connection of 3 Radio Base Stations to the combiner:

- 1 TETRA Radio Base Station
- 1 GSM900 Radio Base Station
- 1 UMTS Radio Base Station

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### **Reduces cost**

By utilizing our triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Triple Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0080
Passband:	
Port 1: TETRA	376 - 500 MHz
Port 2: GSM900	880 - 960 MHz
Port 3: UMTS	1920 - 2170 MHz
Insertion loss:	
Port 1: TETRA - ANT	≤ 0.30 dB, typ 0,15dB
Port 2: GSM900 - ANT	≤ 0.55 dB, typ 0,3dB
Port 3: UMTS - ANT	≤ 0.65 dB, typ 0,4dB
Input return loss:	> 18.0 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	
Port 1: TETRA	< 200 W
Port 2: GSM900	< 200 W
Port 3: UMTS	< 100 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	153 dBc

### Mechanical Specifications

Dimensions (W x H x D):	300 x 150 x 500 mm
Connectors:	7/16 (f)
Weight:	8 kg

### Environmental Specifications

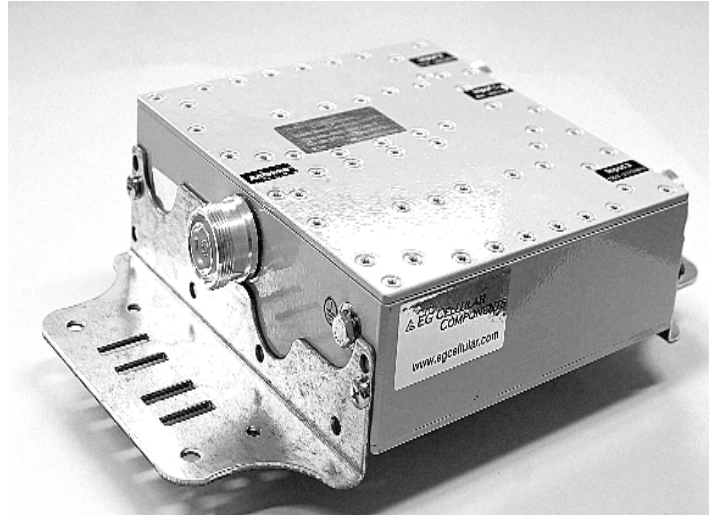
Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP66

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## Triple Band Combiner/Dual Band Combiner UMTS, GSM1800, GSM900 / GSM1800, UMTS



### Combines 3 RBSs into 1 antenna port

This triple band combiner enables the connection of 3 Radio Base Stations to the combiner:

- 1 GSM900 Radio Base Station
- 1 GSM1800 Radio Base Station
- 1 UMTS Radio Base Station

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing our triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Dual Band Combiner - combines 2 RBSs into 1 antenna port

The dual band combiner enables you to connect 2 Radio Base Stations to the combiner:

- 1 GSM1800 Radio Base Station
- 1 UMTS Radio Base Station

## Technical Specifications for the Triple Band Combiner/Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 100 9012	EG 100 9009
Passband:		
Port 1: GSM900	698 - 960 MHz	
Port 2: GSM1800	1710 - 1880 MHz	1710 - 1880 MHz
Port 3: UMTS	1920 - 2170 MHz	1920 - 2170 MHz
Insertion loss:		
Port 1: GSM900 - ANT	≤ 0.20 dB	
Port 2: GSM1800 - ANT	≤ 0.30 dB	≤ 0.40 dB
Port 3: UMTS - ANT	≤ 0.45 dB	≤ 0.45 dB
Input return loss:	> 21.0 dB	> 20.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB
Max input power/port:		
Port 1: GSM900	< 200 W	
Port 2: GSM1800	< 200 W	< 200 W
Port 3: UMTS	< 100 W	< 100 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153dBc)
DC by-pass between all inputs to output:	1A, max, per input	1A, max, per input
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	230 x 200 x 555 mm	245 x 210 x 50 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	3.6 kg	3.6 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP66	IP66

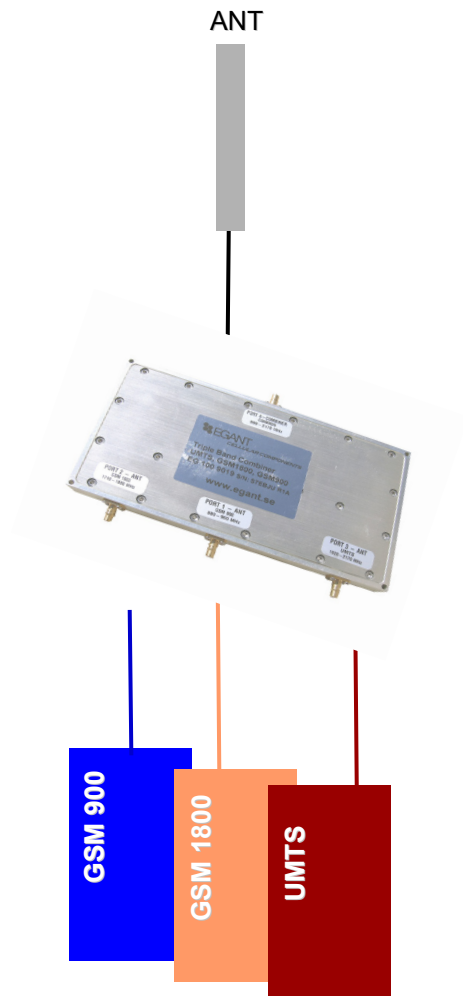
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## Triple Band Combiner UMTS, GSM1800, GSM900



### Reduces cost

By utilizing the Egant triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Combines 3 RBSs into 1 Antenna Port

This triple band combiner enables the connection of 3 Radio Base Stations to the combiner:

- 1 GSM900 Radio Base Station
- 1 GSM1800 Radio Base Station
- 1 UMTS Radio Base Station

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

## Technical Specifications for the Triple Band Combiner

Below are some typical data. For more detailed information, please contact us.

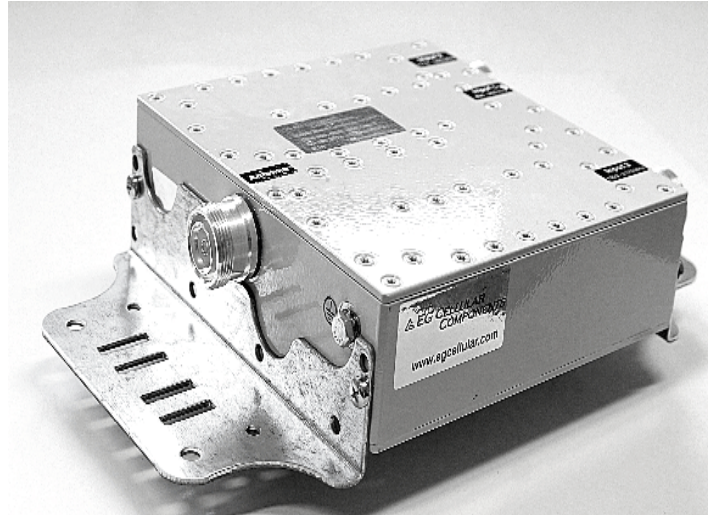
<b>Electrical Specifications</b>		
Product number:	EG 100 9019	EG 602 0041
Passband:		
Port 1: GSM900	880 - 960 MHz	880 - 960 MHz
Port 2: GSM1800	1710 - 1880 MHz	1710 - 1880 MHz
Port 3: UMTS	1920 - 2170 MHz	1920 - 2170 MHz
Insertion loss:		
Port 1: GSM900 - ANT	≤ 1.3 dB	≤ 1.3 dB
Port 2: GSM1800 - ANT	≤ 1.3 dB	≤ 1.3 dB
Port 3: UMTS - ANT	≤ 1.3 dB	≤ 1.3 dB
Input return loss:	> 16.0 dB	> 16.0 dB
Isolation between systems:	≥ 30 dB	≥ 30 dB
Max input power/port:		
Port 1: GSM900	20 W	20 W
Port 2: GSM1800	20 W	20 W
Port 3: UMTS	20 W	20 W
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	195 x 130 x 30 mm	195 x 130 x 30 mm
Connectors:	SMA (f)	N (f)
Weight:	1 kg	1 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## Triple Band Combiner GSM900, UMTS, LTE2600MHz



### Combines 3 RBSs into 1 antenna port

This triple band combiner enables the connection of 3 Radio Base Stations to the combiner:

- 1 GSM900 Radio Base Station
- 1 UMTS Radio Base Station
- 1 LTE2600 Radio Base Station

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing our triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Triple Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0150
Passband:	
Port 1: GSM900	880 - 960 MHz
Port 2: UMTS	1920 - 2170MHz
Port 3: LTE2600	2490 - 2690 MHz
Insertion loss:	
Port 1: GSM900 - ANT	≤ 0.25 dB
Port 2: UMTS - ANT	≤ 0.25 dB
Port 3: LTE - ANT	≤ 0.25 dB
Input return loss:	> 18.0 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	
Port 1: GSM900	< 300 W
Port 2: UMTS	< 300 W
Port 3: LTE2600	< 300 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	230 x 50 x 200 mm
Connectors:	7/16 (f)
Weight:	3.6 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +65° C
Humidity:	Relative 5 - 100%
Sealing:	IP66

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# Dual Band Combiner

[www.egant.se](http://www.egant.se)

<u>Frequency range</u>	<u>Description</u>	<u>Connector</u>	<u>Ordering number</u>
<b><i>Dual Band Combiners</i></b>			
68-470, 791-862MHz	Dual Band Combiner	7/16(f)	EG 602 0182
68-500, 700-2700MHz	Dual Band Combiner	N(f)	EG 602 0115
68-500, 700-2700MHz	Dual Band Combiner	7/16(f)	EG 602 0120
68-500, 790-2700MHz	Dual Band Combiner	7/16(f)	EG 602 0072
68-470, 870-970MHz	Dual Band Combiner	N(f)	EG 100 9015
68-470, 870-970MHz	Dual Band Combiner	7/16(f)	EG 100 9016
68-470, 870-970MHz	Dual Band Combiner	7/16(f)	EG 100 9017
68-2170, 2400-2500MHz	Dual Band Combiner	7/16(f)	EG 602 0007
80-240, 376-480MHz	Dual Band Combiner	N(f)	EG 602 0183
80-240, 376-480MHz	Dual Band Combiner	N(f)	EG 602 0184
80-240, 376-480MHz	Dual Band Combiner	7/16(f)	EG 602 0038
80-240, 376-480MHz	Dual Band Combiner	7/16(f)	EG 602 0030
80-960, 1710-2700MHz	Dual Band Combiner	N(f)	EG 602 0111
80-960, 1710-2700MHz	Dual Band Combiner	7/16(f)	EG 602 0108
155-500, 1575-1576MHz	Dual Band Combiner	7/16(f)	EG 602 0049
376-500, 1920-2170MHz	Dual Band Combiner	N(f)	EG 602 0045
376-500, 1920-2170MHz	Dual Band Combiner	7/16(f)	EG 602 0046
376-2170, 2400-2500MHz	Dual Band Combiner	N(f)	EG 100 9018
376-2170, 2400-2500MHz	Dual Band Combiner	7/16(f)	EG 100 9028
376-2170, 2400-2500MHz	Dual Band Combiner	7/16(m), 7/16(f), N(f)	EG 602 0007
376-2170, 2500-2700MHz	Dual Band Combiner	N(f)	EG 602 0076
376-2170, 2500-2700MHz	Dual Band Combiner	7/16(f)	EG 602 0074
380-395, 410-425MHz	Dual Band Combiner	N(f)	EG 602 0023



## Dual Band Combiner

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380-395, 410-425MHz	Dual Band Combiner	7/16(f)	EG 602 0024
380-395, 440-450MHz	Dual Band Combiner	7/16(f)	EG 602 0191
380-395, 442,975-448,975MHz	Dual Band Combiner	N(f)	EG 602 0176
380-395, 450-470MHz	Dual Band Combiner	N(f)	EG 602 0094
790-862, 880-960MHz	Dual Band Combiner	N(f)	EG 602 0112
790-862, 880-960MHz	Dual Band Combiner	7/16(f)	EG 602 0097
790-1000, 1710-2170MHz	Dual Band Combiner	7/16(f)	EG 602 0110
800-1000, 1710-2170MHz	Dual Band Combiner	N(f)	EG 100 9014
800-1000, 1710-2170MHz	Dual Band Combiner	7/16(f)	EG 100 9013
880-960, 1710-1880MHz	Dual Band Combiner	7/16(f)	EG 602 0034
890-960, 1710-2700MHz	Dual Band Combiner	7/16(f)	EG 602 0096
1710-1880, 1920-2170MHz	Dual Band Combiner	7/16(f)	EG 100 9009



**Dual Band Combiner**  
**TETRA / LTE800**  
**68 - 470 MHz / 791 - 862 MHz**



**Combines 2 RBSs into 1 antenna port**

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 TETRA Radio Base Station
- 1 LTE800 Radio Base Station

The combiner combines the 2 signals to the antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0182
Passband:	
Port 1: TETRA	68 - 470 MHz
Port 2: LTE800	791 - 862 MHz
Insertion loss:	
Port 1: TETRA	$\leq 0.3$ dB
Port 2: LTE800	$\leq 0.5$ dB
Input return loss:	$> 18.0$ dB
Isolation between systems:	$\geq 50$ dB
Max input power/port:	
Port 1: TETRA	150 W
Port 2: LTE800	100 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	128 x 177 x 28 mm
Connectors:	7/16 (f)
Weight:	2 kg

### Environmental Specifications

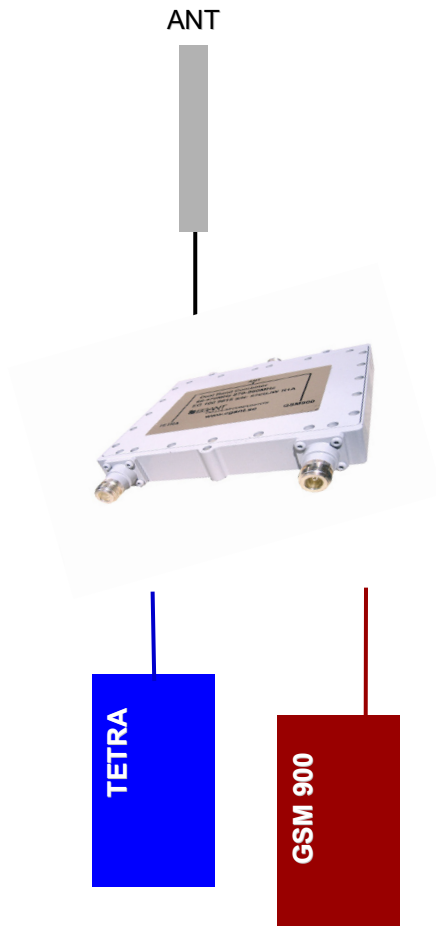
Temp. range (normal operation):	-20 to +65° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

Egant reserves the right to change this product specification at any time without notice.

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**Dual Band Combiner**  
**TETRA / GSM900**  
**68 - 470 MHz / 870 - 970 MHz**



**Combines 2 RBSs into 1 antenna port**

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 TETRA Radio Base Station
- 1 GSM900 Radio Base Station

The combiner combines the 2 signals to the antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 100 9015	EG 100 9016	EG 100 9017
Passband:			
Port 1: TETRA	68 - 470 MHz	68 - 470 MHz	68 - 470 MHz
Port 2: GSM900	870 - 970 MHz	870 - 970 MHz	870 - 970 MHz
Insertion loss:			
Port 1: TETRA	≤ 0.1 dB	≤ 0.1 dB	≤ 0.1 dB
Port 2: GSM900	≤ 0.3 dB	≤ 0.3 dB	≤ 0.3 dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB	≥ 50 dB
Max input power/port:			
Port 1: TETRA	250 W	250 W	250 W
Port 2: GSM900	250 W	250 W	250 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Intermodulation:			
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	128 x 177 x 28 mm	128 x 177 x 28 mm	128 x 177 x 32
Connectors:	N (f)	7/16 (f)	7/16 (f)
Weight:	2 kg	2.6 kg	2.8 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65	IP68

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## Dual Band Combiner 68 - 500 MHz / 700 - 2700 MHz



### Reduces cost

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Combines 2 RBSs into 1 Antenna Port

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner.

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0115	EG 602 0120
Passband:		
Port 1: Low band	68 - 500 MHz	68 - 500 MHz
Port 2: High band	700 - 2700 MHz	700 - 2700 MHz
Insertion loss:		
Port 1: Low band - ANT	$\leq 0.3$ dB, typ 0,15dB	$\leq 0.3$ dB, typ 0,15dB
Port 2: High band - ANT	$\leq 0.5$ dB, typ 0.3dB	$\leq 0.5$ dB, typ 0.3dB
Input return loss:	$> 16.0$ dB, typ 20dB	$> 16.0$ dB, typ 20dB
Isolation between systems:		
Port 1: - ANT	$\geq 50$ dB	$\geq 50$ dB
Port 2: - ANT		
700 - 800 MHz	$\geq 40$ dB	$\geq 40$ dB
800 - 2500 MHz	$\geq 50$ dB	$\geq 50$ dB
2500 - 2700MHz	$\geq 30$ dB	$\geq 30$ dB
Max input power/port:	$< 50$ W	$< 50$ W
Intermodulation:		
IM3, 2 x 43 dBm:	$\leq -150$ dBc	$\leq -150$ dBc
Impedance in/out:	50 Ohm	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	235 x 35 x 130 mm	235 x 20 x 130 mm
Connectors:	N (f)	7/16 (f)
Weight:	1.5 kg	1.0 kg

### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

Egant reserves the right to change this product specification at any time without notice.

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## Dual Band Combiner 68 - 500 MHz / 790 - 2700 MHz



### Combines 2 RBSs into 1 Antenna Port

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner.

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0072
Passband:	
Port 1: Low band	68 - 500 MHz
Port 2: High band	790 - 2700 MHz
Insertion loss:	
Port 1: Low band - ANT	$\leq 0.3$ dB, typ 0.15dB
Port 2: High band - ANT	$\leq 0.4$ dB, typ 0.15dB
Input return loss:	
68 - 500 MHz	$> 18.0$ dB
790 - 960 MHz	$> 16.0$ dB
1710 - 1880 MHz	$> 18.0$ dB
1920 - 2170 MHz	$> 18.0$ dB
2500 - 2700MHz	$> 16.0$ dB
Isolation between systems:	
Port 1: - ANT	$\geq 40$ dB
Port 2: - ANT	$\geq 50$ dB
Max input power/port:	
Port 1: Low band	$< 300$ W
Port 2: High band	$< 500$ W
Intermodulation:	
IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	265 x 55 x 120 mm
Connectors:	7/16 (f)
Weight:	1.5 kg

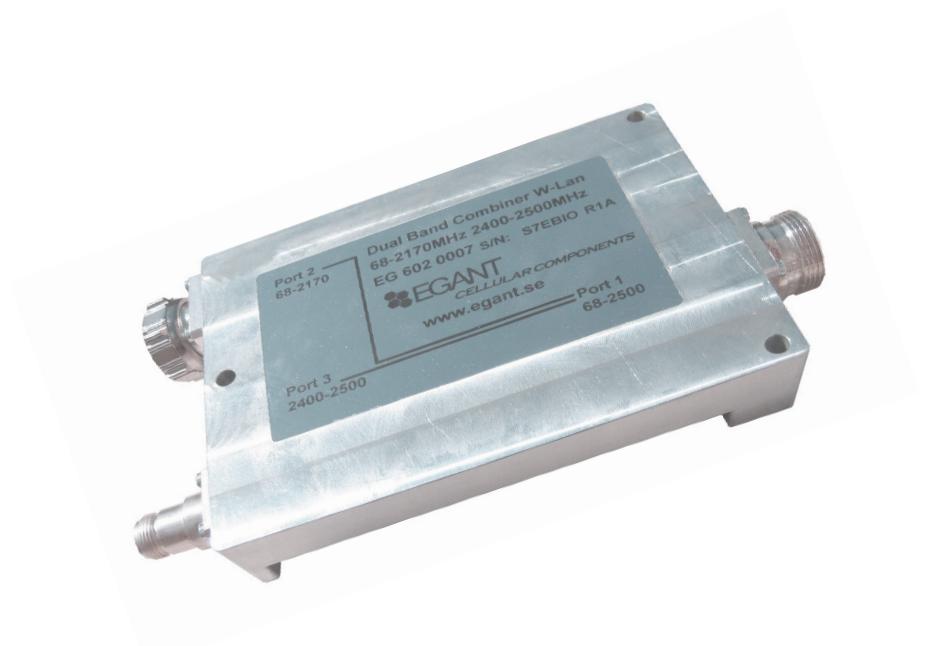
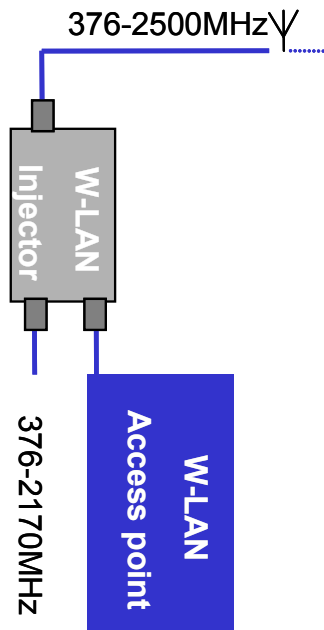
### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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**Dual Band Combiner W-LAN**  
**376 - 2500 MHz**  
**TETRA, GSM900, GSM1800, UMTS,**  
**W-LAN**



**Add W-LAN to your antenna system**

Installing the dual band combiner W-LAN enables you to add W-LAN to your cellular antenna system. After installing the W-LAN combiner and an access point you are up and running with a high speed W-LAN system.

This is a highly important feature when designing shared antenna systems wishing to add W-LAN capability to your system.

**Save money**

The dual band combiner W-LAN offers additional benefits by opening up W-LAN capability to your existing antenna system.

The sleek and easily installed combiner has a broad-banded spectrum with low insertion loss and low intermodulation.

## Technical Specifications for Dual Band Combiner W-LAN

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 100 9018	EG 100 9028	EG 602 0007
Passband:			
Port 1:	376 - 2170 MHz	376 - 2170 MHz	68 - 2500 MHz
Port 2:	2400 - 2500 MHz	2400 - 2500 MHz	68 - 2170 MHz
Port 3:			2400 - 2500 MHz
Input return loss:			
68 - 2170 MHz:	≥ 18 dB	≥ 18 dB	≥ 18 dB
2400 - 2500 MHz:	≥ 16 dB	≥ 16 dB	≥ 16 dB
Insertion loss:			
Port 2 - Port 1 (ANT):			
68 - 2170 MHz:	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)
Port 3 - Port 1 (ANT):			
2400 - 2500 MHz:	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)
Isolation: Port 2 - Port 3, Port 3 - Port 2	≥ 50 dB	≥ 50 dB	≥ 50 dB
Max input power/port:	50 W avg. 0.5 kW peak	50 W avg. 0.5 kW peak	50 W avg. 0.5 kW peak
3 <sup>rd</sup> order intermodulation:			
IM3, 2 x 43 dBm:	< - 97 dBm (140 dBc)	< - 97 dBm (140 dBc)	< - 97 dBm (140 dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	180 x 28 x 140 mm	180 x 32 x 140 mm	180 x 32 x 140 mm
Connectors:	N (f)	7/16 (f)	7/16 (f), 7/16 (m), N (f)
Weight:	1.6 kg	1.9 kg	1.9 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-35 to +70° C	-35 to +70° C	-35 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65	IP65

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## Dual Band Combiner 80 - 240 MHz / 376 - 480 MHz



### Combines FM + VHF + DAB and TETRA into one antenna port

This dual band combiner enables the connection of these two systems to the combiner:

- 1 FM + VHF + DAB Input
- 1 TETRA Radio Base Station

The combiner combines the two signals into one antenna port, or splits the signal into the two input systems in the receiving direction.

### Reduces cost

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the inputs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the FM + VHF + DAB / TETRA Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0183	EG 602 0184
Passband:		
Port 1: FM + VHF + DAB	80 - 240 MHz	80 - 240 MHz
Port 2: TETRA	376 - 480 MHz	376 - 480 MHz
Insertion loss:	≤ 0.5 dB	≤ 0.5 dB
Input return loss:	> 16.0 dB	> 16.0 dB
Isolation between systems:	> 50 dB	> 50 dB
Max input power/port:	≤ 40 W	≤ 40 W
Impedance in/out:	50 Ohm	50 Ohm
DC-Bypass	Port 1 - Ant	Port 1 - Ant
<b>Mechanical &amp; Environmental Specifications</b>		
Dimensions (W x H x D):	95 x 23 x 75 mm	95 x 23 x 75 mm
Connectors:	N (f)	N (f)
Weight:	0.5 kg	0.5 kg
Sealing:	IP65	Indoor use

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**Dual Band Combiner**  
**FM + VHF + DAB / TETRA**  
**80 - 240 MHz / 376 - 480 MHz**



**Combines FM + VHF + DAB and TETRA  
into one antenna port**

This dual band combiner enables the connection of these two systems to the combiner:

- 1 FM + VHF + DAB Input
- 1 TETRA Radio Base Station

The combiner combines the two signals into one antenna port, or splits the signal into the two input systems in the receiving direction.

**Reduces cost**

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the inputs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the FM + VHF + DAB / TETRA Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0030	EG 602 0038
Passband:		
Port 1: FM + VHF + DAB	80 - 240 MHz	80 - 240 MHz
Port 2: TETRA	376 - 480 MHz	376 - 480 MHz
Insertion loss:		
Port 1: 80 - 108 MHz	≤ 0.5 dB	≤ 0.5 dB
Port 1: 108 - 174 MHz	≤ 0.5 dB	≤ 0.5 dB
Port 1: 174 - 240 MHz	≤ 0.5 dB	≤ 0.5 dB
Port 2: TETRA	≤ 0.5 dB	≤ 0.5 dB
Input return loss:	> 18.0 dB	> 18.0 dB
Isolation between systems:		
Port 1 - 2: 80 - 108 MHz, 108 - 240 MHz	> 40 dB	> 40 dB
Port 2 - 1: 376 - 480 MHz	> 40 dB	> 40 dB
Max input power/port:		
Port 1:	> 20 W	> 20 W
Port 2:	> 20 W	> 20 W
Impedance in/out:	50 Ohm	50 Ohm
DC-Bypass	Port1 - Ant	Port1 - Ant
<b>Mechanical &amp; Environmental Specifications</b>		
Dimensions (W x H x D):	118 x 119 x 37 mm	110 x 115 x 37 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	1.7 kg	1.4 kg
Sealing:	IP67	Indoor use

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## Dual Band Combiner 80- 960 MHz / 1710 - 2700 MHz



### Reduces cost

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Combines 2 RBSs into 1 Antenna Port

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner.

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>	Single Unit	Double Unit
Product number:	EG 602 0108	EG 602 0109
Passband:		
Port 1: Low band	80 - 960 MHz	80 - 960 MHz
Port 2: High band	1710 - 2700 MHz	1710 - 2700 MHz
Insertion loss:		
Port 1: 80 - 960 MHz- ANT	≤ 0.3 dB (0,2 dB typical)	≤ 0.3 dB (0,2 dB typical)
Port 2: 1710 - 2700 MHz - ANT	≤ 0.5 dB (0,3 dB typical)	≤ 0.5 dB (0,3 dB typical)
Input return loss:		
80 - 960 MHz	> 18.0 dB	> 18.0 dB
1710 - 2700 MHz	> 18.0 dB	> 18.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB
Intermodulation:		
IM3, 2x43 dBm:	<-150 dBc	<-150 dBc
DC by pass Port 1 - Ant	2A max	2A max
Max input power/port:		
Port 1: Low band	< 60 W	< 60 W
Port 2: High band	< 60 W	< 60 W
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	125 x 32 x 110 mm	125 x 68 x 110 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	1.5 kg	3.2 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-35 to +55° C	-35 to +55° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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**Dual Band Combiner**  
**155 - 500 MHz / GPS**

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0049
Passband:	
Port 1: Low band	155 - 500 MHz
Port 2: High band	1575 - 1576 MHz
Insertion loss:	
Port 1: Low band - ANT	$\leq 0.2$ dB
Port 2: High band - ANT	$\leq 0.2$ dB
Input return loss:	
155 - 380 MHz	$> 16.0$ dB
380 - 500 MHz	$> 20.0$ dB
1575 - 1576 MHz	$> 16.0$ dB
Isolation between systems:	
Port 1: - Port2	$\geq 50$ dB
Port 2: - Port1	$\geq 50$ dB
Max input power/port:	
Port 1: Low band	$< 300$ W
Port 2: High band	$< 20$ W
Intermodulation:	
IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)
DC by-pass Port 2 - ANT	1A, max
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	265 x 55 x 120 mm
Connectors:	7/16 (f)
Weight:	1.5 kg

### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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## Dual Band Combiner 376 - 500 MHz / 1920 - 2170 MHz



### Combines 2 RBSs into 1 Antenna Port

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner.

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

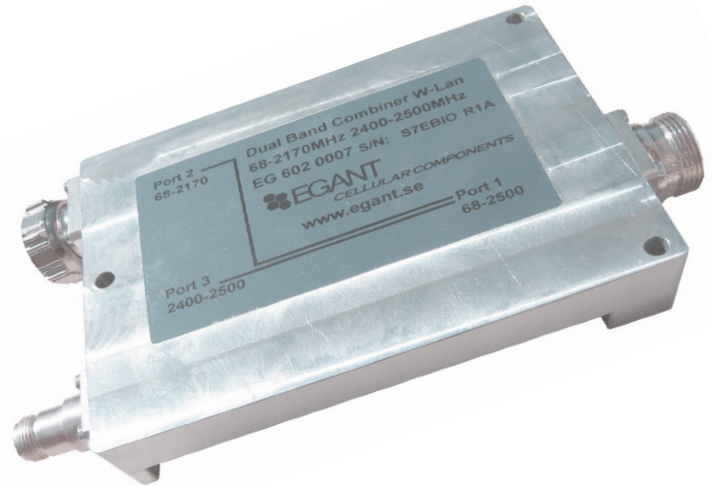
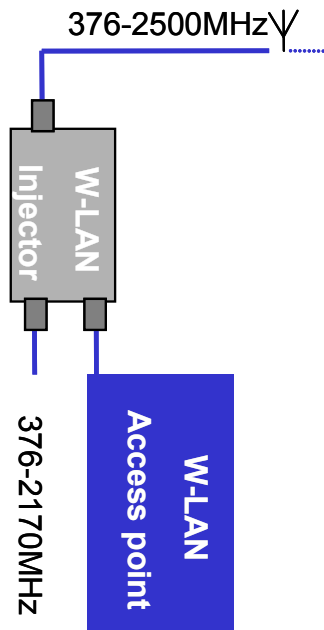
## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0045	EG 602 0046
Passband:		
Port 1: Low band	376 - 500 MHz	376 - 500 MHz
Port 2: High band	1920 - 2170 MHz	1920 - 2170 MHz
Insertion loss:		
Port 1: Low band - ANT	$\leq 0.3$ dB	$\leq 0.3$ dB
Port 2: High band - ANT	$\leq 0.3$ dB	$\leq 0.3$ dB
Input return loss:		
376 - 500 MHz	$> 18.0$ dB	$> 18.0$ dB
1920 - 2170 MHz	$> 18.0$ dB	$> 18.0$ dB
Isolation between systems:		
Port 1: - ANT	$\geq 30$ dB	$\geq 30$ dB
Port 2: - ANT	$\geq 50$ dB	$\geq 50$ dB
Max input power/port:		
Port 1: Low band	$< 300$ W	$< 300$ W
Port 2: High band	$< 500$ W	$< 500$ W
Intermodulation:		
IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)	$\leq -110$ dBm (153 dBc)
DC by-pass Port 2: UMTS - ANT	1A, max	1A, max
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	242 x 31 x 84 mm	242 x 31 x 84 mm
Connectors:	N (f)	7/16 (f)
Weight:	1.5 kg	1.5 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65
Egant reserves the right to change this product specification at any time without notice.		

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**Dual Band Combiner W-LAN**  
**376 - 2500 MHz**  
**TETRA, GSM900, GSM1800, UMTS,**  
**W-LAN**



### **Add W-LAN to your antenna system**

Installing the dual band combiner W-LAN enables you to add W-LAN to your cellular antenna system. After installing the W-LAN combiner and an access point you are up and running with a high speed W-LAN system.

This is a highly important feature when designing shared antenna systems wishing to add W-LAN capability to your system.

### **Save money**

The dual band combiner W-LAN offers additional benefits by opening up W-LAN capability to your existing antenna system.

The sleek and easily installed combiner has a broad-banded spectrum with low insertion loss and low intermodulation.

## Technical Specifications for Dual Band Combiner W-LAN

Below are some typical data. For more detailed information, please contact us.

	EG 100 9018	EG 100 9028	EG 602 0007
<b>Electrical Specifications</b>			
Product number:	EG 100 9018	EG 100 9028	EG 602 0007
Passband:			
Port 1:	376 - 2170 MHz	376 - 2170 MHz	68 - 2500 MHz
Port 2:	2400 - 2500 MHz	2400 - 2500 MHz	68 - 2170 MHz
Port 3:			2400 - 2500 MHz
Input return loss:			
68 - 2170 MHz:	≥ 18 dB	≥ 18 dB	≥ 18 dB
2400 - 2500 MHz:	≥ 16 dB	≥ 16 dB	≥ 16 dB
Insertion loss:			
Port 2 - Port 1 (ANT):			
68 - 2170 MHz:	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)
Port 3 - Port 1 (ANT):			
2400 - 2500 MHz:	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)	≤ 1.0 dB (0.5 typ.)
Isolation: Port 2 - Port 3, Port 3 - Port 2	≥ 50 dB	≥ 50 dB	≥ 50 dB
Max input power/port:	50 W avg. 0.5 kW peak	50 W avg. 0.5 kW peak	50 W avg. 0.5 kW peak
3 <sup>rd</sup> order intermodulation:			
IM3, 2 x 43 dBm:	< - 97 dBm (140 dBc)	< - 97 dBm (140 dBc)	< - 97 dBm (140 dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	180 x 28 x 140 mm	180 x 32 x 140 mm	180 x 32 x 140 mm
Connectors:	N (f)	7/16 (f)	7/16 (f), 7/16 (m), N (f)
Weight:	1.6 kg	1.9 kg	1.9 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-35 to +70° C	-35 to +70° C	-35 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65	IP65

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**Dual Band Combiner**  
**UMTS/LTE**  
**376-2170MHz / 2500-2690 MHz**

**Combines 2 RBSs into 1 Antenna Port**

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner.

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

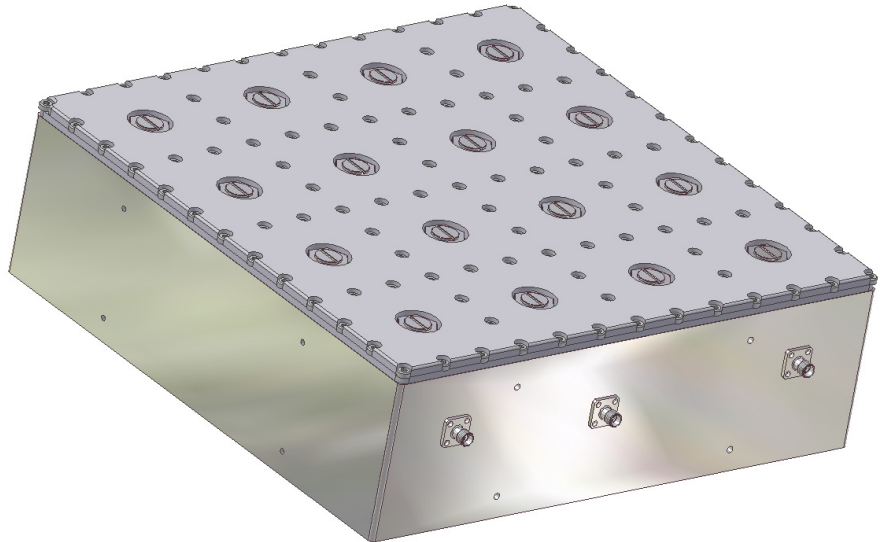
## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0074	EG 602 0076
Passband:		
Port 1: Low band	376 - 2170 MHz	376 - 2170 MHz
Port 2: High band	2500 - 2690 MHz	2500 - 2690 MHz
Insertion loss:		
Port 1: Low band - ANT	$\leq 0.3$ dB, typ $<0.15$ dB	$\leq 0.3$ dB, typ $<0.15$ dB
Port 2: High band - ANT	$\leq 0.3$ dB, typ $<0.15$ dB	$\leq 0.5$ dB, typ $<0.25$ dB
Input return loss:		
1920- 2170 MHz	$> 18.0$ dB	$> 17.5$ dB
2500 - 2690 MHz	$> 18.0$ dB	$> 17.5$ dB
Isolation between systems:		
Port 1: - ANT	$\geq 50$ dB	$\geq 50$ dB
Port 2: - ANT	$\geq 50$ dB	$\geq 50$ dB
Max input power/port:		
Port 1: Low band	$< 400$ W	$< 60$ W
Port 2: High band	$< 100$ W	$< 60$ W
Intermodulation:		
IM3, 2 x 43 dBm:	$\leq -140$ dBc	$\leq -140$ dBc
Impedance in/out:		
	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	265 x 55 x 120 mm	140 x 35 x 138 mm
Connectors:	7/16 (f)	N (f)
Weight:	1.5 kg	1.2 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-35 to +60° C	-35 to +60° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP67	IP67
Egant reserves the right to change this product specification at any time without notice.		

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**Dual Band Combiner**  
**380 - 395 MHz / 410 - 425 MHz**  
**TETRA Public Safety**  
**TETRA Public Services**



**Combines 2 RBSs into 1 Antenna Port**

This Dual Band Combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 TETRA Public Safety System
- 1 TETRA Public Services System

The Combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing the Egant Dual Band Combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0023	EG 602 0024
Passband:		
Port 1: TETRA - Public Safety	380 - 395 MHz	380 - 395 MHz
Port 2: TETRA - Public Services	410 - 425 MHz	410 - 425 MHz
Insertion loss:		
Port 1: TETRA - Public Safety	≤ 1.2 dB	≤ 1.2 dB
Port 2: TETRA - Public Services	≤ 1.2 dB	≤ 1.2 dB
Input return loss:	> 18.0 dB	> 18.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB
Max input power/port:		
Port 1: TETRA - Public Safety	< 60W	< 60W
Port 2: TETRA - Public Services	< 60W	< 60W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	150 x 150 x 110 mm	150 x 150 x 110 mm
Connectors:	N (f)	7/16 (f)
Weight:	2.5 kg	2.5 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Sealing:	Indoor	Indoor

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**Dual Band Combiner**  
**380 - 395 MHz / 440 - 450 MHz**  
**TETRA Public Safety**  
**TETRA Public Services**

**Combines 2 RBSs into 1 Antenna Port**

This Dual Band Combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 TETRA Public Safety System
- 1 TETRA Public Services System

The Combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing the Egant Dual Band Combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0191
Passband:	
Port 1:	380 - 395 MHz
Port 2:	440 - 450 MHz
Insertion loss:	$\leq 1.4$ dB, (Typ 0.8dB)
Input return loss:	$> 18.0$ dB
Isolation between systems:	$\geq 50$ dB
Max input power/port:	$< 60$ W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	150 x 150 x 110 mm
Connectors:	7/16 (f)
Weight:	2.5 kg

### Environmental Specifications

Temp. range (normal operation):	-20 to +55° C
Sealing:	Indoor

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## **Dual Band Combiner**

**380 - 395 MHz**

**442,975 - 448,975 MHz**

### **Combines 2 RBSs into 1 Antenna Port**

This Dual Band Combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 TETRA Public Safety System
- 1 TETRA Public Services System

The Combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### **Reduces cost**

By utilizing the Egant Dual Band Combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0176
Passband:	
Port 1:	380 - 395 MHz
Port 2:	442,975 - 448,975 MHz
Insertion loss:	
Port 1:	≤ 1.2 dB, (Typ 0.7dB)
Port 2: TETRA	≤ 1.2 dB, (Typ 0.7dB)
Input return loss:	> 16.0 dB
Isolation between systems:	≥ 40 dB
Max input power/port:	
Port 1: TETRA - Public Safety	< 60W
Port 2: TETRA - Public Services	< 60W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	150 x 150 x 110 mm
Connectors:	N (f)
Weight:	2.5 kg

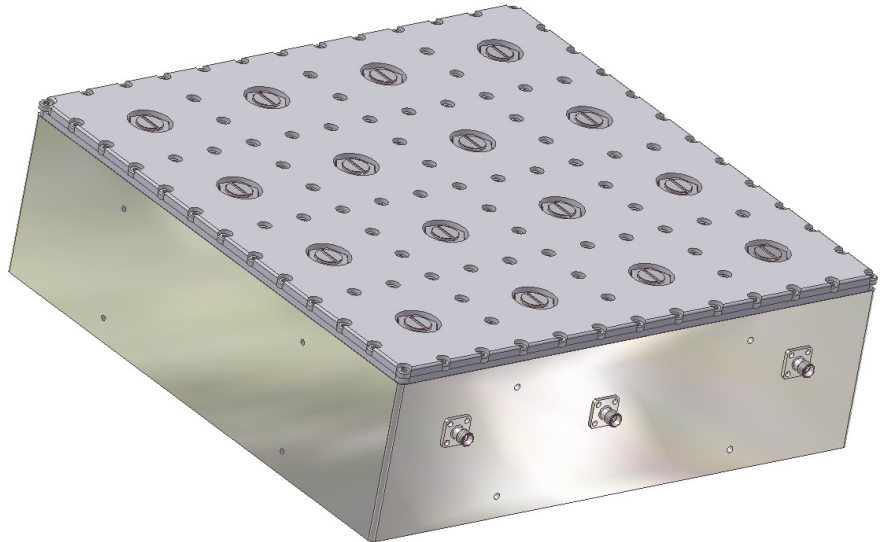
### Environmental Specifications

Temp. range (normal operation):	-5 to +65° C
Sealing:	Indoor

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**Dual Band Combiner**  
**380 - 395 MHz / 450 - 470 MHz**  
**TETRA Public Safety**  
**TETRA Public Services**



**Combines 2 RBSs into 1 Antenna Port**

This Dual Band Combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 TETRA Public Safety System
- 1 TETRA Public Services System

The Combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Reduces cost**

By utilizing the Egant Dual Band Combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0094
Passband:	
Port 1: TETRA - Public Safety	380 - 395 MHz
Port 2: TETRA - Public Services	450 - 470 MHz
Insertion loss:	
Port 1: TETRA - Public Safety	≤ 1.2 dB, (Typ 0.7dB)
Port 2: TETRA - Public Services	≤ 1.2 dB, (Typ 0.7dB)
Input return loss:	> 18.0 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	
Port 1: TETRA - Public Safety	< 60W
Port 2: TETRA - Public Services	< 60W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	150 x 150 x 110 mm
Connectors:	N (f)
Weight:	2.5 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Sealing:	Indoor

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## Dual Band Combiner 790 - 862 MHz / 880 - 960 MHz



### Combines 2 RBSs into 1 antenna port

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 LTE 800 Radio Base Station
- 1 GSM900 Radio Base Station

The combiner combines the 2 signals to the antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0097	EG 602 0112
Passband:		
Port 1: DVB	790 - 862 MHz	790 - 862 MHz
Port 2: GSM900	880 - 960 MHz	880 - 960 MHz
Insertion loss:		
Port 1: DVB	≤ 0.45 dB, typ 0.2dB	≤ 0.45 dB, typ 0.2dB
Port 2: GSM900	≤ 0.45 dB, typ 0.2dB	≤ 0.45 dB, typ 0.2dB
Input return loss:	> 18.0 dB	> 18.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB
Max input power/port:		
Port 1: DVB	200 W	200 W
Port 2: GSM900	200 W	200 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	200 x 60 x 185 mm	200 x 60 x 185 mm
Connectors:	7/16 (f)	N (f)
Weight:	3.2 kg	3.1 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## Dual Band Combiner

790 - 1000 MHz, 1710 - 2170 MHz



### Combines 2 RBSs into 1 Antenna Port

This Dual Band Combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 800/900 Radio Base Station
- 1 1800/2100 Radio Base Station

The Combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing the Egant Dual Band Combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0110
Passband:	
Port 1: 800/900	790 - 1000 MHz
Port 2: 1800/2100	1710 - 2170 MHz
Insertion loss:	
Port 1: 800/900	≤ 0.3dB, typ 0.15dB
Port 2: 1800/2100	≤ 0.5dB, typ 0.25dB
Input return loss:	> 18.0 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	
Port 1: 800/900	< 250W
Port 2: 1800/2100	< 150W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	≤ -117 dBm (160 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	117 x 215 x 50 mm
Connectors:	7/16 (f)
Weight:	1.5 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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## Dual Band Combiner 800 - 1000 MHz, 1700 - 2170 MHz



### Reduces cost

By utilizing the Egant Dual Band Combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Combines 2 RBSs into 1 Antenna Port

This Dual Band Combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 GSM800 / GSM900 Radio Base Station
- 1 CDMA / GSM1800 Radio Base Station or
- 1 GSM1900 / UMTS Radio Base Station

The Combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

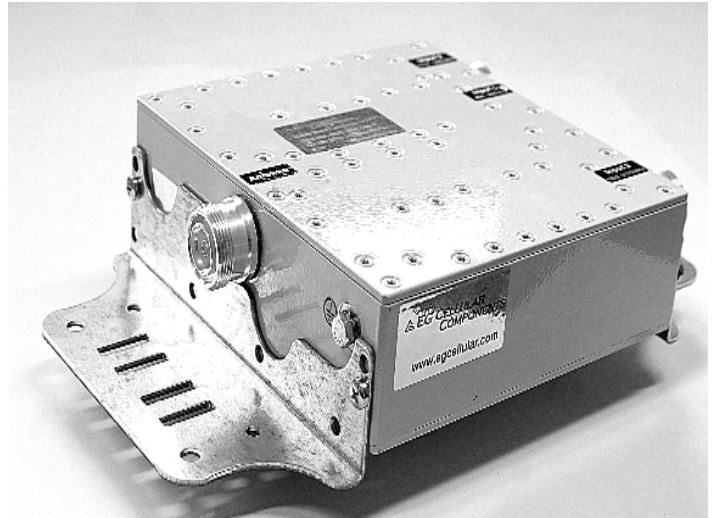
<b>Electrical Specifications</b>		
Product number:	EG 100 9013	EG 100 9014
Passband:		
Port 1: GSM800 / GSM900 / CDMA	800 - 1000 MHz	800 - 1000 MHz
Port 2: GSM1800 / GSM1900 / UMTS	1700 - 2170 MHz	1700 - 2170 MHz
Insertion loss:		
Port 1: GSM800 / GSM900 / CDMA	≤ 0.15 dB	≤ 0.15 dB
Port 2: GSM1800 / GSM1900 / UMTS	≤ 0.25 dB	≤ 0.25 dB
Input return loss:	> 21.0 dB	> 21.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB
Max input power/port:		
Port 1: GSM800 / GSM900 / CDMA	< 250W	< 250W
Port 2: GSM1800 / GSM1900 / UMTS	< 150W	< 150W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	117 x 215 x 50 mm	117 x 215 x 50 mm
Connectors:	7/16 (f)	N (f)
Weight:	1.5 kg	1.5 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## Dual Band Combiner GSM900, GSM1800



### Reduces cost

By utilizing the Egant dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Combines 2 RBSs into 1 antenna port

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner:

- 1 GSM900 Radio Base Station
- 1 GSM1800 Radio Base Station

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>	
Product number:	EG 602 0034
Passband:	
Port 1: GSM900	880 - 960 MHz
Port 2: GSM1800	1710 - 1880 MHz
Insertion loss:	
Port 1: GSM900 - ANT	≤ 0.2 dB (0.1 dB typ)
Port 2: GSM1800 - ANT	≤ 0.4 dB (0.2 dB typ)
Input return loss:	> 18.0 dB
Isolation between systems:	≥ 50 dB
Rejection 1920 - 2170 MHz (UMTS):	> 65.0 dB
Max input power/port:	
Port 1: GSM900	100 W
Port 2: GSM1800	100 W
Impedance in/out:	50 Ohm
<b>Mechanical Specifications</b>	
Dimensions (W x H x D):	195 x 185 x 55 mm
Connectors:	7/16 (f)
Weight:	4 kg
<b>Environmental Specifications</b>	
Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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## **Dual Band Combiner**

**890-960 MHz / 1710-1880, 1920-2170,  
2600-2700MHz MHz**

### **Combines 2 RBSs into 1 Antenna Port**

This dual band combiner enables the connection of 2 Radio Base Stations to the combiner.

The combiner combines the 2 signals to 1 antenna port, or splits the signal to the 2 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### **Reduces cost**

By utilizing our dual band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

## Technical Specifications for the Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0096
Passband:	
Port 1: Low band	890 - 960 MHz
Port 2: High band	1710 - 1880 MHz 1920 - 2170 MHz 2600- 2700 MHz
Insertion loss:	
Port 1: Low band - ANT	≤ 0.3 dB, typ 0,15dB
Port 2: High band - ANT	≤ 0.4dB, typ 0,15dB
Input return loss:	> 16.0 dB
Isolation between systems:	≥ 50 dB
Max input power/port:	
Port 1: Low band	< 150 W
Port 2: High band	< 150 W
Intermodulation:	
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)
DC by-pass Port 2: UMTS - ANT	1A, max
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	265 x 55 x 120 mm
Connectors:	7/16 (f)
Weight:	2.5 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +60° C
Humidity:	Relative 5 - 100%
Sealing:	IP66

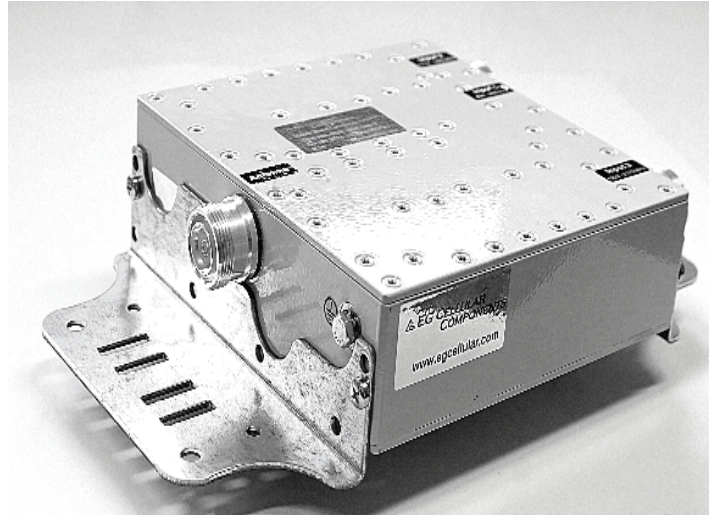
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## Triple Band Combiner/Dual Band Combiner UMTS, GSM1800, GSM900 / GSM1800, UMTS



### Combines 3 RBSs into 1 antenna port

This triple band combiner enables the connection of 3 Radio Base Stations to the combiner:

- 1 GSM900 Radio Base Station
- 1 GSM1800 Radio Base Station
- 1 UMTS Radio Base Station

The combiner combines the 3 signals to 1 antenna port, or splits the signal to the 3 RBSs in the receiving direction.

This is a highly desirable function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Reduces cost

By utilizing our triple band combiner you will reduce the cost of antennas, feeders and installation.

It eliminates the cost inefficient need to make one antenna installation for each system. By simply connecting the RBSs into the combiner it will immediately render you all the benefits of antenna sharing.

### Dual Band Combiner - combines 2 RBSs into 1 antenna port

The dual band combiner enables you to connect 2 Radio Base Stations to the combiner:

- 1 GSM1800 Radio Base Station
- 1 UMTS Radio Base Station

## Technical Specifications for the Triple Band Combiner/Dual Band Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 100 9012	EG 100 9009
Passband:		
Port 1: GSM900	698 - 960 MHz	
Port 2: GSM1800	1710 - 1880 MHz	1710 - 1880 MHz
Port 3: UMTS	1920 - 2170 MHz	1920 - 2170 MHz
Insertion loss:		
Port 1: GSM900 - ANT	≤ 0.20 dB	
Port 2: GSM1800 - ANT	≤ 0.30 dB	≤ 0.40 dB
Port 3: UMTS - ANT	≤ 0.45 dB	≤ 0.45 dB
Input return loss:	> 21.0 dB	> 20.0 dB
Isolation between systems:	≥ 50 dB	≥ 50 dB
Max input power/port:		
Port 1: GSM900	< 200 W	
Port 2: GSM1800	< 200 W	< 200 W
Port 3: UMTS	< 100 W	< 100 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153dBc)
DC by-pass between all inputs to output:	1A, max, per input	1A, max, per input
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	230 x 200 x 555 mm	245 x 210 x 50 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	3.6 kg	3.6 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP66	IP66

Egant reserves the right to change this product specification at any time without notice.

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## Duplex Filter

[www.egant.se](http://www.egant.se)

### Frequency range

#### *Duplex Filter*

380-385, 390-395MHz

380-385, 390-395MHz

380-385, 390-395MHz

415-420, 425-430MHz

791-821, 832-862MHz

876-880, 921-925MHz

876-880, 921-925MHz

880-915, 925-960MHz

880-915, 925-960MHz

880-915, 925-960MHz

890-915, 935-960MHz

890-915, 935-960MHz

890-915, 935-960MHz

890-915, 935-960MHz

1710-1785, 1805-1880MHz

1710-1785, 1805-1880MHz

1920-1980, 2110-2170MHz

1920-1980, 2110-2170MHz

1920-1980, 2110-2170MHz

2500-2570, 2620-2690MHz

2500-2570, 2620-2690MHz

2500-2570, 2620-2690MHz

2500-2570, 2620-2690MHz

2500-2570, 2620-2690MHz

2500-2570, 2620-2690MHz

### Description

Duplex Filter Tetra

Duplex Filter Tetra

Duplex Filter Tetra

Duplex Filter Tetra

Duplex Filter 800

Duplex GSM-R

Duplex GSM-R

Duplex Filter 900

Duplex Filter 900

Duplex Filter 900

Duplex Filter 900

Duplex Filter 900

Duplex Filter 900

Duplex Filter 900

Duplex Filter 1800

Duplex Filter 1800

Duplex Filter 2100

Duplex Filter 2100

Duplex Filter 2100

Duplex Filter 2600

Duplex Filter 2600

Duplex Filter 2600

Duplex Filter 2600

Duplex Filter 2600

Duplex Filter 2600

### Connector

N(f)

7/16(f)

7/16(f)

SMA(f)

7/16(f)

7/16(f)

N(f)

N(f)

SMA(f)

7/16(f)

7/16(f)

N(f)

SMA(f)

7/16(f)

N(f)

7/16(f)

N(f)

7/16(f)

7/16(f)

N(f)

7/16(f)

7/16(f)

N(f)

SMA(f)

N(f)

### Ordering number

EG 602 0084

EG 602 0020

EG 602 0021

EG 602 0037

EG 602 0192

EG 602 0148

EG 602 0149

EG 602 0079

EG 602 0087

EG 602 0091

EG 602 0090

EG 602 0088

EG 602 0089

EG 602 0090

EG 602 0055

EG 602 0193

EG 602 0056

EG 602 0171

EG 602 0194

EG 602 0104

EG 602 0195

EG 602 0103

EG 602 0104

EG 602 0105

EG 602 0106



## **Duplexer TETRA**

**380 - 385 MHz**

**390 - 395 MHz**

This Duplexer combines/splits the TETRA TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for TETRA Duplexers

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0084
Passband:	
Port 1: RX	380 - 385 MHz
Port 2: TX	390 - 395 MHz
Insertion loss:	$\leq 1.7$ dB
Input return loss:	$> 18.0$ dB
Isolation between TX/RX:	$\geq 65$ dB
Max input power/port:	200 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)

Monitoring port:

### Mechanical Specifications

Dimensions (W x H x D):	100 x 150 x 100 mm
Connectors:	N (f)
Weight:	1.4 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	Indoor use

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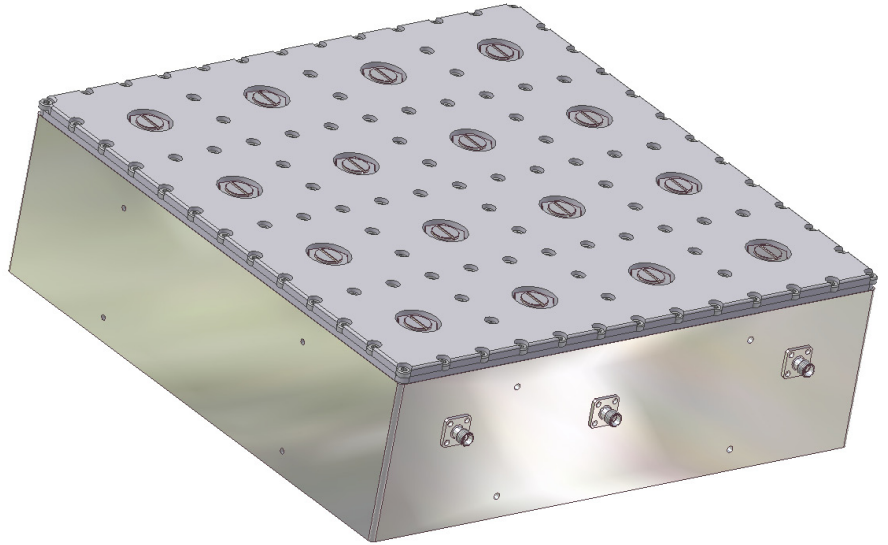
## Duplexer TETRA

380 - 385 MHz

390 - 395 MHz

415 - 420 MHz

425 - 430 MHz



This Duplexer combines/splits the TETRA TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for TETRA Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0020	EG 602 0021	EG 602 0037
Passband:			
Port 1: RX	380 - 385 MHz	380 - 385 MHz	415 - 420 MHz
Port 2: TX	390 - 395 MHz	390 - 395 MHz	425 - 430 MHz
Insertion loss:	≤ 1.5 dB	≤ 0.8 dB	≤ 1.9 dB (1.2 typ)
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB
Isolation between TX/RX:	≥ 65 dB	≥ 65 dB	≥ 75 dB
Max input power/port:	200 W	200 W	80 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Intermodulation:			
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Monitoring port:			20 dB
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	100 x 150 x 100 mm	100 x 250 x 300 mm	240 x 240 x 80 mm
Connectors:	7/16 (f)	7/16 (f)	SMA
Weight:	1.4 kg	4.2 kg	3 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C	-10 to +60° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use

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**LTE 800 Duplexer**  
**791 - 821MHz 832 - 862MHz**



This Duplexer combines/splits the LTE800 TX and RX signals to or from one common TX/RX antenna.



## Technical Specifications for LTE800 Duplexers

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0192
Passband: (To be configured for customers needs)	
Port 1: TX	791 - 821MHz
Port 2: RX	832 - 862MHz
Insertion loss:	$\leq 1.0$ dB, typ 0.6dB
Input return loss:	$> 18.0$ dB
Isolation between TX/RX:	$\geq 50$ dB
Max input power/port:	100 W
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	175 x 45 x 155 mm
Connectors:	7/16 (f)
Weight:	1.8 kg

### Environmental Specifications

Temp. range (normal operation):	-20 to +55° C
Humidity:	Relative 5 - 100%
Sealing:	Indoor use

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## Duplexer GSM-R

876 - 880 MHz

921 - 925 MHz



This Duplexer combines/splits the GSM-R TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for GSM-R Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0148	EG 602 0149
Passband:		
Port 1: RX	876 - 880 MHz	876 - 880 MHz
Port 2: TX	921 - 925 MHz	921 - 925 MHz
Insertion loss:	≤ 0.5 dB, typ 0.3dB	≤ 0.5 dB, typ 0.3dB
Input return loss:	> 18.0 dB	> 18.0 dB
Isolation between TX/RX:	≥ 85 dB	≥ 85 dB
Max input power/port:	250 W	250 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	160 x 55 x 120 mm	160 x 55 x 120 mm
Connectors:	7/16 (f)	N (f)
Weight:	2.5 kg	2.5 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-20 to +55° C	-20 to +55° C
Humidity:	Relative 5 - 95%	Relative 5 - 95%
Sealing:	Indoor use	Indoor use

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## Duplexer EGSM900

880 - 915 MHz

925 - 960 MHz



This Duplexer combines/splits the EGSM900 TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for EGSM900 Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0079	EG 602 0087	EG 602 0091
Passband:			
Port 1: RX	880 - 915 MHz	880 - 915 MHz	880 - 915 MHz
Port 2: TX	925 - 960 MHz	925 - 960 MHz	925 - 960 MHz
Insertion loss:			
Port 1: RX	≤ 0.9 dB, typ 0.5dB	≤ 0.9 dB, typ 0.5dB	≤ 0.9 dB, typ 0.5dB
Port 2: TX	≤ 1.1 dB, typ 0.5dB	≤ 1.1 dB, typ 0.5dB	≤ 1.1 dB, typ 0.5dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB
Isolation between TX/RX:	≥ 50 dB	≥ 50 dB	≥ 50 dB
Max input power/port:	200 W	200 W	200 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Intermodulation:			
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	180 x 60 x 110 mm	180 x 60 x 100 mm	180 x 60 x 130 mm
Connectors:	N (f)	SMA (f)	7/16 (f)
Weight:	1.5 kg	1.5 kg	1.6 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use

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**Duplexer GSM900**

**890 - 915 MHz**

**935 - 960 MHz**

This Duplexer combines/splits the GSM900 TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for GSM900 Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0088	EG 602 0089	EG 602 0090
Passband:			
Port 1: RX	890 - 915 MHz	890 - 915 MHz	890 - 915 MHz
Port 2: TX	935 - 960 MHz	935 - 960 MHz	935 - 960 MHz
Insertion loss:	≤ 0.7 dB, typ 0.5dB	≤ 0.7 dB, typ 0.5dB	≤ 0.7 dB, typ 0.5dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB
Isolation between TX/RX:	≥ 60 dB	≥ 60 dB	≥ 60 dB
Max input power/port:	200 W	200 W	200 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Intermodulation: IM3, 2 x 43 dBm:	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	180 x 60 x 110 mm	180 x 60 x 100 mm	180 x 60 x 130 mm
Connectors:	N (f)	SMA (f)	7/16 (f)
Weight:	1.5 kg	1.5 kg	1.6 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use

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**Duplexer**

**1710 - 1785MHz, 1805 - 1880MHz  
1920 - 1980MHz, 2110 - 2170MHz**

This Duplexer combines/splits the GSM1800 or UMTS TX and RX signals to or from one common TX/RX antenna.



## Technical Specifications for GSM1800, UMTS Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0055	EG 602 0056	EG 602 0171
Passband: (To be configured for customers needs)			
Port 1: RX	1710 - 1785MHz	1920 - 1980MHz	1920 - 1980MHz
Port 2: TX	1805 - 1880MHz	2110 - 2170MHz	2110 - 2170MHz
Insertion loss:	≤ 1.2 dB, typ 0.6dB	≤ 1.2 dB, typ 0.6dB	≤ 1.2 dB, typ 0.6dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB
Isolation between TX/RX:	≥ 75 dB, typ 90dB	≥ 75 dB, typ 90dB	≥ 75 dB, typ 90dB
Max input power/port:	100 W	100 W	100 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	145 x 45 x 145 mm	145 x 45 x 145 mm	145 x 45 x 145 mm
Connectors:	N (f)	N (f)	7/16 (f)
Weight:	0.9. kg	0.9 kg	0.9 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	0 to +70° C	0 to +70° C	0 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use

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### **Duplexer**

**1710 - 1785MHz, 1805 - 1880MHz**

**1920 - 1980MHz, 2110 - 2170MHz**

**2500 - 2570MHz, 2620 - 2690MHz**

This Duplexer combines/splits the GSM1800, UMTS or LTE2600 TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for GSM1800, UMTS2100, LTE2600 Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0193	EG 602 0194	EG 602 0195
Passband: (To be configured for customers needs)			
Port 1: RX	1710 - 1785MHz	1920 - 1980MHz	2500 - 2570MHz
Port 2: TX	1805 - 1880MHz	2110 - 2170MHz	2620 - 2690MHz
Insertion loss:	≤ 1.0 dB, typ 0.6dB	≤ 0.8 dB, typ 0.5dB	≤ 0.7 dB, typ 0.4dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB
Isolation between TX/RX:	≥ 50 dB	≥ 50 dB, typ 60dB	≥ 60 dB, typ 70dB
Max input power/port:	100 W	100 W	100 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	175 x 45 x 155 mm	175 x 40 x 155 mm	175 x 45 x 155 mm
Connectors:	7/16 (f)	7/16 (f)	7/16 (f)
Weight:	1.8 kg	1.5 kg	1.5 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-20 to +55° C	-20 to +55° C	-20 to +55° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use

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**Duplexer LTE**  
**2500-2570MHz**  
**2620-2690MHz**

This Duplexer combines/splits the LTE TX and RX signals to or from one common TX/RX antenna.

## Technical Specifications for LTE Duplexers

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>				
Product number:	EG 602 0103	EG 602 0104	EG 602 0105	EG 602 0106
Passband:				
Port 1: RX	2500-2570MHz	2500-2570MHz	2500-2570MHz	2500-2570MHz
Port 2: TX	2620-2690MHz	2620-2690MHz	2620-2690MHz	2620-2690MHz
Insertion loss:	≤ 0.7 dB, typ 0,3dB	≤ 0.7 dB, typ 0.3dB	≤ 0.9 dB, typ 0.6dB	≤ 0.9 dB, typ 0.6dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB	> 18.0 dB
Isolation between TX/RX:	≥ 60 dB, typ 70dB	≥ 60 dB, typ 70dB	≥ 75 dB, typ 85dB	≥ 75 dB, typ 85dB
Max input power/port:	200 W	200 W	200 W	200 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
Intermodulation: IM3, 2 x 43 dBm:	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)
<b>Mechanical Specifications</b>				
Dimensions (W x H x D):	176 x 38 x 115 mm	176 x 38 x 115 mm	200 x 45 x 140 mm	200 x 45 x 140 mm
Connectors:	SMA (f)	N (f)	SMA (f)	N (f)
Weight:	1.5 Kg	1.5 Kg	2.8 Kg	2.8 Kg
<b>Environmental Specifications</b>				
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use	Indoor use

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## Band Pass Filter

[www.egant.se](http://www.egant.se)

### Frequency range

#### *Band Pass Filters*

380-395MHz  
880-960MHz  
880-960MHz  
890-960MHz  
880-960MHz  
890-960MHz  
890-960MHz  
1710-1880MHz  
1920-2170MHz  
1935-1965, 2125-2155MHz  
1950-1965, 2140-2155MHz

### Description

Band Pass Filter Tetra, reject 403-2170  
Band Pass Filter 900, reject 0-850, 990-6000  
Band Pass Filter 900, reject 0-889  
Band Pass Filter 900, reject 0-888  
Band Pass Filter 900, reject 0-888,5  
Band Pass Filter 900, reject 0-888,5  
Band Pass Filter 900, reject 1920-2170  
Band Pass Filter 1800, reject 1920-2170  
Band Pass Filter 2100, reject < 1900, > 2190  
Band Pass Filter 2100, reject 1970-2000  
Band Pass Filter 2100, reject 1970-2000

### Connector

7/16(f)  
7/16(f)  
7/16(f)  
7/16(f)  
7/16(m)-7/16(f)  
7/16(m)-7/16(f)  
7/16(f)  
7/16(f)  
7/16(f)  
7/16(m)-7/16(f)  
7/16(m)-7/16(f)

### Ordering number

EG 602 0181  
EG 602 0152  
EG 602 0142  
EG 602 0169  
EG 601 0198  
EG 601 0199  
EG 602 0031  
EG 602 0032  
EG 602 0170  
EG 602 0201  
EG 602 0200



**Band Pass Filter**

**Tetra 380 - 395 MHz**

**GSM900 880 - 960 MHz**

**UMTS2100 1920 - 2170 MHz**

## Technical Specifications for TETRA, GMS900, UMTS2100 Band Pass Filter

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0181	EG 602 0152	EG 602 0153
Passband:	380 - 395 MHz	880 - 960 MHz	1920 - 2170 MHz
Reject Band:	403 - 2170MHz	0 - 850MHz 990 - 6000GHz	0 - 1850MHz 2250 - 6000MHz
Insertion loss:	≤ 2.4 dB, typ 1,5dB	≤ 1.8 dB, typ 0,8dB	≤ 1.8 dB, typ 0,7dB
Input return loss:	> 16.0 dB	> 16.0 dB	> 16.0 dB
Attenuation in reject band:			
Reject Band: 0 -340 MHz	≥ 60 dB		
Reject Band: 403 -1920 MHz	≥ 60 dB		
Reject Band: 1920 - 3GHz	≥ 70 dB		
Reject Band: 0GHz - 850MHz		> 70dB	
Reject Band: 990MHz - 3GHz		> 70dB	
Reject Band: 0GHz - 1850MHz			> 70dB
Reject Band: 2250 - 3GHz			> 70dB
Reject Band: 3GHz - 6GHz	> 70dB	> 70dB	> 70dB
Reject Band: 6GHz - 10GHz	> 50dB	> 50dB	> 50dB
Reject Band: 10GHz - 18GHz	> 20dB	> 20dB	> 20dB
Max input power/port:	100 W	100 W	100 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	140 x 75 x 75 mm	175 x 45 x 165 mm	175 x 45 x 165 mm
Connectors:	7/16 (f)	7/16 (f)	7/16 (f)
Weight:	1.5 kg	1.8 kg	1.8kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use	Indoor use

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**Band Pass Filter**  
**GSM900 890 - 960 MHz**  
**Stop band: 0-889MHz**



## Technical Specifications for the Band Pass Filter GSM900

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0142	EG 602 0147
Passband:	890 - 960 MHz	890 - 960 MHz
Stop band	0 - 889 MHz	0 - 889 MHz
Insertion loss:		
890 - 891 MHz	≤ 4 dB	≤ 4 dB
891 - 892 MHz	≤ 2.5 dB	≤ 2.5 dB
892 - 893 MHz	≤ 1.0 dB	≤ 1.0 dB
893 - 905 MHz	≤ 0.6 dB	≤ 0.6 dB
905 - 960 MHz	≤ 0.3 dB	≤ 0.3 dB
Input return loss:	> 17.5 dB	> 17.5 dB
Attenuation in rejection band:		
0 - 869 MHz	≥ 50 dB	≥ 50 dB
869 - 889 MHz	≥ 30 dB	≥ 30 dB
Max input power/port:	400 W	400 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm	≤ -110 dBm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	300 x 72 x 95 mm	310 x 82 x 105 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	2.5 kg	3.4 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	0 to + 40° C	-20 to + 55° C
Sealing:	IP50	IP65

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**Band Pass Filter**  
**GSM900 890 - 960 MHz**  
**Stop band: 0-888MHz**



## Technical Specifications for the Band Pass Filter GSM900

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0169
Passband:	890 - 960 MHz
Stop band	0 - 888 MHz
Insertion loss:	
890 - 892 MHz	≤ 1.5 dB
892 - 893 MHz	≤ 0.8 dB
893 - 905 MHz	≤ 0.6 dB
905 - 960 MHz	≤ 0.3 dB
Input return loss:	> 17.5 dB
Attenuation in rejection band:	
0 - 880 MHz	≥ 50 dB
880 - 885 MHz	≥ 40 dB
885 - 888 MHz	≥ 30 dB
Max input power/port:	400 W
Impedance in/out:	50 Ohm
Intermodulation:	
IM3, 2 x 43 dBm:	≤ -110 dBm, (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	300 x 72 x 95 mm
Connectors:	7/16 (f)
Weight:	2.5 kg

### Environmental Specifications

Temp. range (normal operation):	-35 to + 65° C
Sealing:	IP66

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**Band Pass Filter**  
**GSM900 890 - 960 MHz**  
**Stop band: 0-888.5MHz**



## Technical Specifications for the Band Pass Filter GSM900

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0198	EG 602 0199
Passband:	890 - 960 MHz	890 - 960 MHz
Stop band	0 - 888.5 MHz	0 - 888.5 MHz
Insertion loss:		
890 - 892 MHz	≤ 4.0 dB	≤ 4.0 dB
892 - 893 MHz	≤ 2.0 dB	≤ 2.0 dB
893 - 960 MHz	≤ 1.0 dB, typ 0,4 dB	≤ 1.0 dB, typ 0,4 dB
Input return loss:	> 18 dB, typ 22 dB	> 18 dB, typ 22 dB
Attenuation in rejection band:		
0 - 888.5 MHz	≥ 50 dB	≥ 50 dB
Max input power/port:	200 W	200 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm, (153 dBc)	≤ -110 dBm, (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	300 x 60 x 180 mm	320 x 72 x 200 mm
Connectors:	7/16 (f) - 7/16(m)	7/16 (f) - 7/16(m)
Weight:	2.5 kg	3.0 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	+5 to + 45° C	-30 to + 65° C
Sealing:	Indoor	IP66

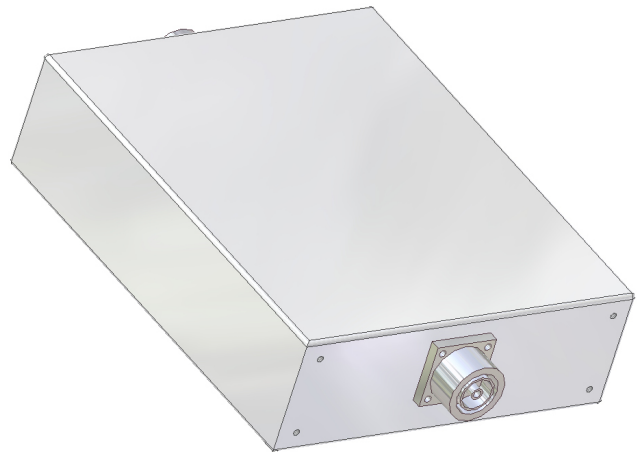
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**Band Pass Filter**  
**GSM900 / GSM1800**  
890 - 960 MHz  
1710 - 1880 MHz

PRELIMINARY



## Technical Specifications for the Band Pass Filter GSM900 / GSM1800

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0031	EG 602 0032
Passband:	890 - 960 MHz	1710 - 1880 MHz
Rejectband	1920 - 2170 MHz	1920 - 2170 MHz
Insertion loss:	≤ 1 dB (0.5 typ)	≤ 1 dB (0.5 typ)
Input return loss:	> 18 dB	> 18 dB
Attenuation in rejection band:	≥ 60 dB	≥ 60 dB
Max input power/port:	100 W	100 W
DC Bypass	Yes	Yes
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	195 x 150 x 70 mm	195 x 150 x 70 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	1.4 kg	1.4 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-40 to +70° C	-40 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	Indoor use	Indoor use

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**Band Pass Filter**  
**UMTS 1920 - 2170 MHz**



## Technical Specifications for the Band Pass Filter UMTS2100

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0170
Passband:	1920 - 2170 MHz
Stop band	$\leq 1900$ MHz $\geq 2190$ MHz
Insertion loss: 1920 - 2170 MHz	$\leq 0.5$ dB
Input return loss:	$> 17.5$ dB
Attenuation in rejection band: 0 -1900 MHz $\geq 2190$ MHz	$\geq 50$ dB $\geq 30$ dB
Max input power/port:	150 W
Impedance in/out:	50 Ohm
Intermodulation: IM3, 2 x 43 dBm:	$\leq -110$ dBm, (153 dBc)

### Mechanical Specifications

Dimensions (W x H x D):	190 x 120 x 50 mm
Connectors:	7/16 (f)
Weight:	2.3 kg

### Environmental Specifications

Temp. range (normal operation):	-35 to + 65° C
Sealing:	IP66

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**Dual Band Pass Filter**  
**UMTS2100**



## Technical Specifications for the Band Pass Filter UMTS2100

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 602 0200	EG 602 0201
Passband RX:	1950 - 1965 MHz	1935 - 1965 MHz
Passband TX:	2140 - 2155 MHz	2125 - 2155 MHz
Stop band	1970 - 2000 MHz	1970 - 2000 MHz
Insertion loss:		
RX:	≤ 1.5 dB	≤ 1.5 dB
TX:	≤ 0.8 dB	≤ 0.8 dB
Input return loss:	> 18 dB	> 18 dB
Attenuation in rejection band:		
1970 - 1980 MHz	≥ 40 dB	≥ 40 dB
1980 - 2000 MHz	≥ 50 dB	≥ 50 dB
Max input power/port:	100 W	100 W
Impedance in/out:	50 Ohm	50 Ohm
Intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm, (153 dBc)	≤ -110 dBm, (153 dBc)
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	300 x 72 x 95 mm	300 x 72 x 95 mm
Connectors:	7/16 (f) - 7/16(m)	7/16 (f) - 7/16(m)
Weight:	3.5 kg	3.5 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to + 65° C	-30 to + 65° C
Sealing:	IP66	IP66

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## Phase Adjuster

[www.egant.se](http://www.egant.se)

### **Frequency range**

#### *Phase Adjuster*

791-821, 832-862MHz

890-915, 935-960MHz

880-915, 925-960MHz

2500-2570, 2620-2690MHz

### **Description**

Phase Adjuster LTE800

Phase Adjuster GSM900

Phase Adjuster EGSM

Phase Adjuster LTE2600

### **Connector**

7/16(f)

7/16(f)

7/16(f)

7/16(f)

### **Ordering number**

EG 602 0137

EG 100 9032

EG 602 0133

EG 602 0138



**Phase Adjuster / Duplexer  
LTE 800**



## Technical Specifications for the Phase Adjuster/Duplexer

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0137
Passband:	791 - 821, 832 - 862 MHz
Insertion loss:	
Port 1 - Ant 1: 791 - 821 MHz	≤ 1.5 dB (0.9 dB typ)
Port 2 - Ant 2: 791 - 821 MHz	≤ 1.5 dB (0.9 dB typ)
Port 2 - Ant 1: 832 - 862 MHz	≤ 4.8 dB (4.1 dB typ 3 dB coupling)
Port 2 - Ant 2: 832 - 862 MHz	≤ 4.8 dB (4.1 dB typ 3 dB coupling)

### Phase difference:

Port 1 - Ant 1: 791 - 821 MHz	0°
Port 2 - Ant 2: 791 - 821 MHz	0°
Port 2 - Ant 1: 832 - 862 MHz	0 ± 3° (± 1° typ)
Port 2 - Ant 2: 832 - 862 MHz	0 ± 3° (± 1° typ)

Input return loss:	> 18.0 dB
Isolation between UL - DL:	≥ 30 dB
Max input power/port:	2 x 35 W
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	105 x 240 x 165 mm
Connectors:	7/16 (f)
Weight:	3.7 kg

### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP68

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**Phase Adjuster / Duplexer  
GSM 900**





## Technical Specifications for the Phase Adjuster/Duplexer

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 100 9032
Passband:	890 - 915, 935 - 960 MHz
Insertion loss:	
Port 1 - Ant 1: 890 - 915 MHz	$\leq 1.5$ dB (0.9 dB typ)
Port 1 - Ant 2: 890 - 915 MHz	$\leq 1.5$ dB (0.9 dB typ)
Port 2 - Ant 1: 935 - 960 MHz	$\leq 7.8$ dB (7.1 dB typ 6 dB coupling)
Port 2 - Ant 2: 935 - 960 MHz	$\leq 7.8$ dB (7.1 dB typ 6 dB coupling)
Phase difference:	
Port 1 - Ant 1: 890 - 915 MHz	0°
Port 1 - Ant 2: 890 - 915 MHz	0°
Port 1 - Ant 1: 935 - 960 MHz	$-90 \pm 3^\circ$ ( $\pm 1^\circ$ typ)
Port 1 - Ant 2: 935 - 960 MHz	$-90 \pm 3^\circ$ ( $\pm 1^\circ$ typ)
Port 2 - Ant 1: 935 - 960 MHz	$0 \pm 3^\circ$ ( $\pm 1^\circ$ typ)
Port 2 - Ant 2: 935 - 960 MHz	$0 \pm 3^\circ$ ( $\pm 1^\circ$ typ)
Input return loss:	$> 18.0$ dB
Isolation between UL - DL:	$\geq 30$ dB
Max input power/port:	2 x 35 W
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	105 x 240 x 165 mm
Connectors:	7/16 (f)
Weight:	3.7 kg

### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP68

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**Phase Adjuster / Duplexer  
EGSM 900**



## Technical Specifications for the Phase Adjuster/Duplexer

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0133
Passband:	880 - 915, 925 - 960 MHz
Insertion loss:	
Port 1 - Ant 1: 880 - 915 MHz	≤ 1.5 dB (0.9 dB typ)
Port 2 - Ant 2: 880 - 915 MHz	≤ 1.5 dB (0.9 dB typ)
Port 2 - Ant 1: 925 - 960 MHz	≤ 4.8 dB (4.1 dB typ 3 dB coupling)
Port 2 - Ant 2: 925 - 960 MHz	≤ 4.8 dB (4.1 dB typ 3 dB coupling)

### Phase difference:

Port 1 - Ant 1: 880 - 915 MHz	0°
Port 2 - Ant 2: 880 - 915 MHz	0°
Port 2 - Ant 1: 925 - 960 MHz	0 ± 3° (± 1° typ)
Port 2 - Ant 2: 925 - 960 MHz	0 ± 3° (± 1° typ)

Input return loss:	> 18.0 dB
Isolation between UL - DL:	≥ 30 dB
Max input power/port:	2 x 35 W
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	105 x 240 x 165 mm
Connectors:	7/16 (f)
Weight:	3.7 kg

### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP68

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**Phase Adjuster / Duplexer  
LTE 2600**



## Technical Specifications for the Phase Adjuster/Duplexer

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0138
Passband:	2500 - 2570, 2620 - 2690 MHz
Insertion loss:	
Port 1 - Ant 1: 2500 - 2570 MHz	≤ 1.5 dB (0.9 dB typ)
Port 2 - Ant 2: 2500 - 2570 MHz	≤ 1.5 dB (0.9 dB typ)
Port 2 - Ant 1: 2620 - 2690 MHz	≤ 4.8 dB (4.1 dB typ 3 dB coupling)
Port 2 - Ant 2: 2620 - 2690 MHz	≤ 4.8 dB (4.1 dB typ 3 dB coupling)

### Phase difference:

Port 1 - Ant 1: 2500 - 2570 MHz	0°
Port 2 - Ant 2: 2500 - 2570 MHz	0°
Port 2 - Ant 1: 2620 - 2690 MHz	0 ± 3° (± 1° typ)
Port 2 - Ant 2: 2620 - 2690 MHz	0 ± 3° (± 1° typ)

Input return loss:	> 18.0 dB
Isolation between UL - DL:	≥ 30 dB
Max input power/port:	2 x 35 W
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D):	105 x 240 x 165 mm
Connectors:	7/16 (f)
Weight:	3.7 kg

### Environmental Specifications

Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP68

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## Protection Filter

[www.egant.se](http://www.egant.se)

### Frequency range

#### *Protection Filter*

876-880MHz, 921-925MHz

885-915MHz, 930-960MHz

876-880MHz, 921-925MHz

885-915MHz, 930-960MHz

### Description

Reject band 885-915, 930-960

Reject band 876-880, 921-925

Reject band 885-915, 930-960

Reject band 876-880, 921-925

### Connector

N(f)

N(f)

7/16(f)

7/16(f)

### Ordering number

EG 602 0116

EG 602 0118

EG 602 0117

EG 602 0119



## Protection Filter

885-915MHz + 930-960MHz

876-880MHz + 921-925MHz



The Protection filters is design to eliminate interference between GSM-R and E-GSM. The filters handles both Uplink and Downlink signals making it very easy to install on an existing system.

## Technical Specifications for Protection Filters

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>				
Product number:	EG 602 0116 <b>GSM-R</b>	EG 602 0117 <b>GSM-R</b>	EG 602 0118 <b>E-GSM</b>	EG 602 0119 <b>E-GSM</b>
Passband:	876 - 880 MHz + 921 - 925 MHz	876 - 880 MHz + 921 - 925 MHz	885 - 915 MHz + 930 - 960 MHz	885 - 915 MHz + 930 - 960 MHz
Insertion loss:	≤ 1,6 dB, typ 0.7dB	≤ 1,6 dB, typ 0.7dB	≤ 1,6 dB, typ 0.7dB	≤ 1,6 dB, typ 0.7dB
Input return loss:	> 18.0 dB	> 18.0 dB	> 18.0 dB	> 18.0 dB
Rejection frequency:	885 - 915MHz + 930 - 960MHz	885 - 915MHz + 930 - 960MHz	876 - 880MHz + 921 - 925MHz	876 - 880MHz + 921 - 925MHz
Rejection:	≥ 50 dB	≥ 50 dB	≥ 50 dB	≥ 50 dB
Max input power/port:	200 W	200 W	200 W	200 W
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
Intermodulation: IM3, 2 x 43 dBm:	≤ -110 dBm	≤ -110 dBm	≤ -110 dBm	≤ -110 dBm
<b>Mechanical Specifications</b>				
Dimensions (W x H x D):	180 x 65 x 150m	180 x 65 x 150m	180 x 65 x 150m	180 x 65 x 150m
Connectors:	N (f)	7/16 (f)	N (f)	7/16 (f)
Weight:	1.5 kg	1.5 kg	1.5 kg	1.5 kg

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## Low Pass Filters

[www.egant.se](http://www.egant.se)

### Frequency range

#### *Low Pass Filter*

DC-500MHz

DC-500MHz

DC-960MHz

### Description

Reject 790-2700

Reject 960-2500

Reject 1710-18GHz

### Connector

7/16(f)

N(m)-N(f)

N(m)-N(f)

### Ordering number

EG 602 0128

EG 602 0050

EG 602 0052



**Low Pass Filter**  
**DC- 500 MHz**  
**Reject 790-2700MHz**

## Technical Specifications for Low Pass Filters

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 602 0128
Passband:	DC - 500 MHz
Rejection band:	790 - 2700 MHz
Insertion loss:	≤ 0.3dB (0.1dB typ)
Input return loss	
376-500MHz:	> 16.0 dB
DC-375MHz:	> 10.0 dB
Attenuation/Reject Band	≥ 40dB
Max input power/port:	250 W
Impedance in/out:	50 Ohm

### Mechanical Specifications

Dimensions (W x H x D) mm:	375 x 40 x 40
Connectors:	7/16(f)
Weight:	1,2 kg

### Environmental Specifications

Temp. range (normal operation):	-40 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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**Low Pass Filter**

**DC - 500 MHz**

**DC - 960 MHz**

## Technical Specifications for Low Pass Filters

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 602 0050	EG 602 0052	EG 602 0070
Passband:	DC - 500 MHz	DC - 960 MHz	DC - 960 MHz
Rejection band:	960 - 2500 MHz	1710 MHz - 18 GHz	1710 MHz - 18 GHz
Insertion loss:	≤ 0.3dB (0.1dB typ)	≤ 0.3dB (0.1dB typ)	≤ 0.4dB (0.15dB typ)
Input return loss			
376-960MHz:	> 18.0 dB	> 18.0 dB	> 13.0 dB
>380MHz	> 10.0 dB	> 11.0 dB	> 10.0 dB
Attenuation/Reject Band	≥ 70dB	≥ 70dB	≥ 70dB
Max input power/port:	250 W	250 W	250 W
Impedance in/out:	50 Ohm	50 Ohm	75 Ohm
Intermodulation:			
IM3, 2 x 43 dBm:	≤ -117 dBm (160 dBc)	≤ -117 dBm (160 dBc)	≤ -117 dBm (160 dBc)
<b>Mechanical Specifications</b>			
Dimensions (W x H x D) mm:	127 x 56 x 30	127 x 56 x 30	127 x 56 x 30
Connectors:	N(m) - N(f)	N(m) - N(f)	N(m) - N(f)
Weight:	0.7 kg	0.6 kg	0.6 kg
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-40 to +70° C	-49 to +70° C	-49 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65	IP65

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## 4x4 Combiners

[www.egant.se](http://www.egant.se)

### Frequency range

#### *4x4 Combiners*

376-960MHz  
376-960MHz  
376-2200MHz  
700-2700MHz  
700-2700MHz  
800-960MHz  
1710-2200MHz  
1710-2700MHz  
1710-2700MHz

### Description

4-Way Combiner  
4-Way Combiner  
4-Way Combiner  
4-Way Combiner  
4-Way Combiner  
4-Way Combiner  
4-Way Combiner  
4-Way Combiner  
4-Way Combiner

### Connector

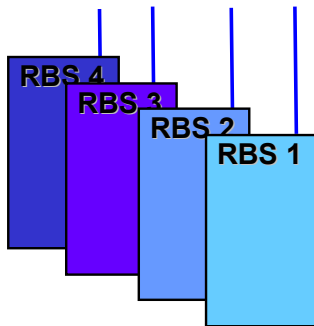
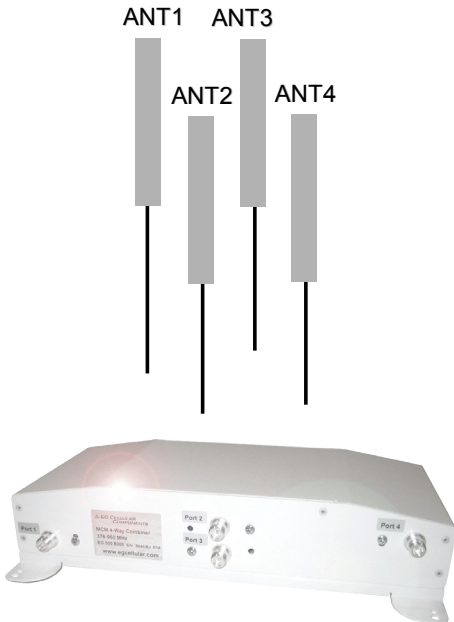
N(f)  
7/16(f)  
7/16(f)  
N(f)  
7/16(f)  
N(f)  
N(f)  
N(f)  
7/16(f)

### Ordering number

EG 500 8008  
EG 603 0014  
EG 603 0008  
EG 603 0080  
EG 603 0081  
EG 500 8001  
EG 500 8002  
EG 603 0078  
EG 603 0079



## MCM 4-Way Combiner Broadband TETRA, CDMA2000, GSM900 376 - 960 MHz



### Combines up to 4 RBSs into the same antenna system

The 4-way combiner enables you to connect 4 Base Stations. The combiner combines the signal and equally splits it between the antenna ports.

This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Innovative design

The 4-way combiner incorporates a broad band and low loss product design. The 4-way combiner is designed for low insertion loss and intermodulation.

There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

### The benefits from installing the 4-way combiner instead of hybrid combiners and splitters are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for 4-Way Combiner Broadband (MCM)

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 500 8008	EG 603 0014
Passband:	376 - 500 MHz, 880 - 960 MHz	376 - 500 MHz, 880 - 960 MHz
Isolation between ports:	$\geq 25$ dB	$\geq 25$ dB
Input return loss:	$> 18.0$ dB	$> 18.0$ dB
Coupling:	$6.4 \pm 0.7$ dB	$6.4 \pm 0.7$ dB
Max input power/port:	100 W	100 W
3 <sup>rd</sup> order intermodulation:	$\leq -110$ dBm (153 dBc)	$\leq -110$ dBm (153 dBc)
IM3, 2 x 43 dBm:	50 Ohm	50 Ohm
Impedance in/out:		
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	310 x 130 x 130 mm	380 x 150 x 130 mm
Connectors:	N (f)	7/16 (f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

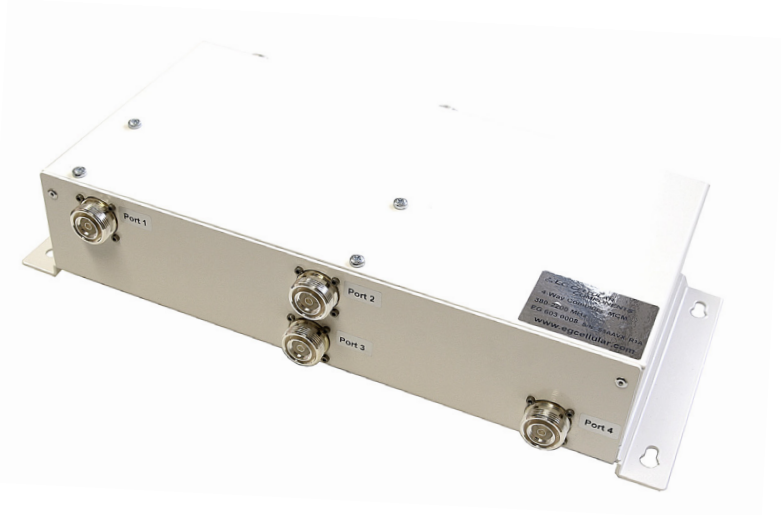
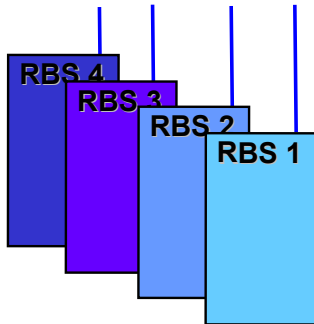
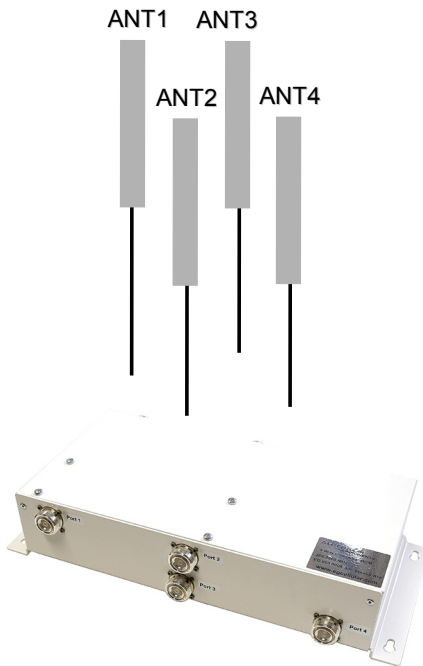
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## 4-Way Combiner Broadband 376 - 2200 MHz



### Combines up to 4 RBSs into the shared antenna system

The 4-way combiner enables the connection of 4 Radio Base Stations. It combines the signal and equally splits it between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Innovative design

The 4-way combiner incorporates a broad band and low loss product design. It is specifically designed with low insertion loss and intermodulation in mind. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

### The benefits from installing the 4-way combiner instead of hybrid combiners and splitters are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for 4-Way Combiner Broadband (MCM)

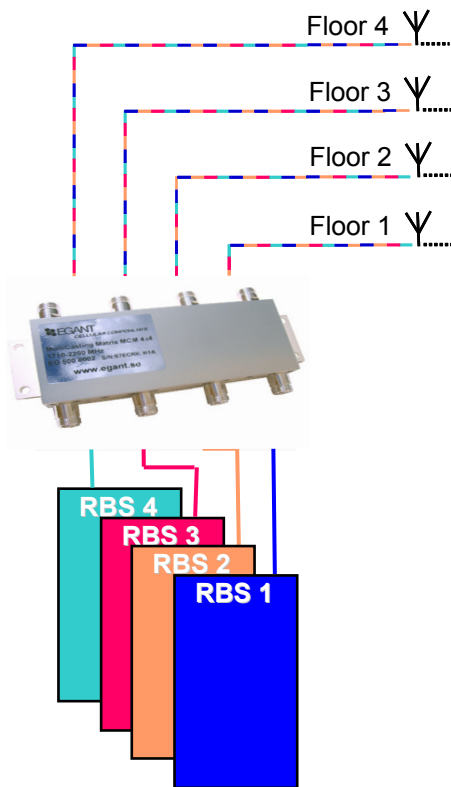
Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0008	EG 603 0069
Passband:	376 - 2200 MHz	376 - 2200 MHz
Isolation between ports:	$\geq 25$ dB (30 dB typ)	$\geq 25$ dB (30 dB typ)
Input return loss:	$> 17.0$ dB	$> 17.0$ dB
Coupling:	$6.4 \pm 1.0$ dB	$6.4 \pm 1.0$ dB
Max input power/port:	100 W	100 W
3 <sup>rd</sup> order intermodulation: IM3, 2 x 43 dBm:	$\leq -110$ dBm (153 dBc)	$\leq -110$ dBm (153 dBc)
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	410 x 130 x 130 mm	410 x 130 x 130 mm
Connectors:	7/16 (f)	N(f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## Multicasting Matrix MCM 4 x 4 700 - 2700 MHz / LTE800,GSM, TDMA, UMTS, LTE2600



### Combines up to 4 RBSs into the same antenna system

The advanced MCM enables you to connect 4 Radio Base Stations. The MCM combines the signals and equally splits them between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.



### Sleek design

The MCM incorporates a broad band and low loss product design. The MCM is specifically designed for low insertion loss and low inter-modulation. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

### The benefits from installing the MCM instead of hybrid combiners and splitters are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the Multicasting Matrix (MCM)

Below are some typical data. For more detailed information, please contact us.

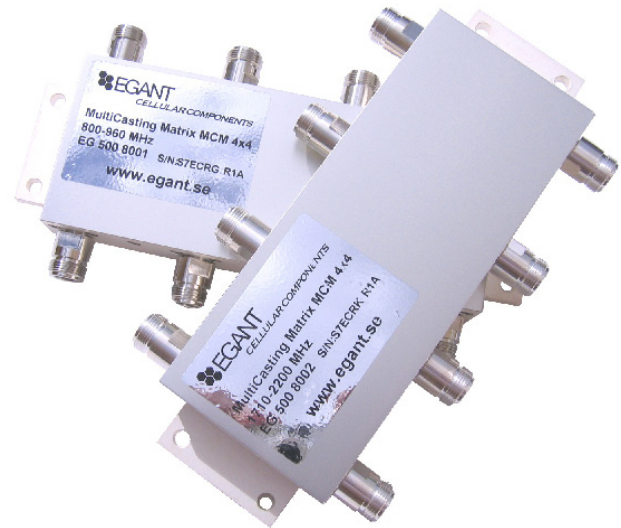
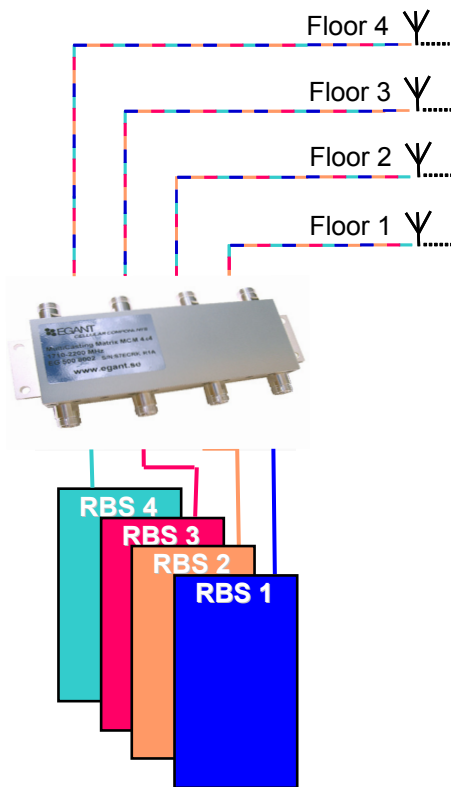
<b>Electrical Specifications</b>		
Product number:	EG 603 0080	EG 603 0081
Passband:	700 - 2700 MHz	700 - 2700 MHz
Isolation between ports:	$\geq 25$ dB, typ $>33$ dB	$\geq 25$ dB, typ $>33$ dB
Input return loss:	$> 21$ dB, typ $>25$ dB	$> 21$ dB, typ $>25$ dB
Coupling:	$6.4 \pm 0.7$ dB	$6.4 \pm 0.7$ dB
Max input power/port:	150 W	150 W
3 <sup>rd</sup> order intermodulation: IM3, 2 x 43 dBm:	$< - 110$ dBm, 153 dBc	$< - 110$ dBm, 153 dBc
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	274 x 35 x 155 mm	274 x 35 x 155 mm
Connectors:	N (f)	7/16 (f)
Weight:	2,25 Kg	2.25 Kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

Egant reserves the right to change this product specification at any time without notice.

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**Multicasting Matrix MCM 4 x 4**  
800 - 960 MHz / GSM, NMT, AMPS  
1710 - 2200 MHz / GSM, TDMA,  
UMTS



**Combines up to 4 RBSs into the same antenna system**

The advanced MCM enables you to connect 4 Radio Base Stations. The MCM combines the signals and equally splits them between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

**Sleek design**

The MCM incorporates a broad band and low loss product design. The MCM is specifically designed for low insertion loss and low inter-modulation. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

**The benefits from installing the MCM instead of hybrid combiners and splitters are:**

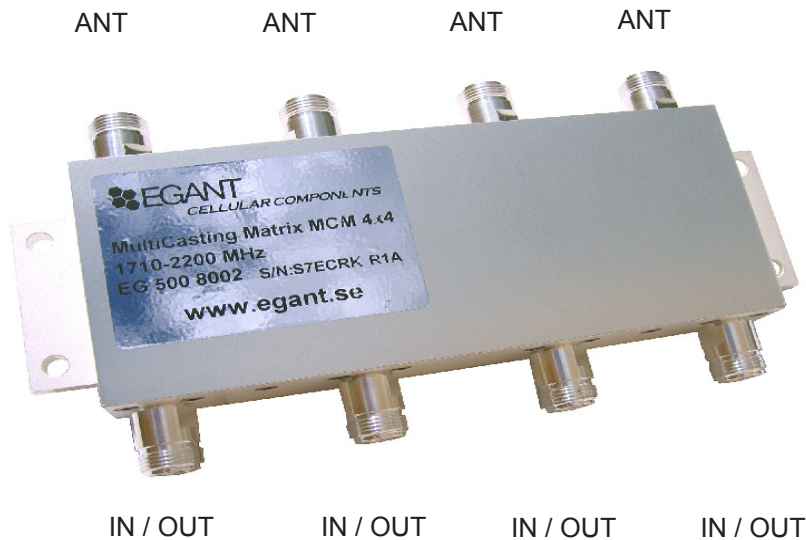
- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the Multicasting Matrix (MCM)

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 500 8001	EG 500 8002
Passband:	800 - 960 MHz	1710 - 2200 MHz
Isolation between ports:	$\geq 25$ dB	$\geq 25$ dB
Input return loss:	$> 22.0$ dB	$> 22.0$ dB
Insertion loss:	$\leq 0.3$ dB	$\leq 0.3$ dB
Coupling:	$6.2 \pm 0.5$ dB	$6.2 \pm 0.5$ dB
Max input power/port:	100 W	100 W
3 <sup>rd</sup> order intermodulation:		
IM3, 2 x 43 dBm:	$< -105$ dBm, 148 dBc	$< -105$ dBm, 148 dBc
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	274 x 35 x 155 mm	274 x 35 x 155 mm
Connectors:	N (f)	N (f)
Weight:	2.25 Kg	2.25 Kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

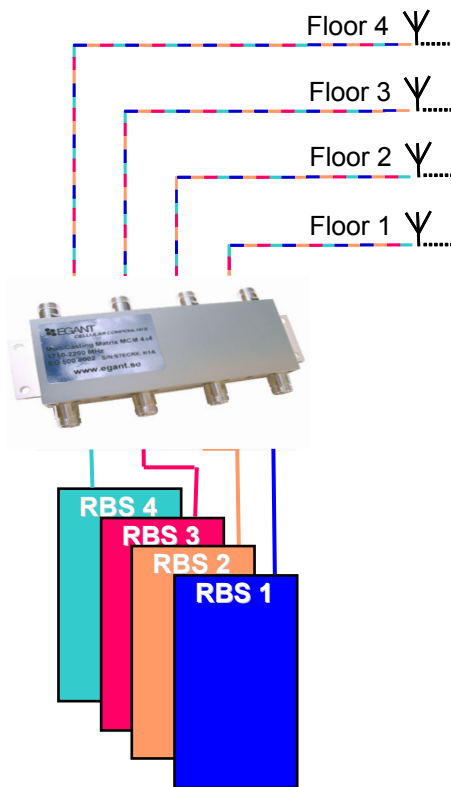
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## Multicasting Matrix MCM 4 x 4 1710 - 2700 MHz / GSM, TDMA, UMTS, LTE



### Sleek design

The MCM incorporates a broad band and low loss product design. The MCM is specifically designed for low insertion loss and low inter-modulation. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

### The benefits from installing the MCM instead of hybrid combiners and splitters are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

### Combines up to 4 RBSs into the same antenna system

The advanced MCM enables you to connect 4 Radio Base Stations. The MCM combines the signals and equally splits them between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

## Technical Specifications for the Multicasting Matrix (MCM)

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0078	EG 603 0079
Passband:	1710 - 2700 MHz	1710 - 2700 MHz
Isolation between ports:	$\geq 25$ dB,	$\geq 25$ dB
Input return loss:	$> 22.0$ dB	$> 22.0$ dB
Insertion loss:	$\leq 0.3$ dB	$\leq 0.3$ dB
Coupling:	$6.2 \pm 0.5$ dB	$6.2 \pm 0.5$ dB
Max input power/port:	100 W	100 W
3 <sup>rd</sup> order intermodulation:		
IM3, 2 x 43 dBm:	$< -105$ dBm, 148 dBc	$< -105$ dBm, 148 dBc
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	220 x 34 x 115 mm	220 x 34 x 115 mm
Connectors:	N (f)	7/16 (f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## 3x3 Combiners

[www.egant.se](http://www.egant.se)

### Frequency range

#### *3x3 Combiners*

376-960MHz

376-960MHz

700-2700MHz

700-2700MHz

### Description

3x3 Combiner

3x3 Combiner

3x3 Combiner

3x3 Combiner

### Connector

N(f)

7/16(f)

N(f)

7/16(f)

### Ordering number

EG 603 0091

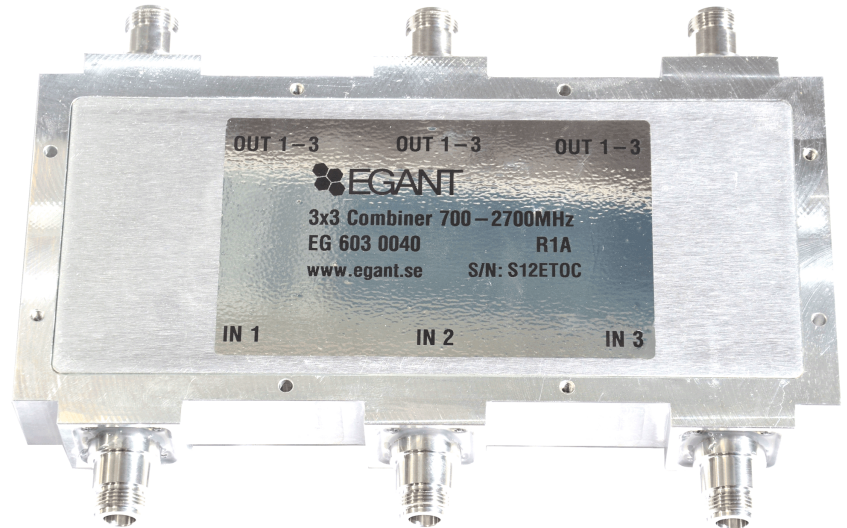
EG 603 0092

EG 603 0040

EG 603 0039



## 3x3 Combiner 4.8dB 376 - 960 MHz



### Combines up to 3 RBSs into the same antenna system

The 3x3 combiner enables the connection of 3 Radio Base Stations to the combiner. The combiner combines the signal and equally splits the signals between the antenna ports.

This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Innovative design

The 3x3 combiner is a broad band and low loss product design. It is intentionally designed for low insertion loss and low intermodulation.

### The benefits of using our 3x3 combiner are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the 3x3 Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0091	EG 603 0092
Passband:	376 - 960 MHz	376 - 960 MHz
Coupling:	5.0 +/- 1.0 dB	5.0 +/- 1.0 dB
Input return loss:	> 20.0 dB	> 20.0 dB
Isolation between ports:	> 25 dB (30 dB typ.)	> 25 dB (30 dB typ.)
Intermodulation 2 x 43 dBm:	≤ 107 dBm (150 dBc)	≤ 107 dBm (150 dBc)
Max input power/port:	60 W	60 W
Max peak power:	3 kW	3 kW
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	175 x 38 x 195 mm	175 x 38 x 195 mm
Connectors:	N (f)	7/16 (f)
Weight:	2.0 kg	2.0 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-35 to +65° C	-35 to +65° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## 3x3 Combiner 4.8dB 698 - 2700 MHz



### Combines up to 3 RBSs into the same antenna system

The 3x3 combiner enables the connection of 3 Radio Base Stations to the combiner. The combiner combines the signal and equally splits the signals between the antenna ports.

This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### Innovative design

The 3x3 combiner is a broad band and low loss product design. It is intentionally designed for low insertion loss and low intermodulation.

### The benefits of using our 3x3 combiner are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement



## 3dB Combiners

[www.egant.se](http://www.egant.se)

### Frequency range

#### *3dB Combiners*

68-79MHz  
150-2700MHz  
150-2700MHz  
376-960MHz  
376-960MHz  
376-2200MHz  
376-2200MHz  
376-2700MHz  
376-2700MHz  
700-2700MHz  
700-2700MHz

### Description

3 dB Combiner  
3 dB Combiner  
3 dB Combiner  
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3 dB Combiner  
3 dB Combiner  
3 dB Combiner  
3 dB Combiner  
3 dB Combiner

### Connector

N(f)  
N(f)  
7/16(f)  
N(f)  
7/16(f)  
N(f)  
7/16(f)  
N(f)  
7/16(f)  
N(f)  
7/16(f)

### Ordering number

EG 603 0001  
EG 603 0074  
EG 603 0076  
EG 500 8017  
EG 500 8018  
EG 603 0030  
EG 603 0031  
EG 603 0072  
EG 603 0073  
EG 500 8011  
EG 500 8010

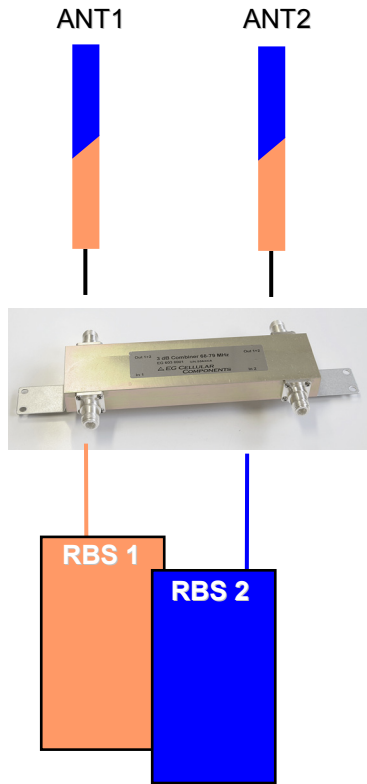
## Technical Specifications for the 3x3 Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0039	EG 603 0040
Passband:	698 - 2700 MHz	698 - 2700 MHz
Coupling: (698 - 2200 MHz)	5.0 +/- 0.8 dB	5.0 +/- 0.8 dB
Coupling: (2200 - 2700 MHz)	5.3 +/- 1.3 dB	5.3 +/- 1.3 dB
Input return loss:	> 20.0 dB	> 20.0 dB
Isolation between ports:	> 25 dB (30 dB typ.)	> 23 dB (28 dB typ.)
Intermodulation 2 x 43 dBm:	≤ 107 dBm (150 dBc)	≤ 107 dBm (150 dBc)
Max input power/port:	150 W	150 W
Max peak power:	3 kW	3 kW
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	204 x 32 x 140 mm	204 x 25 x 140 mm
Connectors:	7/16 (f)	N (f)
Weight:	1.6 kg	1.4 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-35 to +65° C	-35 to +65° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## 3 dB Combiner 68 - 79 MHz



### Combines up to 2 repeaters or RBSs into the same antenna system

The 3 dB combiner enables the connection of 2 repeaters or radio base stations. The combiner combines the signal and equally splits the signals between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple repeaters or RBSs to the shared antennas.

### The benefits from installing the 3 dB combiner instead of power splitters are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

### Innovative design

The 3 dB combiner incorporates a broad band and low loss design. It is specifically designed with low insertion loss and intermodulation in mind. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.



### EG 699 0006

Bracket for EGANT Cellular Components combiner.

## Technical Specifications for the 3 dB Combiner

Below are some typical data. For more detailed information, please contact us.

### Electrical Specifications

Product number:	EG 603 0001
Passband:	68 - 79 MHz
Isolation between ports:	$\geq 30$ dB
Input return loss:	$> 20.0$ dB
Coupling:	$3.1 \pm 0.2$ dB
Max input power/port:	120 W
3 <sup>rd</sup> order intermodulation: IM3, 2 x 43 dBm:	$< -97$ dBm, 140 dBc
Impedance in/out:	50 Ohm

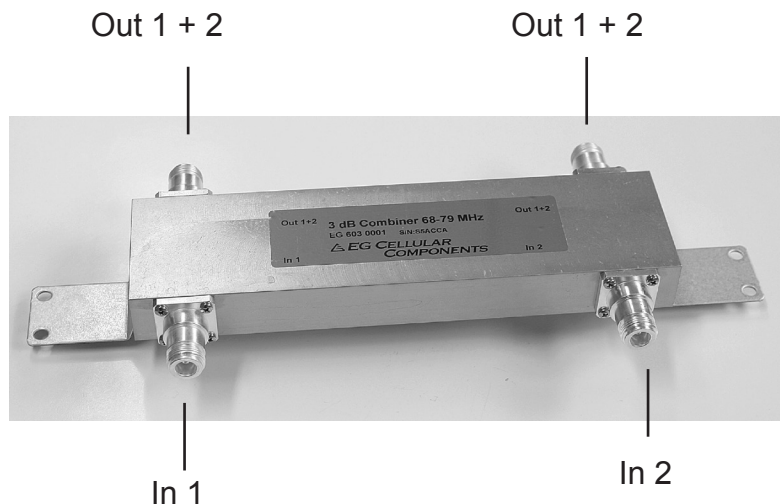
### Mechanical Specifications

Dimensions (W x H x D):	190 x 25 x 82 mm
Connectors:	N (f)

### Environmental Specifications

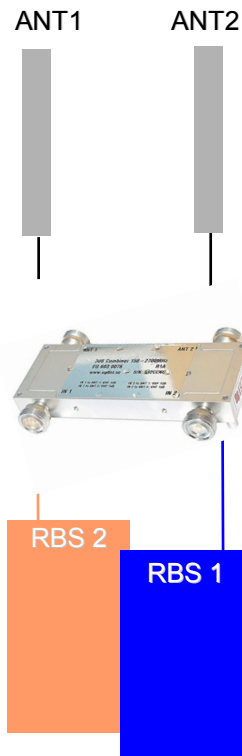
Temp. range (normal operation):	-30 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65
Installation bracket:	EG 699 0006
Material:	Aluminum Zinc

Egant reserves the right to change this product specification at any time without notice.

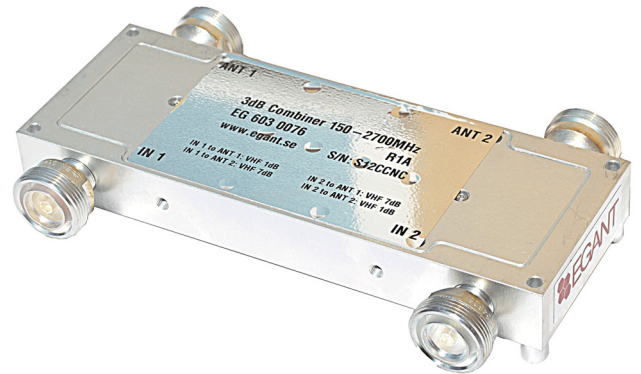


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**3 dB Combiner, Broad Band  
150 - 2700 MHz  
VHF, TETRA, GSM900, GSM1800,  
UMTS, LTE**



### Innovative design

The 3dB combiner incorporates a broad band and low loss design. It is specifically designed with low insertion loss and intermodulation in mind. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

### Combines up to 2 repeaters or RBSs into the same antenna system

The 3 dB combiner enables the connection of 2 repeaters or radio base stations. The combiner combines the signal and equally splits the signals between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple repeaters or RBSs to the shared antennas.

### The benefits from installing the 3 dB combiner instead of power splitters are:

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the 3 dB Combiner

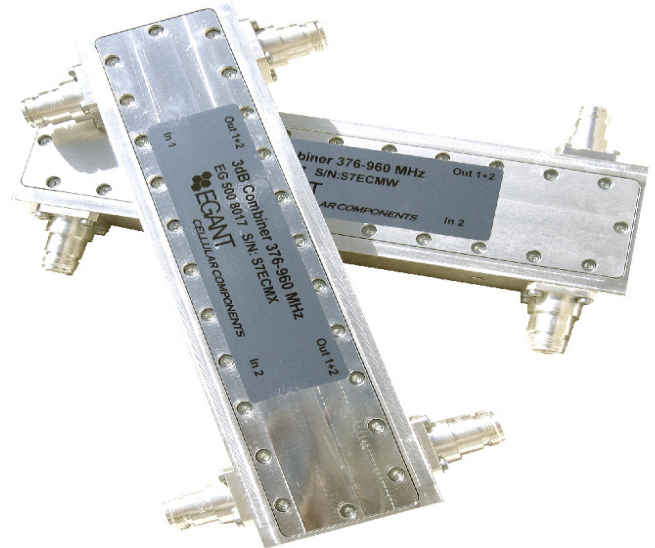
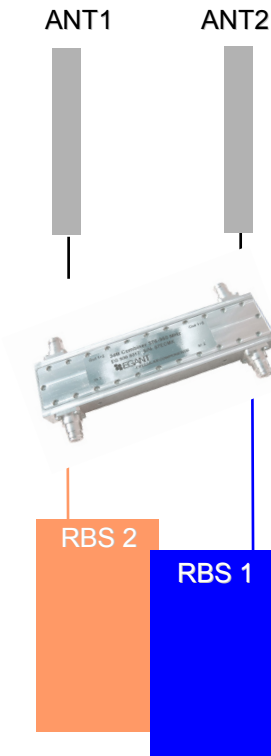
Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0074	EG 603 0076
Passband:	150 - 2700 MHz	150 - 2700 MHz
Isolation between ports: 150 - 2700 MHz:	≥ 24 dB (typ 30 dB)	≥ 24 dB (typ 30 dB)
Input return loss: 150 - 2500 MHz >2500 - 2700 MHz	> 18.0 dB > 16.0 dB, typ 18 dB	> 18.0 dB > 16.0 dB, typ 18 dB
Coupling:		
Input 1: 150 - 160 MHz - Ant 1	1.0 $\pm$ 0.3 dB	1.0 $\pm$ 0.3 dB
Input 1: 150 - 160 MHz - Ant 2	7.1 $\pm$ 0.3 dB	7.1 $\pm$ 0.3 dB
Input 2: 150 - 160 MHz - Ant 1	7.1 $\pm$ 0.3 dB	7.1 $\pm$ 0.3 dB
Input 2: 150 - 160 MHz - Ant 2	1.0 $\pm$ 0.3 dB	1.0 $\pm$ 0.3 dB
376 - 2500 MHz >2500 - 2700 MHz	3.1 $\pm$ 0.3 dB 3.3 $\pm$ 0.4 dB	3.1 $\pm$ 0.3 dB 3.3 $\pm$ 0.4 dB
Max input power/port:	200 W	200 W
3 <sup>rd</sup> order intermodulation: IM3, 2 x 43 dBm: Impedance in/out:	< - 150dBc 50 Ohm	< - 150dBc 50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	215 x 26 x 115 mm	215 x 26 x 115 mm
Connectors:	N (f)	7/16 (f)
Weight:	1 Kg	1 Kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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**3 dB Combiner, Broad Band  
376 - 960 MHz  
TETRA, GSM900**



**Innovative design**

The 3 dB combiner is designed for low insertion loss and low intermodulation. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

**The benefits from installing the 3 dB combiner instead of hybrid combiners and splitters are:**

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

**Combines up to 2 repeaters or RBSs into the same antenna system**

The 3 dB combiner enables the connection of 2 repeaters or radio base stations. The combiner combines the signal and equally splits the signals between the antenna ports. This is a highly desirable function when designing shared antenna systems wishing to connect multiple repeaters or RBSs to the shared antennas.



**EG 699 0006**

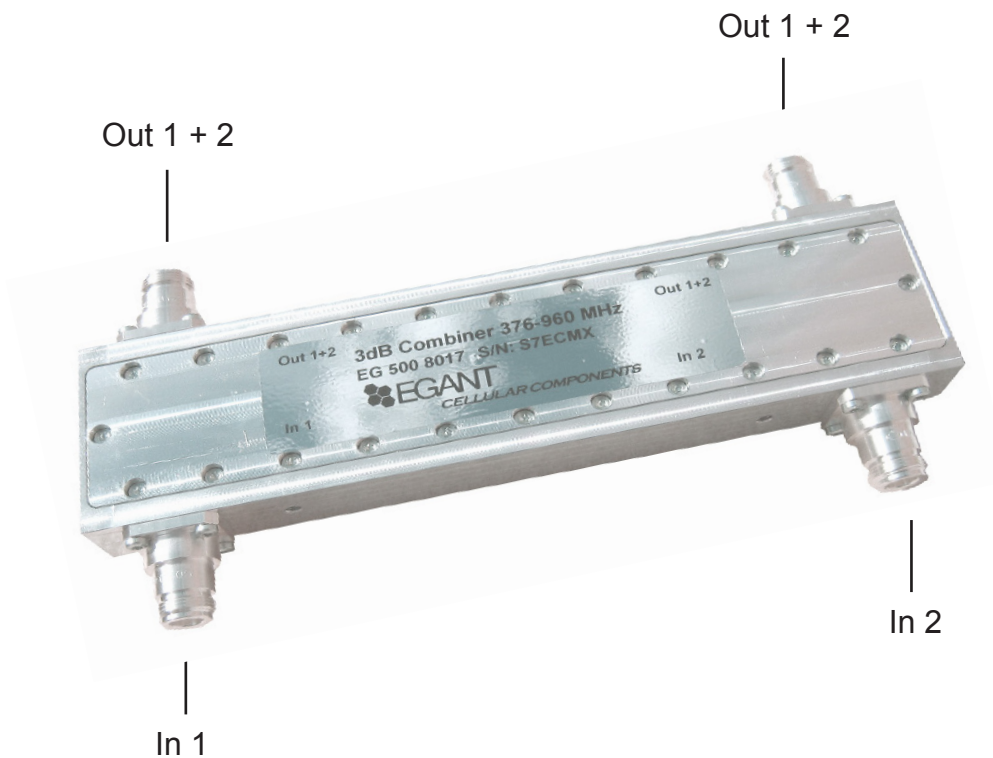
Bracket for EGANT Cellular Components combiner.

## Technical Specifications for the 3 dB Combiner

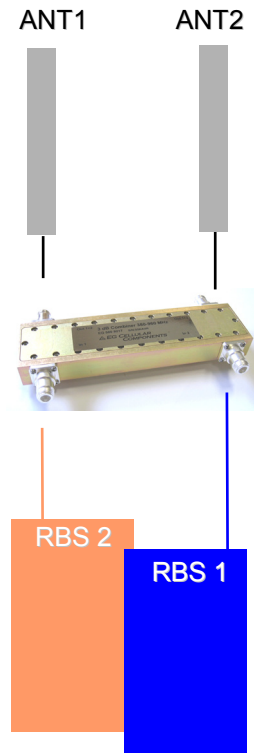
Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 500 8017	EG 500 8018
Passband:	376 - 500 MHz, 876 - 960 MHz	376 - 500 MHz, 876 - 960 MHz
Isolation between ports:		
376 - 500MHz	≥ 30 dB (typ 33 dB)	≥ 30 dB (typ 33 dB)
876 - 960MHz	≥ 26 dB (typ 30 dB)	≥ 26 dB (typ 30 dB)
Input return loss:	> 20.0 dB	> 20.0 dB
Coupling:	3.1 ±/-. 0.4 dB	3.1 ±/-. 0.4 dB
Max input power/port:	120 W	120 W
3 <sup>rd</sup> order intermodulation:		
IM3, 2 x 43 dBm:	< - 110 dBm (153dBc)	< - 110 dBm (153dBc)
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	190 x 25 x 82 mm	190 x 42 x 82 mm
Connectors:	N (f)	7/16 (f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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**3 dB Combiner, Broad Band  
376 - 2200 MHz  
TETRA, GSM900, GSM1800, UMTS**

**Innovative design**

The 3dB combiner incorporates a broad band and low loss design. It is specifically designed with low insertion loss and intermodulation in mind. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

**Combines up to 2 repeaters or RBSs into the same antenna system**

The 3 dB combiner enables the connection of 2 repeaters or radio base stations. The combiner combines the signal and equally splits the signals between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple repeaters or RBSs to the shared antennas.

**The benefits from installing the 3 dB combiner instead of power splitters are:**

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

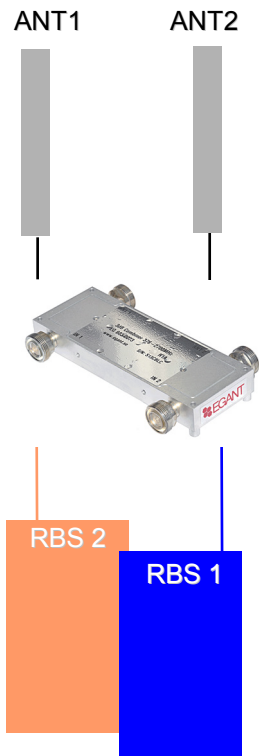
## Technical Specifications for the 3 dB Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0030	EG 603 0031
Passband:	376 - 2200 MHz	376 - 2200 MHz
Isolation between ports:		
376 - 1500 MHz:	≥ 25 dB (typ 30 dB)	≥ 25 dB (typ 30 dB)
1500 - 2200 MHz:	> 20 dB (typ 25 dB)	> 20 dB (typ 25 dB)
Input return loss:		
376 - 1500 MHz	> 20.0 dB	> 20.0 dB
1500 - 2200 MHz	> 18.0 dB	> 18.0 dB
Coupling:	3.1 ± 0.2 dB	3.1 ± 0.2 dB
Max input power/port:	200 W	200 W
3 <sup>rd</sup> order intermodulation:		
IM3, 2 x 43 dBm:	< - 97 dBm	< - 97 dBm
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	215 x 26 x 115 mm	215 x 26 x 115 mm
Connectors:	N (f)	7/16 (f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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**3 dB Combiner, Broad Band  
376 - 2700 MHz  
TETRA, GSM900, GSM1800, UMTS  
LTE**



### **Innovative design**

The 3dB combiner incorporates a broad band and low loss design. It is specifically designed with low insertion loss and intermodulation in mind. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

### **Combines up to 2 repeaters or RBSs into the same antenna system**

The 3 dB combiner enables the connection of 2 repeaters or radio base stations. The combiner combines the signal and equally splits the signals between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple repeaters or RBSs to the shared antennas.

### **The benefits from installing the 3 dB combiner instead of power splitters are:**

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the 3 dB Combiner

Below are some typical data. For more detailed information, please contact us.

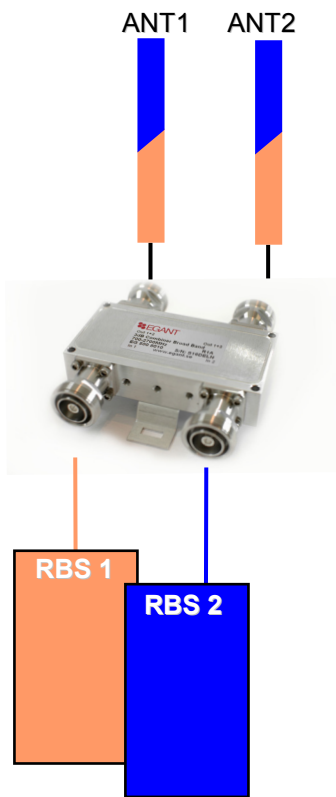
<b>Electrical Specifications</b>		
Product number:	EG 603 0072	EG 603 0073
Passband:	376 - 2700 MHz	376 - 2700 MHz
Isolation between ports:		
376 - 1500 MHz:	≥ 25 dB (typ 30 dB)	≥ 25 dB (typ 30 dB)
1500 - 2700 MHz:	> 20 dB (typ 25 dB)	> 20 dB (typ 25 dB)
Input return loss:		
376 - 1500 MHz	> 20.0 dB	> 20.0 dB
1500 - 2700 MHz	> 18.0 dB	> 18.0 dB
Coupling:	3.1 +/- 0.3 dB	3.1 +/- 0.3 dB
Max input power/port:	200 W	200 W
3 <sup>rd</sup> order intermodulation:		
IM3, 2 x 43 dBm:	< - 97 dBm	< - 97 dBm
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	215 x 26 x 115 mm	215 x 26 x 115 mm
Connectors:	N (f)	7/16 (f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

Egant reserves the right to change this product specification at any time without notice.

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**3 dB Combiner, Broad Band  
700 - 2700 MHz  
GSM, TDMA, UMTS, W-LAN, LTE**



**Combines up to 2 repeaters or RBSs into the same antenna system**

The 3 dB combiner enables the connection of 2 repeaters or radio base stations. The combiner combines the signal and equally splits the signals between the antenna ports. This is a highly important function when designing shared antenna systems wishing to connect multiple repeaters or RBSs to the shared antennas.



**Innovative design**

The 3 dB combiner incorporates a broad band and low loss design. It is specifically designed with low insertion loss and intermodulation in mind. There is no need for terminations or attenuators, which results in very low insertion loss and outstanding intermodulation performance.

**The benefits from installing the 3 dB combiner instead of power splitters are:**

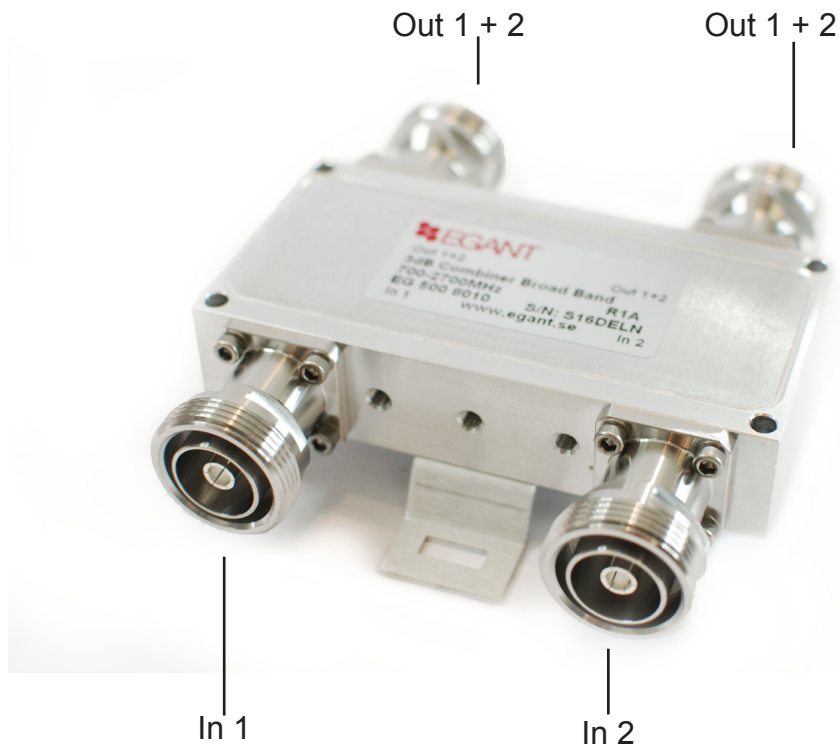
- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the 3 dB Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 500 8010	EG 500 8011
Passband:	700 - 2700 MHz	700 - 2700 MHz
Isolation between ports:	≥ 30 dB	≥ 30 dB
Input return loss:	> 22.0 dB	> 22.0 dB
Coupling:	3.1 ± 0.3 dB	3.1 ± 0.3 dB
Max input power/port:	240 W	240 W
3 <sup>rd</sup> order intermodulation:		
IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	135 x 45 x 80 mm	135 x 45 x 80 mm
Connectors:	7/16 (f)	N (f)
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## 2-Way Combiners

[www.egant.se](http://www.egant.se)

### Frequency range

#### *2-Way Combiner*

88-2700MHz

376-500MHz

376-500MHz

376-500MHz

376-500MHz

376-500MHz

376-500MHz

376-500MHz

376-500MHz

800-2170MHz

800-2170MHz

800-2170MHz

800-2170MHz

800-2170MHz

800-2170MHz

800-2170MHz

800-2170MHz

### Description

2-Way Combiner

2-Way Combiner 4.7dB

2-Way Combiner 6dB

2-Way Combiner 10dB

2-Way Combiner 4.7dB

2-Way Combiner 6dB

2-Way Combiner 7dB

2-Way Combiner 10dB

2-Way Combiner 4.7dB

2-Way Combiner 6dB

2-Way Combiner 10dB

2-Way Combiner 4.7dB

2-Way Combiner 6dB

2-Way Combiner 7dB

2-Way Combiner 10dB

2-Way Combiner 4.7dB

2-Way Combiner 6dB

### Connector

7/16(f)

7/16(f)

7/16(f)

7/16(f)

N(f)

N(f)

N(f)

N(f)

7/16(f)

7/16(f)

7/16(f)

N(f)

N(f)

N(f)

N(f)

7/16(m),7/16(f), N(f)

7/16(m),7/16(f), N(f)

### Ordering number

EG 603 0088

EG 100 9104

EG 100 9106

EG 100 9110

EG 100 9304

EG 100 9306

EG 100 9307

EG 100 9310

EG 100 9004

EG 100 9006

EG 100 9010

EG 100 9204

EG 100 9206

EG 100 9207

EG 100 9210

EG 603 0011

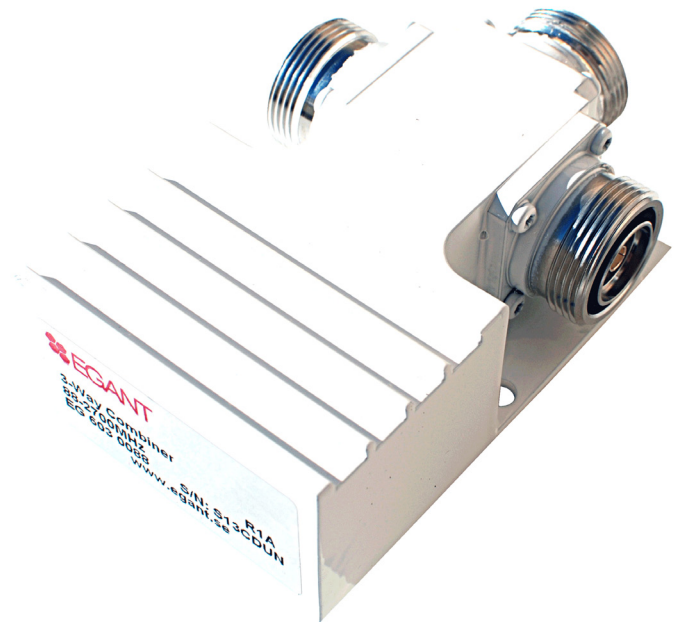
EG 603 0012



## 2-Way Combiner

88 - 2700 MHz

380 - 400 MHz / 1575 - 1576MHz



### **Combines up to 2 RBSs into the same antenna system**

The 2-Way combiner enables the connection of 2 Radio Base Stations to the combiner. The combiner combines the signal and equally splits the signals between the antenna ports.

This is a highly important function when designing shared antenna systems wishing to connect multiple RBSs to the shared antennas.

### **Innovative design**

The 2-Way combiner is a broad band and low loss product design. It is intentionally designed for low insertion loss and low intermodulation.

### **The benefits of using our 2-Way combiner are:**

- Lower insertion loss
- Fewer system components
- Superior antenna isolation
- Greater system quality
- Cost effective design improvement

## Technical Specifications for the 2-Way Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>		
Product number:	EG 603 0088	EG 603 0089
Passband:	88 - 2700 MHz	380 - 400 / 1575 - 1576 MHz
Coupling:	3.0 +/- 0.2 dB	3.0 +/- 0.2 dB
Input return loss:	> 8.0 dB	> 12.0 dB, typ 16dB
Isolation between ports:	3 dB +/- 1.0 dB	3 dB +/- 1.0 dB
Max input power/port:	200 W	200 W
Max peak power:	3 kW	3 kW
Impedance in/out:	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>		
Dimensions (W x H x D):	100 x 40 x 70 mm	100 x 40 x 70 mm
Connectors:	7/16 (f)	7/16 (f)
Weight:	0,8 kg	0,8 kg
<b>Environmental Specifications</b>		
Temp. range (normal operation):	-35 to +65° C	-35 to +65° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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## 2-Way Combiner

376 - 500 MHz

800 - 2170 MHz

TETRA, GSM900, GSM1800, DCS, UMTS



### Combining with optimization

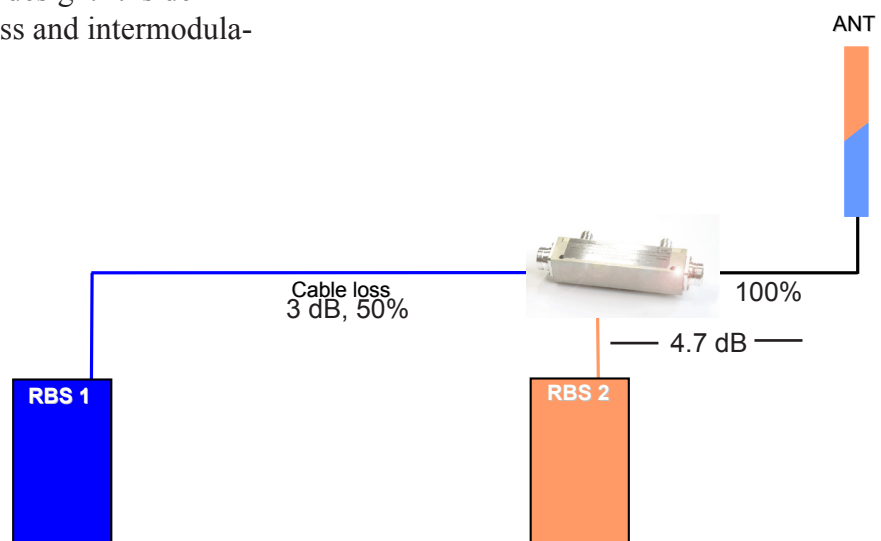
Do you have radio base stations or repeaters in separate locations? Egant has the solution. Our 2-way combiner enables you to optimize your system by compensating for the added cable loss in addition to combining the signals into one point with equal power, adding control over signal strength to the antenna.

### Innovative design

This 2-way combiner incorporates a broad band and low loss product design. It is designed for low insertion loss and intermodulation.

### The benefits from installing the 2-way combiner are:

- Higher antenna isolation
- Lower insertion loss
- Fewer system components
- Higher system quality
- Cost-effective design improvement



## Technical Specifications for the 2-Way Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>			
Product number:	EG 100 9004	EG 100 9006	EG 100 9010
Passband:	800 - 2170 MHz	800 - 2170 MHz	800 - 2170 MHz
Isolation between ports:	≥ 30 dB	≥ 30 dB	≥ 30 dB
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB
Coupling in 1 - out:	1.8 ± 0.3 dB	1.2 ± 0.3 dB	1.0 ± 0.3 dB
Coupling in 2 - out:	4.7 ± 0.3 dB	6.0 ± 0.3 dB	10.0 ± 0.3 dB
Max input power/port:	70 W	70 W	70 W
3 <sup>rd</sup> order intermodulation:			
IM3, 2 x 43 dBm:	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	140 x 80 x 40 mm	140 x 80 x 40 mm	140 x 80 x 40 mm
Connectors:	7/16 (f)	7/16 (f)	7/16 (f)
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP68	IP68	IP68

<b>Electrical Specifications</b>			
Product number:	EG 100 9104	EG 100 9106	EG 100 9110
Passband:	376 - 500 MHz	376 - 500 MHz	376 - 500 MHz
Isolation between ports:	≥ 30 dB	≥ 30 dB	≥ 30 dB
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB
Coupling in 1 - out:	1.8 ± 0.15 dB	1.2 ± 0.15 dB	1.0 ± 0.15 dB
Coupling in 2 - out:	4.7 ± 0.15 dB	6.0 ± 0.15 dB	10.0 ± 0.15 dB
Max input power/port:	70 W	70 W	70 W
3 <sup>rd</sup> order intermodulation:			
IM3, 2 x 43 dBm:	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>			
Dimensions (W x H x D):	140 x 80 x 40 mm	140 x 80 x 40 mm	140 x 80 x 40 mm
Connectors:	7/16 (f)	7/16 (f)	7/16 (f)
<b>Environmental Specifications</b>			
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP68	IP68	IP68

<b>Installation support</b>	
Installation bracket: EG 699 0007	(Order separately)

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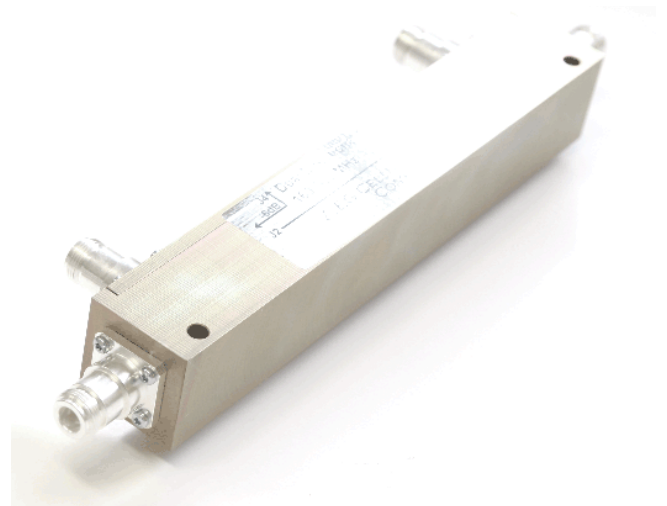
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## 2-Way Combiner

376 - 500 MHz

800 - 2170 MHz

TETRA, GSM900, GSM1800, DCS, UMTS



### Combining with optimization

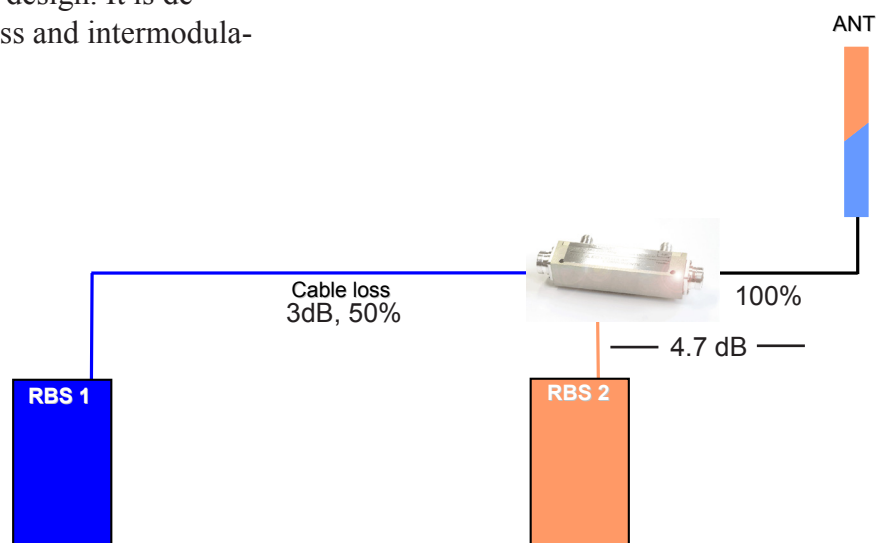
Do you have radio base stations or repeaters in separate locations? Egant has the solution. Our 2-way combiner enables you to optimize your system by compensating for the added cable loss in addition to combining the signals into one point with equal power, adding control over signal strength to the antenna.

### Innovative design

This 2-way combiner incorporates a broad band and low loss product design. It is designed for low insertion loss and intermodulation.

### The benefits from installing the 2-way combiner are:

- Higher antenna isolation
- Lower insertion loss
- Fewer system components
- Higher system quality
- Cost-effective design improvement





## Technical Specifications for the 2-Way Combiner

Below are some typical data. For more detailed information, please contact us.

<b>Electrical Specifications</b>				
Product number:	EG 100 9204	EG 100 9206	EG 100 9207	EG 100 9210
Passband:	800 - 2170 MHz	800 - 2170 MHz	800 - 2170 MHz	800 - 2170 MHz
Isolation between ports:	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB	> 20.0 dB
Coupling in 1 - out:	1.8 ± 0.3 dB	1.2 ± 0.3 dB	1.1 ± 0.15 dB	1.0 ± 0.3 dB
Coupling in 2 - out:	4.7 ± 0.3 dB	6.0 ± 0.3 dB	7.0 ± 0.15 dB	10.0 ± 0.3 dB
Max input power/port:	500 W	500 W	500 W	500 W
3 <sup>rd</sup> order intermodulation:				
IM3, 2 x 43 dBm:	≤ -110 dBm (153dBc)	≤ -110 dBm (153dBc)	≤ -110 dBm (153dBc)	≤ -110 dBm (153dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>				
Dimensions (W x H x D):	140 x 80 x 40 mm	140 x 80 x 40 mm	140 x 80 x 40 mm	140 x 80 x 40 mm
Connectors:	N (f)	N (f)	N (f)	N (f)
<b>Environmental Specifications</b>				
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP68	IP68	IP68	IP68

<b>Electrical Specifications</b>				
Product number:	EG 100 9304	EG 100 9306	EG 100 9307	EG 100 9310
Passband:	376 - 500 MHz	376 - 500 MHz	376 - 500 MHz	376 - 500 MHz
Isolation between ports:	≥ 30 dB	≥ 30 dB	≥ 30 dB	≥ 30 dB
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB	> 20.0 dB
Coupling in 1 - out:	1.8 ± 0.2 dB	1.2 ± 0.2 dB	1.1 ± 0.2 dB	1.0 ± 0.2 dB
Coupling in 2 - out:	4.7 ± 0.4 dB	6.0 ± 0.4 dB	7.0 ± 0.4 dB	10.0 ± 0.4 dB
Max input power/port:	500 W	500 W	500 W	500 W
3 <sup>rd</sup> order intermodulation:				
IM3, 2 x 43 dBm:	≤ -110 dBm (153dBc)	≤ -110 dBm (153dBc)	≤ -110 dBm (153dBc)	≤ -110 dBm (153dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
<b>Mechanical Specifications</b>				
Dimensions (W x H x D):	140 x 80 x 40 mm	140 x 80 x 40 mm	140 x 80 x 40 mm	140 x 80 x 40 mm
Connectors:	N (f)	N (f)	N (f)	N (f)
<b>Environmental Specifications</b>				
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65	IP65	IP65

<b>Installation support</b>	
Installation bracket: EG 699 0007	(Order separately)

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