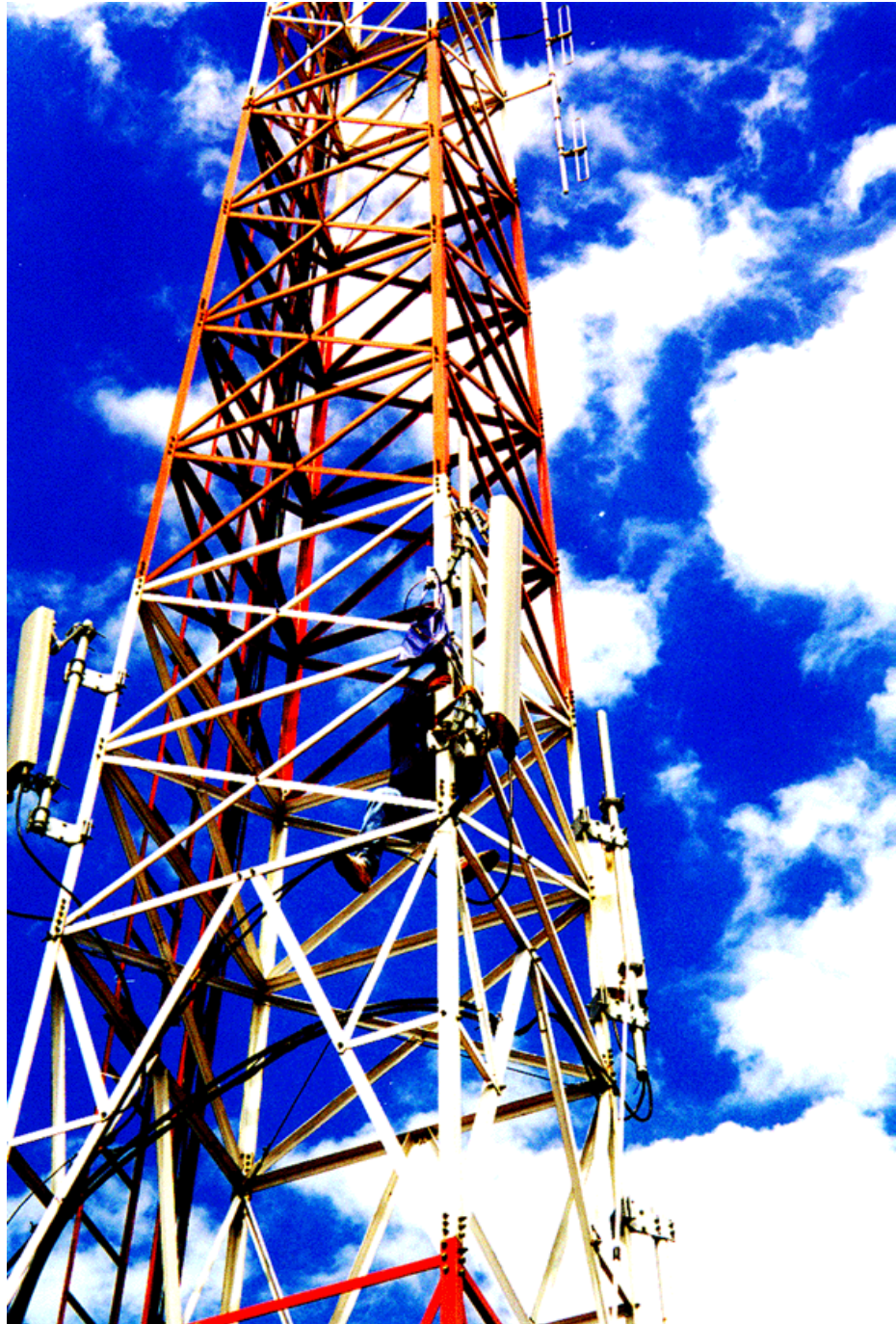




High performance site components





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

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Directional Couplers

www.egant.se

Frequency range

Directional Coupler

376-1000MHz

376-1000MHz

700-2700MHz

700-2700MHz

700-2700MHz

700-2700MHz

800-2200MHz

870-2170MHz

Description

Directional Coupler 20dB

Directional Coupler 30dB

Directional Coupler 6dB

Directional Coupler 7dB

Directional Coupler 10dB

Directional Coupler 20dB

6dB Coupler 800-2200MHz 7/16-N

Directional Coupler 20dB

Connector

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

7/16(m),7/16(f), N(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 0015

EG 601 0016

EG 500 7306

EG 500 7307

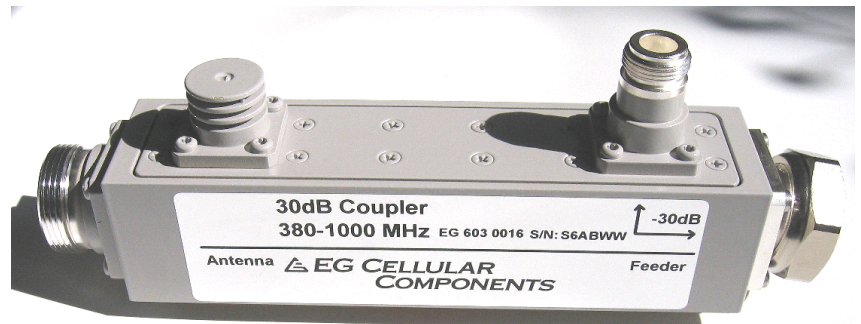
EG 500 7310

EG 500 7320

EG 100 8015

EG 603 0041

Directional Coupler 20 dB, 30 dB
376 - 1000 MHz
870 - 2170 MHz



Couples off signals to a repeater

The directional coupler is designed to be directly installed on the output connector of the RBS, coupling off 20 or 30 dB of the signal to a repeater. Easily installed and robustly designed, it makes the solution highly cost effective and renders superior network performance.

Broadband, 376 - 1000 MHz
870 - 2170MHz

The directional coupler is electrically and mechanically designed for both indoor and outdoor applications. Its broad frequency range gives you the benefit of using just one single unit for all types of cellular systems.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for Directional Coupler

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

Electrical Specifications			
Product number:	EG 603 0015	EG 603 0016	EG 603 0041
Passband:	376 - 1000 MHz	376 - 1000 MHz	870 - 2170 MHz
Input return loss:	≥ 25 dB	≥ 25 dB	≥ 25 dB
Insertion loss J1-J2:	< 0.16 dB	< 0.1 dB	< 0.2 dB
Coupling J1-J3, 376 - 500 MHz:	21.0 ± 1.0 dB	31.0 ± 1.0 dB	
876 - 1000 MHz:	20.0 ± 1.0 dB	30.0 ± 1.0 dB	
870 - 2170 MHz:			20.0 ± 1.2 dB
Directivity:	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)
Intermodulation IM3 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. 3 kW peak	500 W avg. 3 kW peak	500 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	152 x 95 x 38 mm	152 x 95 x 38 mm	152 x 95 x 38 mm
Connector J1:	7/16 (m)	7/16 (m)	7/16 (m)
Connector J2:	7/16 (f)	7/16 (f)	7/16 (f)
Connector J3:	N (f)	N (f)	N (f)
Weight:	1.0 kg	1.0 kg	1.0 kg



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Directional Coupler 20 dB, 30 dB
376 - 1000 MHz
870 - 2170 MHz



Couples off signals to a repeater

The directional coupler is designed to be directly installed on the output connector of the RBS, coupling off 20 or 30 dB of the signal to a repeater. Easily installed and robustly designed, it makes the solution highly cost effective and renders superior network performance.

Broadband, 376 - 1000 MHz
870 - 2170MHz

The directional coupler is electrically and mechanically designed for both indoor and outdoor applications. Its broad frequency range gives you the benefit of using just one single unit for all types of cellular systems.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for Directional Coupler

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

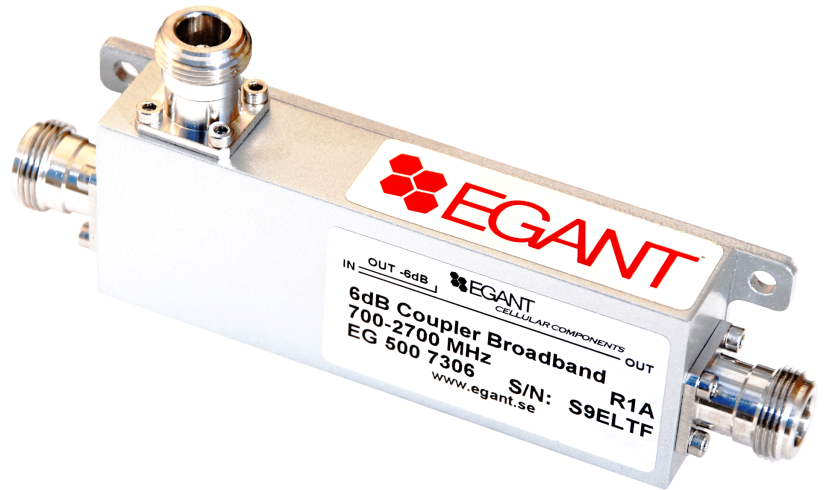
Electrical Specifications			
Product number:	EG 603 0015	EG 603 0016	EG 603 0041
Passband:	376 - 1000 MHz	376 - 1000 MHz	870 - 2170 MHz
Input return loss:	≥ 25 dB	≥ 25 dB	≥ 25 dB
Insertion loss J1-J2:	< 0.16 dB	< 0.1 dB	< 0.2 dB
Coupling J1-J3, 376 - 500 MHz:	21.0 ± 1.0 dB	31.0 ± 1.0 dB	
876 - 1000 MHz:	20.0 ± 1.0 dB	30.0 ± 1.0 dB	
870 - 2170 MHz:			20.0 ± 1.2 dB
Directivity:	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)
Intermodulation IM3 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. 3 kW peak	500 W avg. 3 kW peak	500 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	152 x 95 x 38 mm	152 x 95 x 38 mm	152 x 95 x 38 mm
Connector J1:	7/16 (m)	7/16 (m)	7/16 (m)
Connector J2:	7/16 (f)	7/16 (f)	7/16 (f)
Connector J3:	N (f)	N (f)	N (f)
Weight:	1.0 kg	1.0 kg	1.0 kg



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6dB, 7dB, 10dB, 13dB 20dB Coupler 700 - 2700MHz



Tapps off 6 , 7, 10, 13dB or 20dB of the signal

The coupler is designed to tapp off a portion the signal in one direction and allow the rest of the signal to pass through with minimum of loss.

When building a indoor coverage system the Coupler is often used to tapp off signals to antennas. The functionality of handling both transmit and receiving signals in the same path is very beneficial.

Broad Band, 700 - 2700MHz

The broadband Coupler is designed both electrically and mecha nically to be used for indoor and outdoor applications.

Desin Focus:

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

Technical Specifications for the Coupler 6dB, 7dB 10dB, 13dB, 20dB

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

Electrical Specifications

	EG 500 7306	EG 500 7307	EG 500 7310
Product number:	EG 500 7306	EG 500 7307	EG 500 7310
Passband:	700 - 2700 MHz	700 - 2700 MHz	700 - 2700 MHz
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB
Coupling in 1 - out:	1.3 ± 0.4 dB	1.5 ± 0.4 dB	0.8 ± 0.4dB
Coupling in 2 - out:	-6.0 ± 0.8 dB	-7.0 ± 0.8 dB	-10.0 ± 0.8 dB
Insertion loss:	< 0.20 dB	< 0.20 dB	< 0.20 dB
Directivity:	>20dB	>20dB	>20dB
Max input power/port:	200 W	200 W	200 W
3 rd order intermodulation:			
IM3, 2 x 43 dBm:	-140 dBc	-140 dBc	-140 dBc
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm

Mechanical Specifications

Dimensions (W x H x D):	140 x 23 x 66 mm	140 x 23 x 66 mm	140 x 23 x 66 mm
Connectors:	N (f)	N (f)	N (f)
Weight:	0.4 Kg	0.4 Kg	0.4 Kg

Environmental Specifications

Temp. range (normal operation):	-25 to +75° C	-30 to +70° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65	IP65

Electrical Specifications

	EG 500 7313	EG 500 7320
Product number:	EG 500 7313	EG 500 7320
Passband:	700 - 2700 MHz	700 - 2700 MHz
Input return loss:	> 20.0 dB	> 20.0 dB
Coupling in 1 - out:	0.5 ± 0.4dB	0.3 ± 0.4dB
Coupling in 2 - out:	-13.0 ± 0.8 dB	-20.0 ± 0.8 dB
Insertion loss:	< 0.20 dB	< 0.20 dB
Directivity:	>20dB	>20dB
Max input power/port:	200 W	200 W
3 rd order intermodulation:		
IM3, 2 x 43 dBm:	-140 dBc	-140 dBc
Impedance in/out:	50 Ohm	50 Ohm

Mechanical Specifications

Dimensions (W x H x D):	140 x 23 x 66 mm	140 x 23 x 66 mm
Connectors:	N (f)	N (f)
Weight:	0.4 Kg	0.4 Kg

Environmental Specifications

Temp. range (normal operation):	-25 to +75° C	-30 to +70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65	IP65

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Dual Directional Couplers

www.egant.se

Frequency range

Dual Directional Coupler

145-500MHz

160-500MHz

160-500MHz

160-500MHz

376-470MHz

376-470MHz

376-470MHz

376-500MHz

376-500MHz

376-500MHz

800-2170MHz

870-2200MHz

870-2200MHz

870-2200MHz

870-2170MHz

870-2170MHz

870-2170MHz

Description

Dual Directional Coupler 30dB

Dual Directional Coupler 6dB

Dual Directional Coupler 10dB

Dual Directional Coupler 20dB

Dual Directional Coupler 20dB

Dual Directional Coupler 20dB

Dual Directional Coupler 20dB

Dual Directional Coupler 30dB

Dual Directional Coupler 30dB

Dual Directional Coupler 30dB

2-Way Combiner 10dB

Dual Directional Coupler 30dB

Dual Directional Coupler 30dB

Dual Directional Coupler 30dB

Dual Directional Coupler 20dB

Dual Directional Coupler 20dB

Dual Directional Coupler 20dB

Connector

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

N(f)

N(f)

N(f)

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

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

N(f)

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

N(m), N(f)

N(f)

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

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

7/16(f)

7/16(f), N(f)

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

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

N(f)

Ordering number

EG 100 7165

EG 500 7706

EG 500 7710

EG 500 7720

EG 603 0044

EG 603 0045

EG 603 0046

EG 100 7164

EG 100 7167

EG 100 7168

EG 603 0013

EG 100 7163

EG 100 7169

EG 100 7171

EG 603 0018

EG 603 0019

EG 603 0029



30 dB Dual Directional Couplers
870 - 2170 MHz
GSM-R, GSM900, GSM1800, UMTS



Couples off signals to a repeater

The dual directional couplers are specifically designed to be directly installed on the output connector of the RBS, coupling off 30 dB of the signal to a repeater. The simple and robust installation makes the solution very cost effective and renders high network performance.

Broadband, 870 - 2170 MHz

The dual directional couplers are electrically and mechanically designed for both indoor and outdoor applications. The broad frequency range makes it possible to use only one single unit for all types of cellular systems.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for the 30 dB Dual Directional Couplers

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

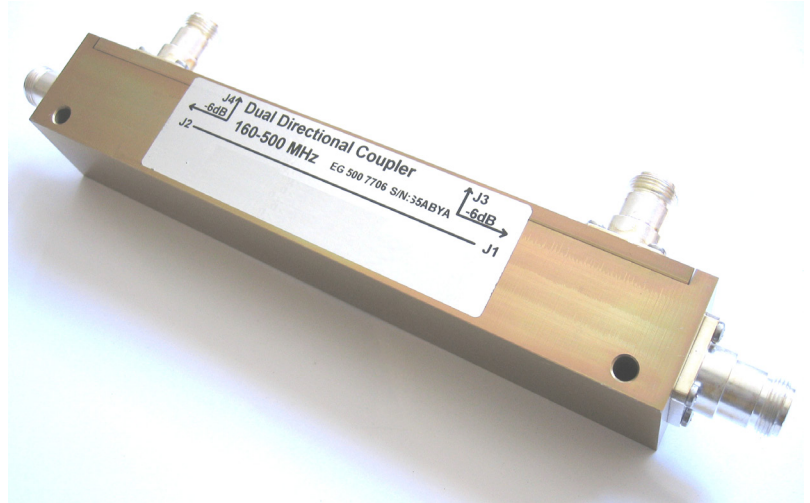
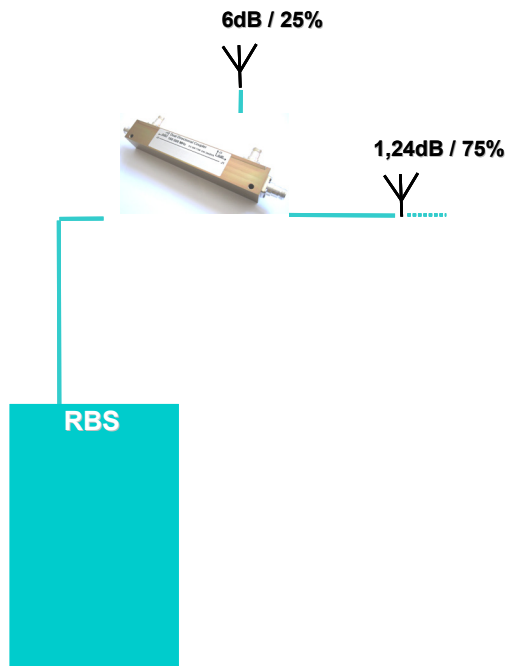
Electrical Specifications			
Product number:	EG 100 7163	EG 100 7169	EG 100 7171
Passband:	870 - 2170 MHz	870 - 2170 MHz	870 - 2170 MHz
Input return loss:	≥ 25 dB	≥ 25 dB	≥ 25 dB
Insertion loss J1-J2:	< 0.1 dB	< 0.1 dB	< 0.1 dB
Coupling J1-J3, J2-J4:			
870 - 960 MHz:	30.0 ± 0.4 dB	30.0 ± 0.4 dB	30.0 ± 0.4 dB
1710 - 2170 MHz:	30.0 + 0.5 dB	30.0 + 0.5 dB	30.0 + 0.5 dB
Directivity:	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)
Intermodulation IM3 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. 3 kW peak	500 W avg. 3 kW peak	500 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	152 x 95 x 38 mm	152 x 95 x 38 mm	152 x 95 x 38 mm
Connector J1:	7/16 (m)	7/16 (f)	7/16 (f)
Connector J2:	7/16 (f)	7/16 (f)	7/16 (f)
Connector J3, J4:	N (f)	7/16 (f)	N (f)
Weight:	1.0 kg	1.0 kg	1.0 kg
Environmental Specifications			
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

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

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Dual Directional Coupler / Combiner

6 dB, 10 dB, 20 dB
160 - 500 MHz



Taps and/or couples off 6, 10 or 20 dB of the signal

The Dual Directional Coupler is specifically designed to tapp off a portion of the signal in one direction whilst allowing the rest of the signal to pass through with a minimum of loss.

Robust design

The Dual Directional Coupler / Combiner is electrically and mechanically designed for both indoor and outdoor applications.

Design highlights:

- Low insertion loss
- Low intermodulation
- Simple installation

Technical Specifications for 6 dB, 10 dB and 20 dB Directional Couplers / Combiners

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

	EG 500 7706	EG 500 7710	EG 500 7720
Electrical Specifications			
Product number:	EG 500 7706	EG 500 7710	EG 500 7720
Passband:	160 - 500 MHz	160 - 500 MHz	160 - 500 MHz
Input return loss IN - OUT:			
160 - 500 MHz:	≥ 20 dB	≥ 20 dB	≥ 20 dB
Coupling IN - OUT:			
160 - 500 MHz:	1.3 ± 0.4 dB	0.45 ± 0.4 dB	0.04 ± 0.4 dB
Coupling IN - COUPLED:			
370 - 500 MHz:	6.0 ± 0.8 dB	10.0 ± 0.8 dB	20.0 ± 0.8 dB
Insertion loss IN - OUT:			
160 - 500 MHz:	< 0.10 dB	< 0.10 dB	< 0.10 dB
Directivity:	> 23 dB	> 23 dB	> 23 dB
Max input power:	200 W avg. 3 kW peak	200 W avg. 3 kW peak	200 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	290 x 70 x 19 mm	290 x 70 x 19 mm	290 x 70 x 19 mm
Connectors:	N (f)	N (f)	N (f)
Weight:	0.9 kg	0.9 kg	0.9 kg
Environmental Specifications			
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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6dB, 10dB Directional Coupler
376 - 500 MHz
376 - 2170 MHz
TETRA, GSM900, GSM1800, UMTS



Design Focus:

- Low Insertionloss
- Low Intermodulation
- High Directivity
- Easy installation
- No active components (robust design)

Broad Band, 376-2200MHz

The Coupler is designed both electrically and mechanically to be used for indoor and outdoor applications.

The broad band frequency range gives you the bennefit to use only one singel unit for all types of cellular systems.

Technical Specifications for the 6dB Coupler

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

Electrical Specifications		
Product number:	EG 100 8015	EG 603 0034
Passband:	376 - 2170 MHz	376 - 500 MHz
Isolation between ports:	≥ 30 dB	≥ 30 dB
Input return loss:	> 20.0 dB	> 20.0 dB
Coupling J1-J2:		
376-500MHz	<1,2 dB	<0,1,2 dB
824-2170MHz	1,2 ± 0,4 dB	
Coupling J1-J3:		
376-430MHz		11,0 ± 0,8 dB
430-500MHz		10,0 ± 0,8 dB
824-960MHz	6,0 ± 0,3 dB	
1710-2170MHz	5,7 ± 0,3 dB	
Max input power J1:	400 W	400 W
Max input power J2:	20W	20W
Max input power J3:	5W	5W
3 rd order Intermodulation IM3, 2*43dBm:	≤-110 dBm (153 dBc)	≤-110 dBm (153 dBc)
Impedance in/out:	50 Ohm	50 Ohm
Mechanical Specifications		
Dimensions (WxHxD):	140 x 80 x 40 mm	140 x 80 x 40 mm
Connectors		
J1:	7/16 (m)	7/16 (m)
J2:	7/16 (f)	7/16 (f)
J3	N (f)	N (f)
Environmental Specifications		
Temp. range (normal operation):	- 30 to + 70° C	- 30 to + 70° C
Humidity:	Relative 5 - 100%	Relative 5 - 100%
Sealing:	IP65 classed	IP65 classed
Installation bracket:	EG 699 0007	EG 699 0007
Materiel:	Aluminum Zinc	Aluminum Zinc



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**30 dB Dual Directional Coupler
145 - 500 MHz
TETRA**



TETRA, 145 - 500 MHz

Couples off signals to a repeater

The dual directional coupler is designed to be directly installed on the output connector of the RBS, coupling off 30 dB of the signal to a repeater. Easily installed and robustly designed, it makes the solution cost effective and renders superior network performance.

This dual directional coupler is electrically and mechanically designed for both indoor and outdoor applications. The broad frequency range gives you the benefit of using just one single unit for all types of cellular systems.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for Dual Directional Coupler 30 dB

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

Electrical Specifications

Product number:	EG 100 7165
Passband:	145 - 500 MHz
Input return loss:	≥ 25 dB
Insertion loss J1-J2:	< 0.1 dB
Coupling J1-J3, J2-J4:	
376 - 500 MHz:	30.0 ± 0.5 dB
145 - 170 MHz:	37.0 ± 0.8 dB
Directivity:	≥ 20 dB (typical > 30 dB)
Intermodulation IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. 3 kW peak
Impedance in/out:	50 Ohm

Mechanical Specifications

Dimensions (W x H x D):	152 x 95 x 38 mm
Connector J1:	7/16 (m)
Connector J2:	7/16 (f)
Connector J3, J4:	N (f)
Weight:	1.0 kg

Environmental Specifications

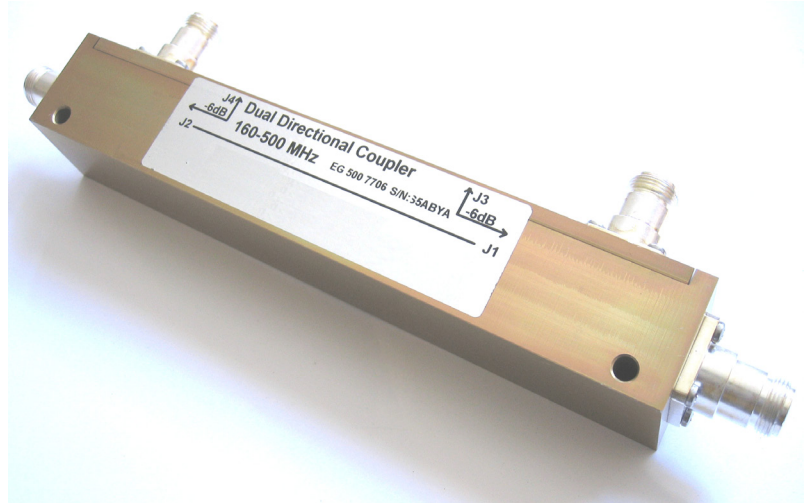
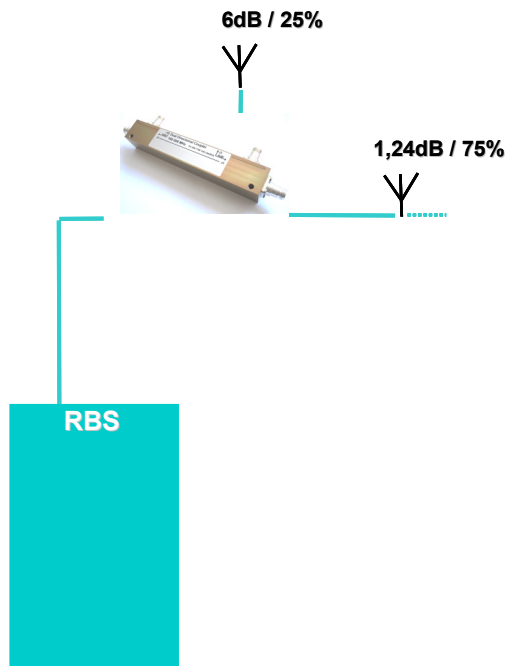
Temp. range (normal operation):	-35 to +70° C
Humidity:	Relative 5 - 100%
Sealing:	IP65

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

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Dual Directional Coupler / Combiner

6 dB, 10 dB, 20 dB
160 - 500 MHz



Taps and/or couples off 6, 10 or 20 dB of the signal

The Dual Directional Coupler is specifically designed to tapp off a portion of the signal in one direction whilst allowing the rest of the signal to pass through with a minimum of loss.

Robust design

The Dual Directional Coupler / Combiner is electrically and mechanically designed for both indoor and outdoor applications.

Design highlights:

- Low insertion loss
- Low intermodulation
- Simple installation

Technical Specifications for 6 dB, 10 dB and 20 dB Directional Couplers / Combiners

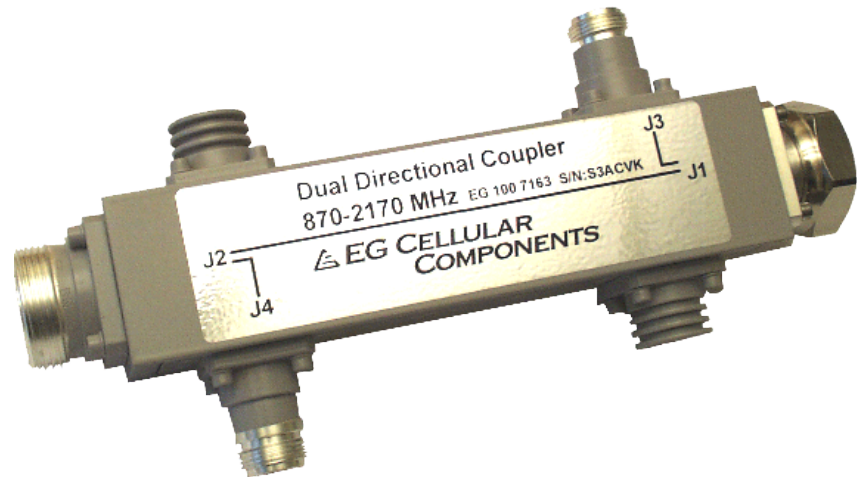
Below are some typical data. For more detailed information, please contact us.

	EG 500 7706	EG 500 7710	EG 500 7720
Electrical Specifications			
Product number:	EG 500 7706	EG 500 7710	EG 500 7720
Passband:	160 - 500 MHz	160 - 500 MHz	160 - 500 MHz
Input return loss IN - OUT:			
160 - 500 MHz:	≥ 20 dB	≥ 20 dB	≥ 20 dB
Coupling IN - OUT:			
160 - 500 MHz:	1.3 ± 0.4 dB	0.45 ± 0.4 dB	0.04 ± 0.4 dB
Coupling IN - COUPLED:			
370 - 500 MHz:	6.0 ± 0.8 dB	10.0 ± 0.8 dB	20.0 ± 0.8 dB
Insertion loss IN - OUT:			
160 - 500 MHz:	< 0.10 dB	< 0.10 dB	< 0.10 dB
Directivity:	> 23 dB	> 23 dB	> 23 dB
Max input power:	200 W avg. 3 kW peak	200 W avg. 3 kW peak	200 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	290 x 70 x 19 mm	290 x 70 x 19 mm	290 x 70 x 19 mm
Connectors:	N (f)	N (f)	N (f)
Weight:	0.9 kg	0.9 kg	0.9 kg
Environmental Specifications			
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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**20 dB Dual Directional Coupler
376 - 470 MHz
TETRA**



Couples off signals to a repeater

The dual directional coupler is specifically designed to be directly installed on the output connector of the RBS, off-coupling 20 dB of the signal to a repeater. The simple and robust installation makes the solution cost effective and renders high network performance.

TETRA Bandwidth, 376 - 470 MHz

The dual directional coupler is electrically and mechanically designed for both indoor and outdoor applications. The specific frequency range makes it the perfect component in a TETRA system.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for the 20 dB Dual Directional Coupler - TETRA

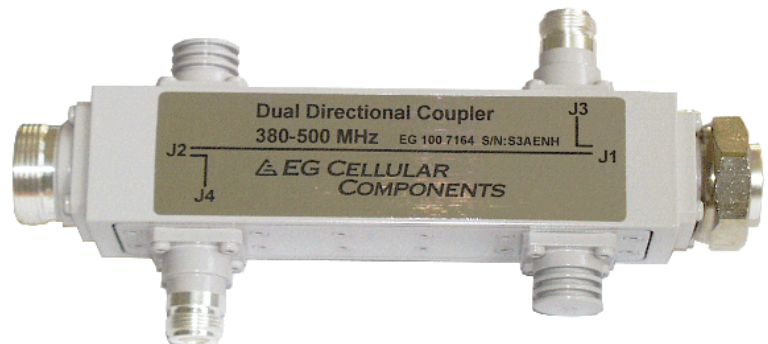
Below are some typical data. For more detailed information, please contact us.

Electrical Specifications			
Product number:	EG 603 0044	EG 603 0045	EG 603 0046
Passband:	376 - 470 MHz	376 - 470 MHz	376 - 470 MHz
Input return loss:	≥ 25 dB	≥ 25 dB	≥ 25 dB
Insertion loss J1 - J2:	< 0.1 dB	< 0.1 dB	< 0.1 dB
Coupling J1 - J3, J2 - J4: 376 - 470 MHz:	20.0 ± 0.8 dB	20.0 ± 0.8 dB	20.0 ± 0.8 dB
Directivity:	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)
Intermodulation IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. / 3 kW peak	500 W avg. / 3 kW peak	500 W avg. / 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	152 x 95 x 38 mm	152 x 95 x 38 mm	152 x 95 x 38 mm
Connector J1:	7/16 (m)	7/16 (m)	N (m)
Connector J2:	7/16 (f)	7/16 (f)	N (f)
Connector J3, J4:	SMA (f)	N (f)	N (f)
Weight:	1.0 kg	1.0 kg	1.0 kg
Environmental Specifications			
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

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

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30 dB Dual Directional Coupler
376 - 500 MHz
TETRA



TETRA, 376 - 500 MHz

Couples off signals to a repeater

The dual directional coupler is designed to be directly installed on the output connector of the RBS, coupling off 30 dB of the signal to a repeater. Easily installed and robustly designed, it makes the solution cost effective and renders superior network performance.

The dual directional coupler is electrically and mechanically designed for both indoor and outdoor applications.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for Dual Directional Coupler 30 dB

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

	EG 100 7164	EG 100 7167	EG 100 7168
Electrical Specifications			
Product number:	EG 100 7164	EG 100 7167	EG 100 7168
Passband:	376 - 500 MHz	376 - 500 MHz	376 - 500 MHz
Input return loss:	≥ 25 dB	≥ 25 dB	≥ 25 dB
Insertion loss J1-J2:	< 0.1 dB	< 0.1 dB	< 0.1 dB
Coupling J1-J3, J2-J4: 376 - 500 MHz:	30.0 ± 0.5 dB	30.0 ± 0.5 dB	30.0 ± 0.5 dB
Directivity:	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)
Intermodulation IM3 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. 3 kW peak	500 W avg. 3 kW peak	500 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	152 x 95 x 38 mm	152 x 95 x 38 mm	152 x 95 x 38 mm
Connector J1:	7/16 (m)	N (m)	N (f)
Connector J2:	7/16 (f)	N (f)	N (f)
Connector J3, J4:	N (f)	N (f)	N (f)
Weight:	1.0 kg	1.0 kg	1.0 kg
Environmental Specifications			
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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2-Way Combiner

800 - 2170 MHz

GSM 900, GSM 1800, PCS, UMTS



Combining with optimization

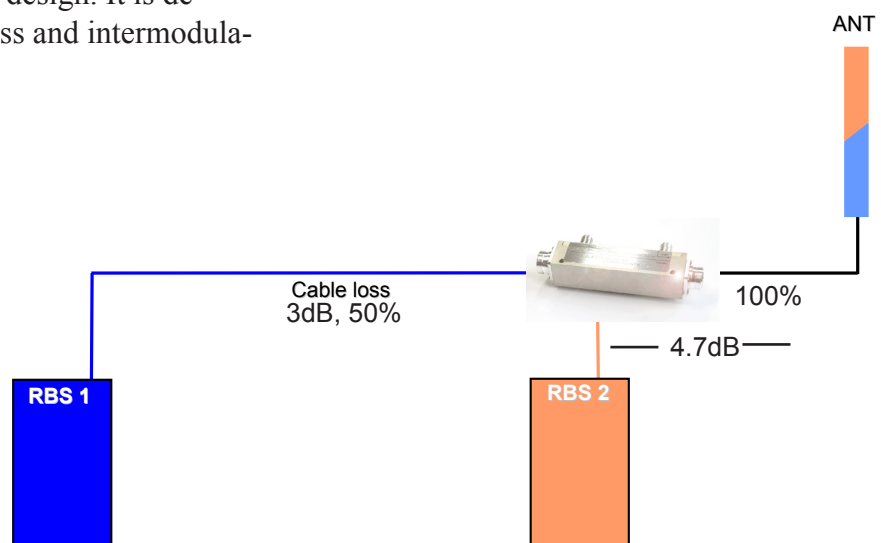
Do you have radio base stations or repeaters in separate locations? Egant has the solution. Our 2-way combiner enables you to optimize your system by compensating for the added cable loss in addition to combining the signals into one point with equal power, adding control over signal strength to the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

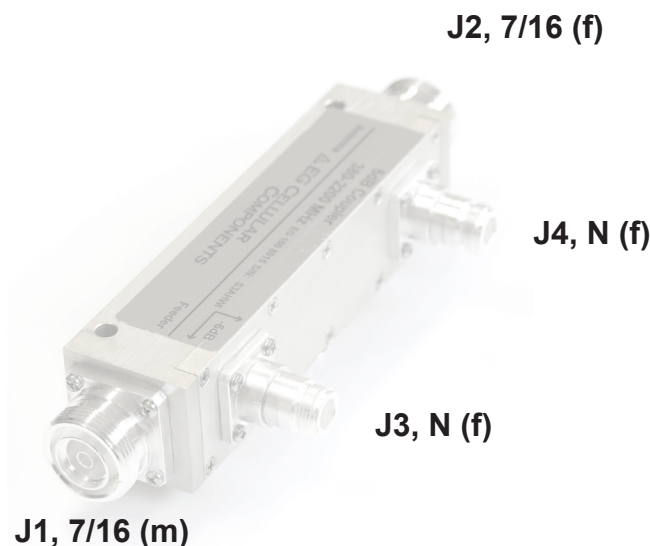
Below are some typical data. For more detailed information, please contact us.

Electrical Specifications			
Product number:	EG 603 0011	EG 603 0012	EG 603 0013
Passband:	800 - 2170 MHz	800 - 2170 MHz	800 - 2170 MHz
Isolation between ports J2 - J3:	≥ 30 dB	≥ 30 dB	≥ 30 dB
Input return loss:	> 20.0 dB	> 20.0 dB	> 20.0 dB
Coupling J1 - J2:	1.8 ± 0.3 dB	1.2 ± 0.3 dB	1.0 ± 0.3 dB
Coupling J1 - J3:	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 rd order intermodulation: IM3, 2 x 43 dBm:	≤ -110 dBm (153dBc)	≤ -110 dBm(153dBc)	≤ -110 dBm(153dBc)
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
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:			
J1:	7/16 (m)	7/16 (m)	7/16 (m)
J2:	7/16 (f)	7/16 (f)	7/16 (f)
J3 - J4 (coupled port):	N (f)	N (f)	N (f)
Environmental Specifications			
Temp. range (normal operation):			
Humidity:	-30 to +70° C	-30 to +70° C	-30 to +70° C
Sealing:	Relative 5 - 100% IP65	Relative 5 - 100% IP65	Relative 5 - 100% IP65

Installation support

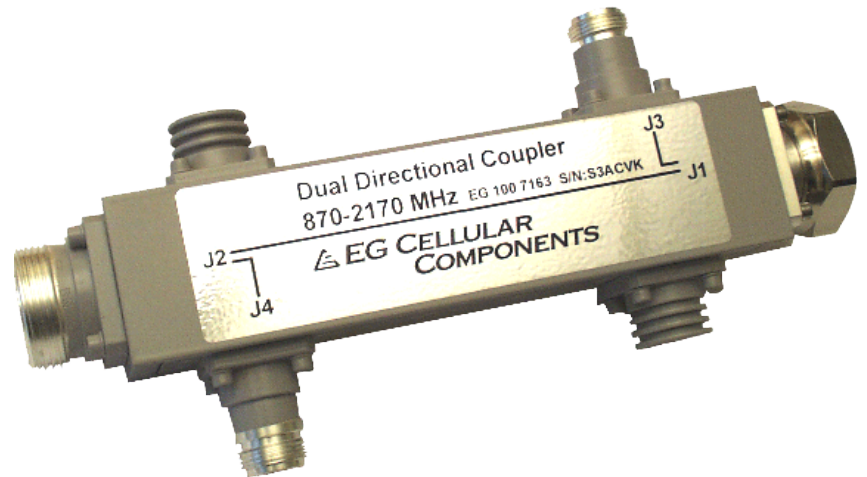
Installation bracket: EG 699 0007 (Order separately)

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



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**Dual Directional Coupler 20 dB
870 - 2170 MHz
GSM-R, GSM900, GSM1800, UMTS**



Couples off signals to a repeater

The dual directional coupler is specifically designed to be directly installed on the output connector of the RBS, off-coupling 20 dB of the signal to a repeater. The simple and robust installation makes the solution cost effective and renders high network performance.

Broadband, 870 - 2170 MHz

The dual directional coupler is electrically and mechanically designed for both indoor and outdoor applications. The broadband frequency range makes it possible to use only one single unit for all types of cellular systems.

Design highlights:

- Low insertion loss
- Low intermodulation
- High directivity
- Easy installation
- No active components (robust design)

Technical Specifications for Dual Directional Coupler 20 dB

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

Electrical Specifications			
Product number:	EG 603 0018	EG 603 0019	EG 603 0029
Passband:	870 - 2170 MHz	870 - 2170 MHz	870 - 2170 MHz
Input return loss:	≥ 25 dB	≥ 25 dB	≥ 25 dB
Insertion loss J1-J2:	< 0.1 dB	< 0.1 dB	< 0.1 dB
Coupling J1-J3, J2-J4:			
870 - 960 MHz:	20.0 ± 0.5 dB	20.0 ± 0.5 dB	20.0 ± 0.5 dB
1710 - 2170 MHz:	20.0 ± 0.6 dB	20.0 ± 0.6 dB	20.0 ± 0.6 dB
Directivity:	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)	≥ 20 dB (typical > 30 dB)
Intermodulation IM3, 2 x 43 dBm:	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)	≤ -110 dBm (153 dBc)
Max input power:	500 W avg. 3 kW peak	500 W avg. 3 kW peak	500 W avg. 3 kW peak
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm
Mechanical Specifications			
Dimensions (W x H x D):	152 x 95 x 38 mm	152 x 95 x 38 mm	152 x 95 x 38 mm
Connector J1:	7/16 (m)	7/16 (m)	N (m)
Connector J2:	7/16 (f)	7/16 (f)	N (f)
Connector J3, J4:	SMA (f)	N (f)	N (f)
Weight:	1.0 kg	1.0 kg	1.0 kg
Environmental Specifications			
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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**Telecommunication Adapters
N type and 7/16 (DIN)
DC - 3 GHz**



**Ultra high performance adapters designed for
the lowest possible loss**

The Egant adapters are precision-made of machined brass with Teflon® insulation and silver-plated contacts and bodies for minimal intermodulation generation.

Technical Specifications for Egant Adapters

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

Specifications Straight Adapters				
Product number:	EG 608 0002	EG 200 0078	EG 200 0089	EG 200 0083
Connectors:	N (f) - N (f)	N (m) - N (m)	7/16 (f) - 7/16 (f)	7/16(m) - 7/16 (m)
IM3, 2 x 43 dBm:	< - 117 dBm	< - 117 dBm	< - 117 dBm	< - 117 dBm
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C	-30 to +70° C
Sealing:	IP65	IP65	IP68	IP68
Specifications Straight Adapters				
Product number:	EG 200 0090	EG 200 0091	EG 200 0087	EG 200 0088
Connectors:	N (f) - 7/16 (f)	N (f) - 7/16 (m)	N (m) - 7/16 (f)	N (m) - 7/16 (m)
IM3, 2 x 43 dBm:	< - 117 dBm	< - 117 dBm	< - 117 dBm	< - 117 dBm
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C	-30 to +70° C
Sealing:	IP65	IP65	IP65	IP65

Specifications 90° Angle Adapters				
Product number:	EG 200 0095	EG 200 0080	EG 200 0081	EG 200 0096
Connectors:	N (f) - N (m)	7/16(f)-7/16(m)	7/16 (f) - 7/16 (f)	7/16 (m) - 7/16 (m)
IM3, 2 x 43 dBm:	< - 117 dBm	< - 117 dBm	< - 117 dBm	< - 117 dBm
Impedance in/out:	50 Ohm	50 Ohm	50 Ohm	50 Ohm
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C	-30 to +70° C	-30 to +70° C
Sealing:	IP65	IP65	IP68	IP68
Specifications 90° Angle Adapters				
Product number:	EG 200 0082	EG 200 0086		
Connectors:	N (f) - 7/16 (m)	N (m) - 7/16 (f)		
IM3, 2 x 43 dBm:	< - 117 dBm	< - 117 dBm		
Impedance in/out:	50 Ohm	50 Ohm		
Temp. range (normal operation):	-30 to +70° C	-30 to +70° C		
Sealing:	IP65	IP65		

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Brackets

Brackets

Description

Bracket for splitters/tappers
3dB combiner bracket 376-960MHz
6dB coupler bracket
3db bracket, 700-2700MHz
Bracket 4-Way Splitter RF

Connector

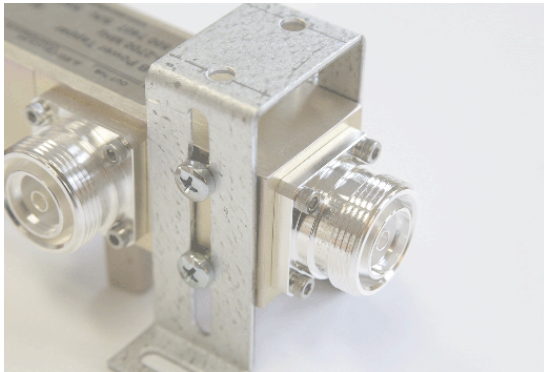
7/16(f), Nf)
7/16(f), Nf)
7/16(f), Nf)
7/16(f), Nf)
7/16(f), Nf)

www.egant.se

Ordering number

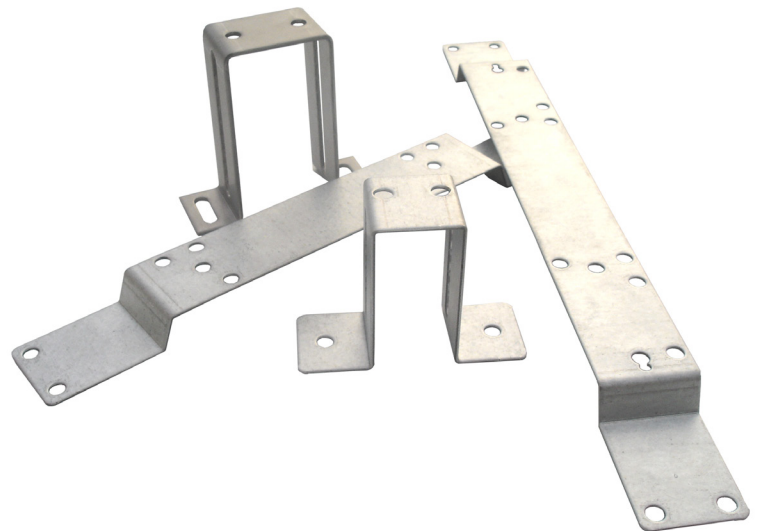
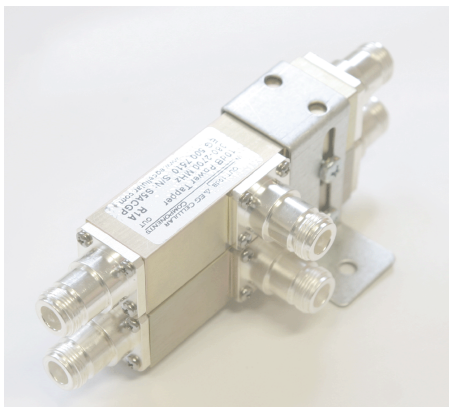
EG 699 0005
EG 699 0006
EG 699 0007
EG 699 0237
EG 699 0386

Brackets for Power Splitters, Power Tappers, Combiners and Couplers



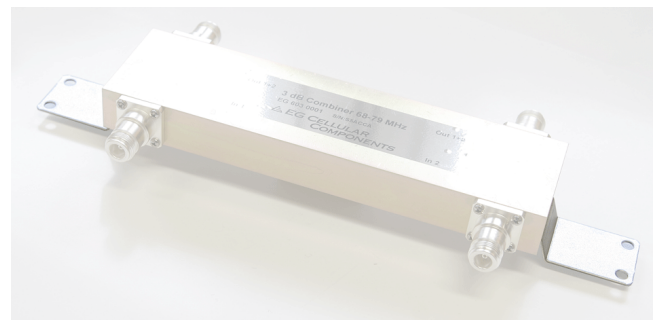
Adjustable brackets, optimized for tunnels and harsh environments

To simplify installation our brackets are multi-adjustable and made with ease of installation in mind.



Save money

Our brackets are optimized for Power Tappers, Power Splitters, Combiners and Couplers. When opting for quick and easy installation, make sure to use our tailor made stainless steel or aluzinc brackets.



Technical Specifications - Brackets

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

Product number:	EG 300 0306	EG 300 0307	EG 699 0005
Mechanical Specifications			
Dimensions (W x H x D):	30 x 77 x 80 mm	30 x 77 x 80 mm	80 x 60 x 30 mm
Weight:	0.2 kg	0.2 kg	0.15 kg
Material:	Stainless steel A4	Aluzinc	Aluzinc

Product number:	EG 699 0006	EG 699 0007	EG 300 0386
Mechanical Specifications			
Dimensions (W x H x D):	330 x 15 x 35 mm	257 x 15 x 35 mm	80 x 44 x 31 mm
Weight:	0.3 kg	0.2 kg	0.2 kg
Material:	Aluzinc	Aluzinc	Stainless steel



EG 699 0006

Bracket for Egant combiners



EG 699 0007

Bracket for Egant cellular couplers



EG 300 0386

Bracket (RF) for 3 and 4-Way Splitters
7/16(f) and N(f)



EG 699 0005

Bracket (Alu) for splitters/tappers 7/16 and (N)

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

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