



800—2500MHz Power Splitter

Description: SY-DIN8025-X*-I50 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS),which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

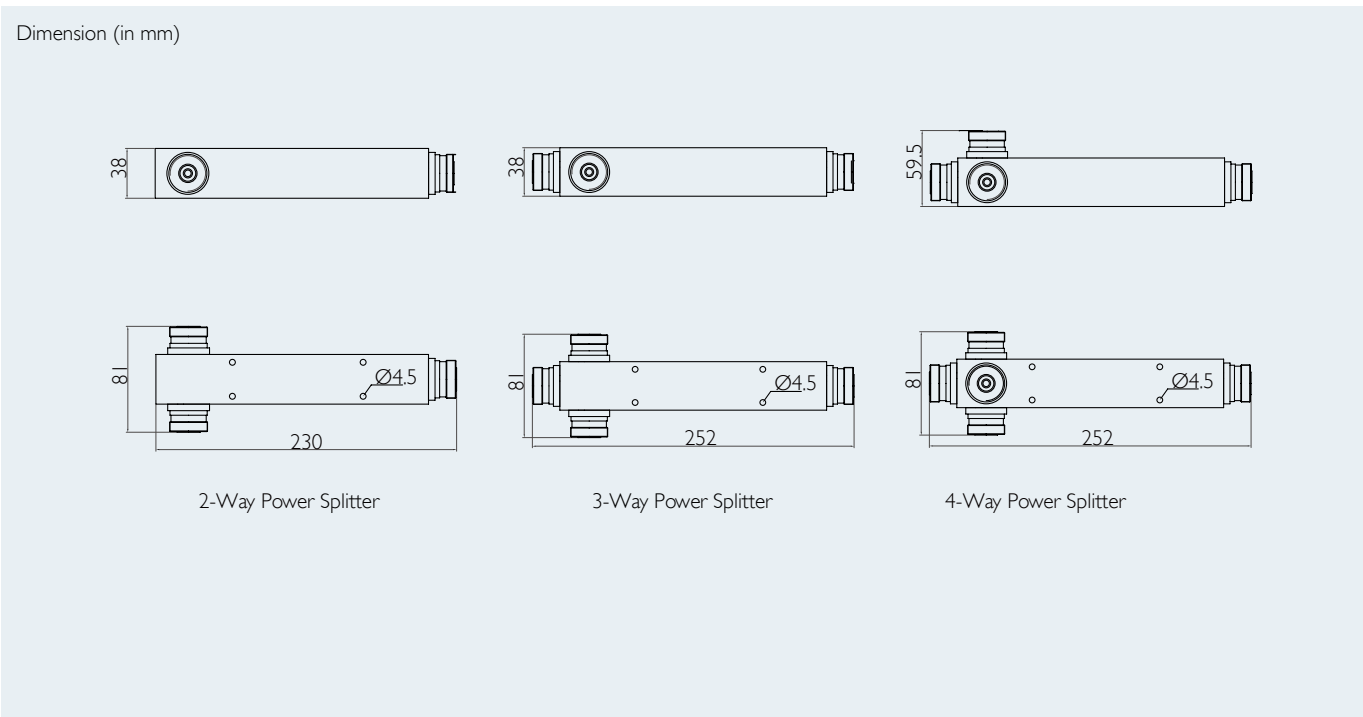
Synergy's RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



Technical Parameters

Part No.	SY-ST8025-2-I50	SY-ST8025-3-I50	SY-ST8025-4-I50
Frequency Range (MHz)	800-2500		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤1.2		
Insertion Loss(dB)	≤0.3	≤0.3	≤0.3
In-band Ripple (dB)	±0.3	±0.3	±0.3
PIM3(dBc)	≤-150 @ +43dBm×2		
Impedance (Ω)	50		
Power Rating(W)	500		
Connector	DIN-F		
Application	Outdoor, IP65		
Temperature Range(℃)	-30 ~ + 70		



800—2500MHz Power Splitter

Description: SY-N8025-X*-I50 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

SYNERGYs RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

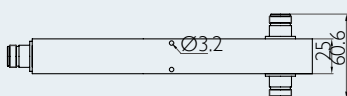
Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



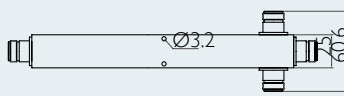
Technical Parameters

Part No.	SY-N8025-2-I50	SY-N8025-3-I50	SY-N8025-4-I50
Frequency Range (MHz)	800-2500		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤1.2		
Insertion Loss(dB)	≤0.1	≤0.1	≤0.2
In-band Ripple (dB)	0.3	0.3	0.3
PIM3(dBc)	≤-150 @ +43dBm×2		
Impedance (Ω)	50		
Power Rating(W)	200		
Connector	N-F		
Application	Outdoor, IP65		
Temperature Range(°C)	-30 ~ + 70		

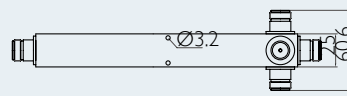
Dimension (in mm)



2-Way Power Splitter



3-Way Power Splitter



4-Way Power Splitter

800—2500MHz Power Splitter

Description: SY-N80250B-X*-I40 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

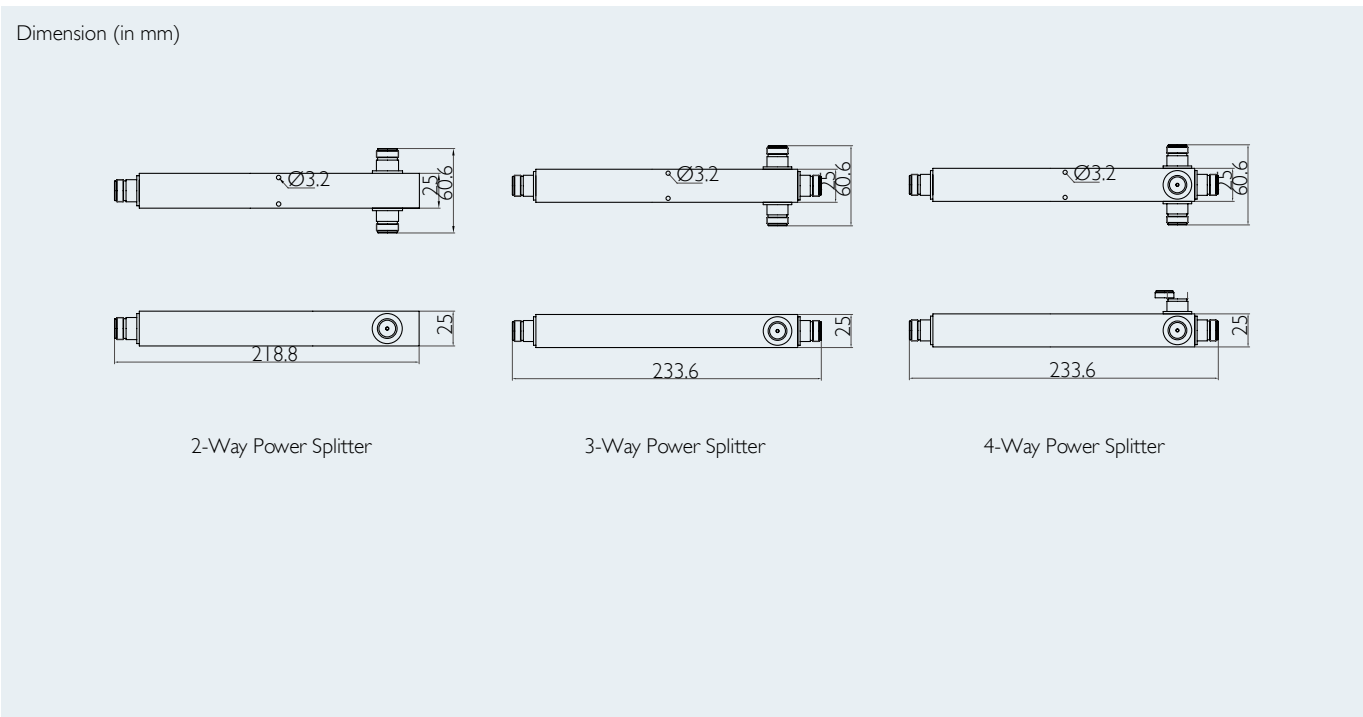
SYNERGY's RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



Technical Parameters

Part No.	SY-N80250B-2-I40	SY-N80250B-3-I40	SY-N80250B-4-I40
Frequency Range (MHz)	800-2500		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤1.2		
Insertion Loss(dB)	≤0.3	≤0.3	≤0.5
In-band Ripple (dB)	0.3	0.3	0.3
PIM3 / PIM5(dBc)	≤-140 @ +43dBm×2 / ≤-155 @ +43dBm×2		
Impedance (Ω)	50		
Power Rating(W)	200		
Connector	N-F		
Application	Indoor		
Temperature Range(°C)	-30 ~ + 70		



800—2700MHz Power Splitter

Description: SY-DIN8027-X*-I50 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

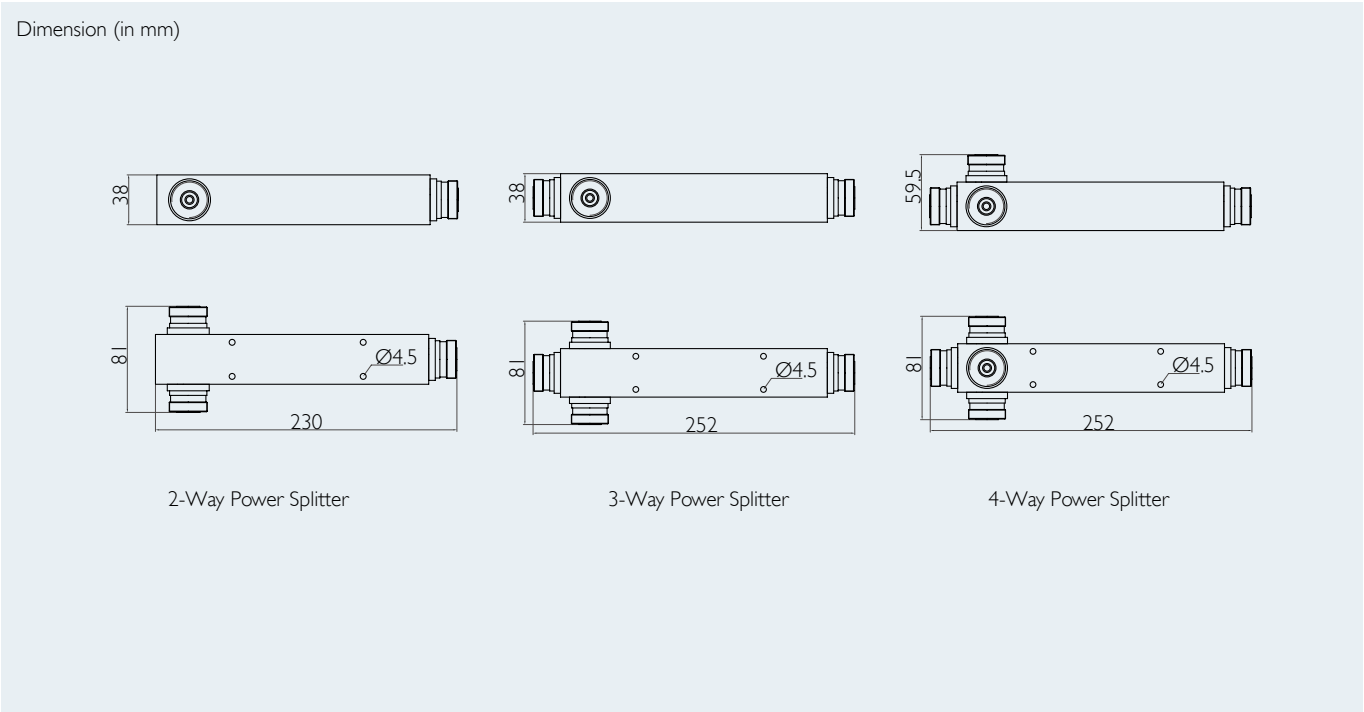
SYNERGYs RF power splitters of cavity types are characterized by lowVSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax. applicationnetwork.



Technical Parameters

Part No.	SY-DIN8027-2-I50	SY-DIN8027-3-I50	SY-DIN8027-4-I50
Frequency Range (MHz)	800-2700		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤1.22	≤1.22	≤1.22
Insertion Loss(dB)	≤0.3	≤0.3	≤0.3
In-band Ripple (dB)	0.3	0.3	0.3
PIM3(dBc)	≤-150 @ +43dBm×2		
Impedance (Ω)	50		
Power Rating(W)	500		
Connector	DIN-F		
Application	Outdoor, IP65		
Temperature Range(°C)	-30 ~ + 70		



800—2700MHz Power Splitter

Description: SY-N8027--X*-I50 series Power splitters are passive devices for cellular band in Intelligent Building System(IFS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

SYNERGYs RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

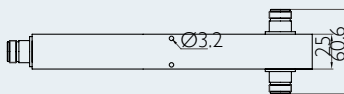
Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



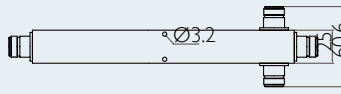
Technical Parameters

Part No.	SY-N8027-2-I50	SY-N8027-3-I50	SY-N8027-4-I50
Frequency Range (MHz)	800-2700		
Way No *	2	3	4
Split Loss(dB)	3.0	3.0	6.0
VSWR	≤ 1.2	≤ 1.2	≤ 1.2
Insertion Loss(dB)	≤ 0.3	≤ 0.3	≤ 0.3
In-band Ripple (dB)	0.3	0.3	0.3
PIM3(dBc)	≤ -150 @ +43dBm $\times 2$		
Impedance (Ω)	50		
Power Rating(W)	200		
Connector	N-F		
Application	Outdoor, IP65		
Temperature Range($^{\circ}\text{C}$)	$-30 \sim +70$		

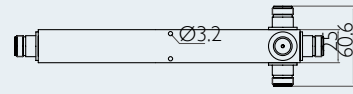
Dimension (in mm)



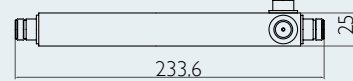
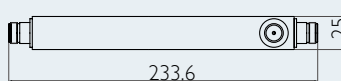
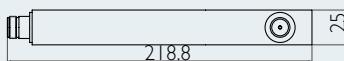
2-Way Power Splitter



3-Way Power Splitter



4-Way Power Splitter



800—2700MHz Power Splitter

Description: SY-N8027-X*-I40 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

SYNERGYs RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

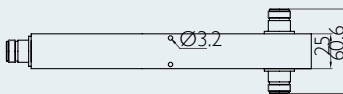
Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



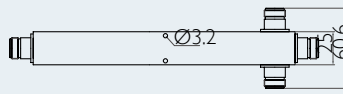
Technical Parameters

Part No.	SY-N8027-2-I40	SY-N8027-3-I40	SY-N8027-4-I40
Frequency Range (MHz)	800-2700		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤ 1.25	≤ 1.25	≤ 1.25
Insertion Loss(dB)	≤ 0.3	≤ 0.4	≤ 0.5
In-band Ripple (dB)	0.3	0.45	0.55
PIM3(dBc)	≤ -140 @ +43dBm $\times 2$		
PIM5(dBc)	≤ -155 @ +43dBm $\times 2$		
Impedance (Ω)	50		
Power Rating(W)	Typical: 200W;Peak: 400W		
Connector	N-F		
Temperature Range($^{\circ}\text{C}$)	$-30 \sim +70$		

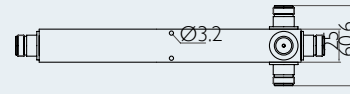
Dimension (in mm)



2-Way Power Splitter



3-Way Power Splitter



4-Way Power Splitter

698—2700MHz Power Splitter

Description: SY-DIN7027-X*-150 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS),which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

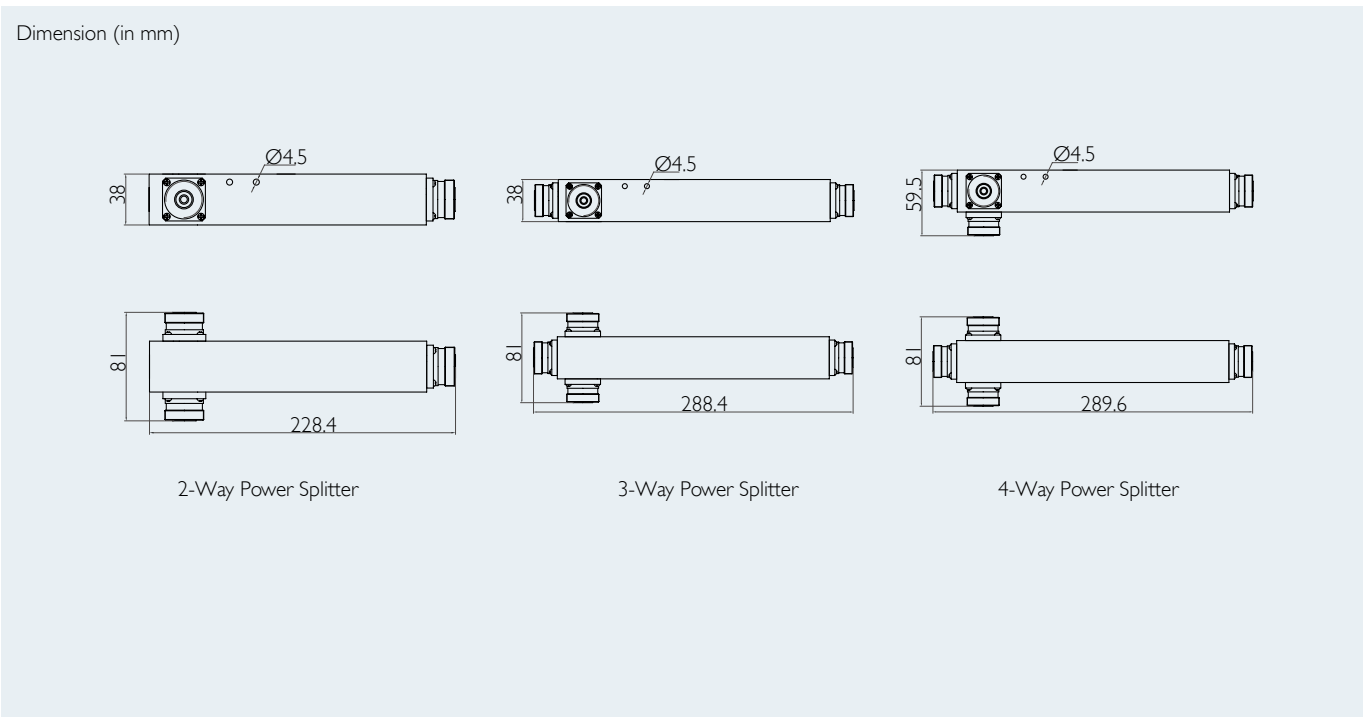
SYNERGY's RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



Technical Parameters

Part No.	SY-DIN7027-2-150	SY-DIN7027-3-150	SY-DIN7027-4-150
Frequency Range (MHz)	698-2700		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤1.2	≤1.3	≤1.3
Insertion Loss(dB)	≤0.3	≤0.3	≤0.3
In-band Ripple (dB)	0.3	0.3	0.3
PIM3(dBc)	≤-150 @ +43dBmx2		
Impedance (Ω)	50		
Power Rating(W)	500		
Connector	DIN-F		
Application	Outdoor, IP65		
Temperature Range(°C)	-30 ~ + 70		



698—2700MHz Power Splitter

Description: SY-N7027-X*-150 series Power splitters are passive devices for cellular band in Intelligent Building System (IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

SYNERGY's RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

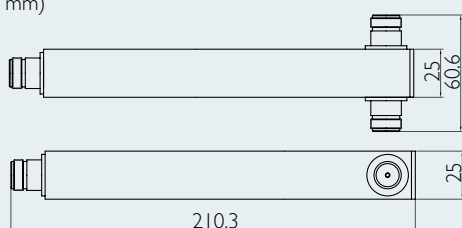
Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



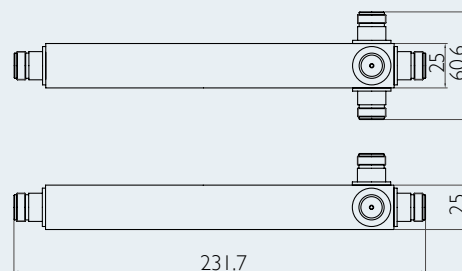
Technical Parameters

Part No.	SY-N7027-2-150	SY-N7027-3-150	SY-N7027-4-150	SY-N7027-6-150
Frequency Range (MHz)	698-2700			
Way No *	2	3	4	6
Split Loss(dB)	3.0	4.8	6.0	8.3
VSWR	≤1.25	≤1.25	≤1.3	≤1.3
Insertion Loss(dB)	≤0.1	≤0.2	≤0.3	≤0.3
In-band Ripple (dB)	0.3	0.4	0.5	0.5
PIM3(dBc)	≤-150 @ +43dBm×2			
Impedance (Ω)	50			
Power Rating(W)	200			
Connector	N-F			
Application	Outdoor, IP65			
Temperature Range(°C)	-30 ~ + 70			

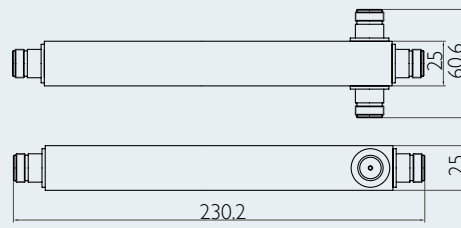
Dimension (in mm)



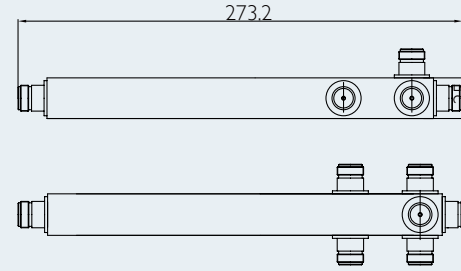
2-Way Power Splitter



4-Way Power Splitter



3-Way Power Splitter



6-Way Power Splitter

698—2700MHz Power Splitter

Description: SY-N7027-X*-I40 series Power splitters are passive devices for cellular band in Intelligent Building System(IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

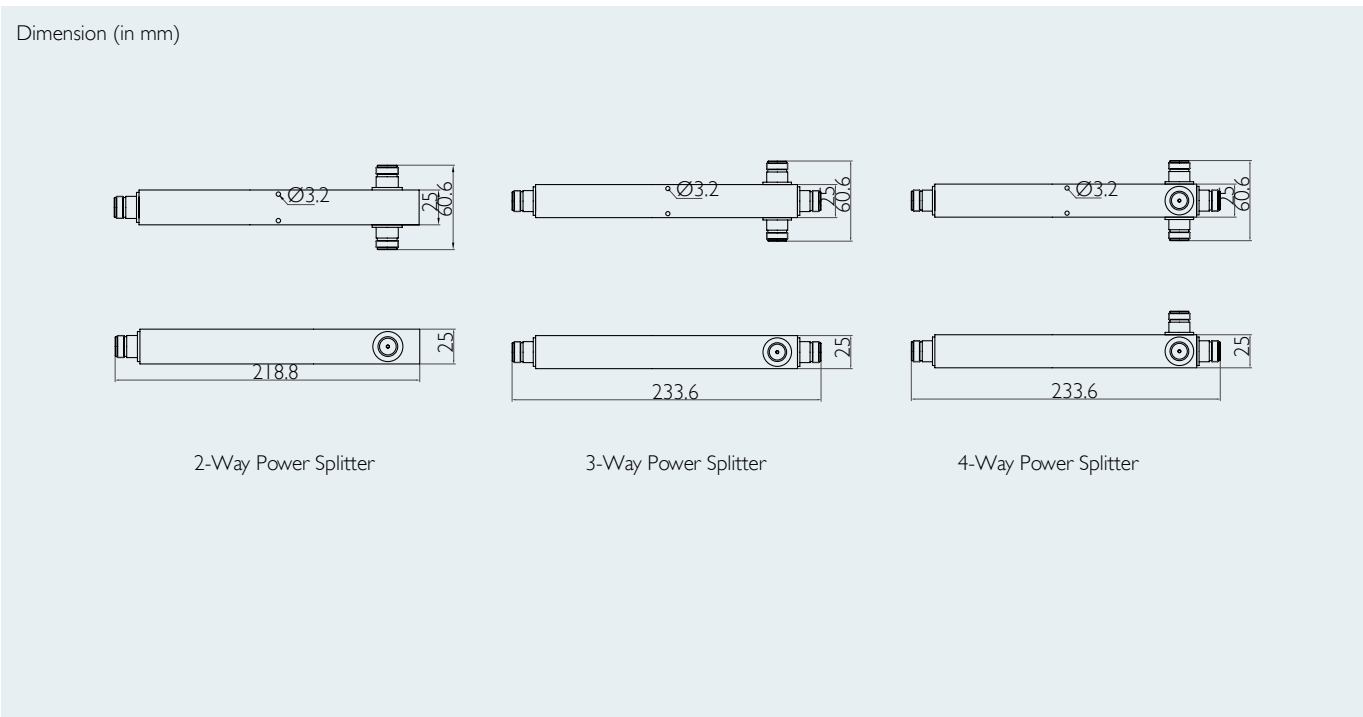
SYNERGYs RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.T



Technical Parameters

Part No.	SY-N7027-2-I40	SY-N7027-3-I40	SY-N7027-4-I40
Frequency Range (MHz)	698-2700		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤1.25	≤1.25	≤1.25
Insertion Loss(dB)	≤0.3	≤0.4	≤0.5
In-band Ripple (dB)	0.3	0.45	0.55
PIM3 / PIM5(dBc)	≤-140 @ +43dBmx2 / ≤-155 @ +43dBmx2		
Impedance (Ω)	50		
Power Rating(W)	Typical: 200W;Peak: 400W		
Connector	N-F		
Application	Indoor		
Temperature Range(°C)	-30 ~ + 70		



698—3800MHz Power Splitter

Description: SY-N7038-X*-I50 series Power splitters are passive devices for cellular band in Intelligent Building System (IBS), which are required to split/divide equally the input signal into multiple signals at separate output ports to enable balancing-out the power budget of the network.

SYNERGY's RF power splitters of cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for Cellular DCS/CDMA/GSM/2G/3G/Wifi/WiMax applications.



Technical Parameters

Part No.	SY-N7038-2-I50	SY-N7038-3-I50	SY-N7038-4-I50
Frequency Range (MHz)	698-3800		
Way No *	2	3	4
Split Loss(dB)	3.0	4.8	6.0
VSWR	≤ 1.35	≤ 1.35	≤ 1.35
Insertion Loss(dB)	≤ 0.3	≤ 0.4	≤ 0.4
In-band Ripple (dB)	± 0.3	± 0.4	± 0.4
PIM3(dBc)	≤ -150 @ +43dBm $\times 2$		
Impedance (Ω)	50		
Power Rating(W)	300		
Connector	N-F		
Application	Outdoor; IP65		
Temperature Range($^{\circ}\text{C}$)	$-30 \sim +70$		

Dimension (in mm)



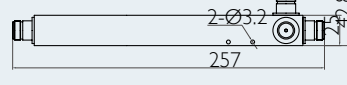
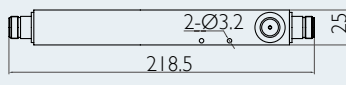
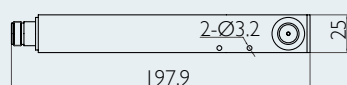
2-Way Power Splitter



3-Way Power Splitter



4-Way Power Splitter



800—2500MHz Directional Coupler

Description: SY-J8025-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

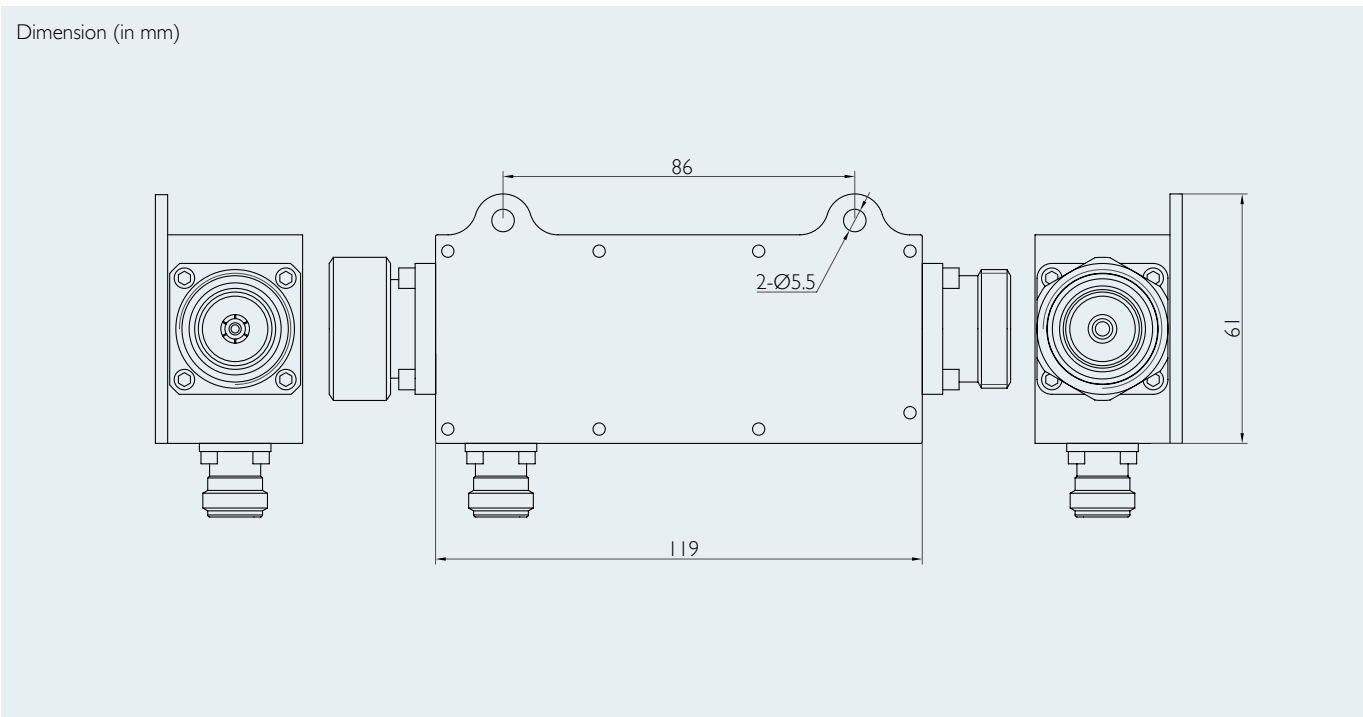
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-J8025-X-I50					
Coupling (dB) *	6	10	15	20	30	40
In-band Ripple (dB)	±0.6	±0.8	±0.8	±0.8	±1.0	±1.2
VSWR	≤1.25					
Insertion Loss(dB)	≤1.76	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥26	≥30	≥35	≥40	≥50	≥60
PIM3(dBc)	≤-150 @ +43dBm×2					
Impedance (Ω)	50					
Power Rating(W)	500					
Connector	Input: DIN-M, Output :DIN-F, Coupling: N-F					
Application	Outdoor, IP65					
Temperature Range(°C)	-30 ~ + 70					



800—2500MHz Directional Coupler

Description: SY-D8025-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

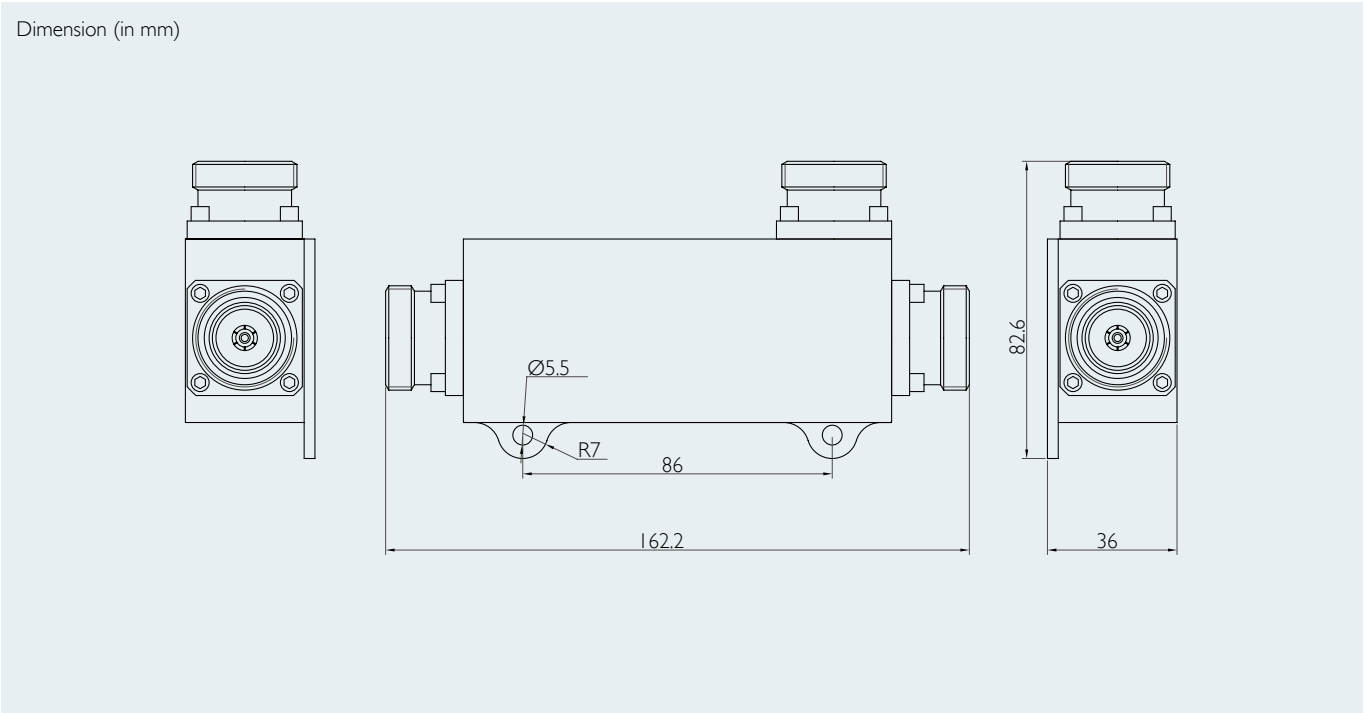
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8025A-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150@+43dBm×2								
Impedance (Ω)	50								
Power Rating(W)	500								
Connector	DIN-F								
Application	Outdoor; IP65								
Temperature Range(°C)	-30 ~ + 70								



800—2500MHz Directional Coupler

Description: SY-D8025B-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

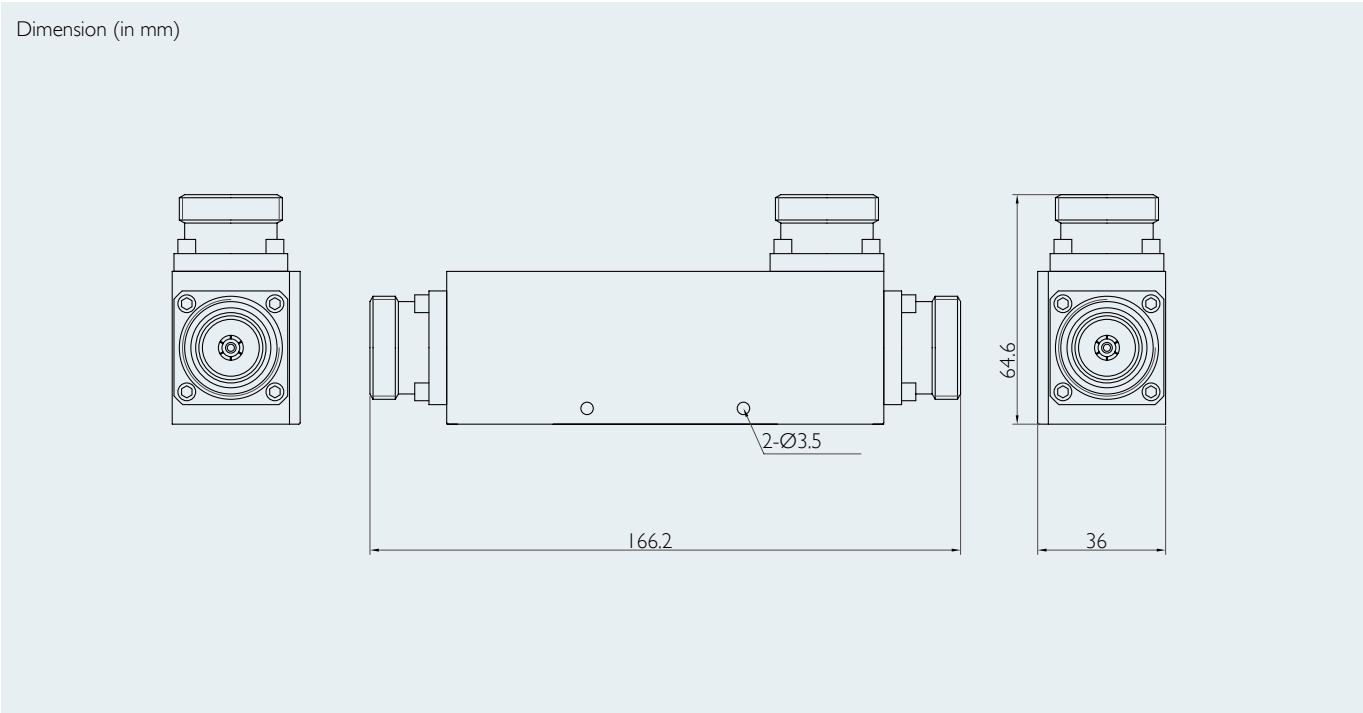
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8025B-X-I50							
Coupling (dB) *	5	6	7	10	15	20	30	40
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.2	±1.2
VSWR	≤1.25							
Insertion Loss(dB)	≤2.3	≤1.7	≤1.5	≤0.8	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥30	≥35	≥35	≥40	≥55
PIM3(dBc)	≤-150 @ +43dBm×2							
Impedance (Ω)	50							
Power Rating(W)	500							
Connector	DIN-F							
Application	Outdoor, IP65							
Temperature Range(°C)	-30 ~ + 70							



800—2500MHz Directional Coupler

Description: SY-N8025A-X*-I50 series Directional couplers are

passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

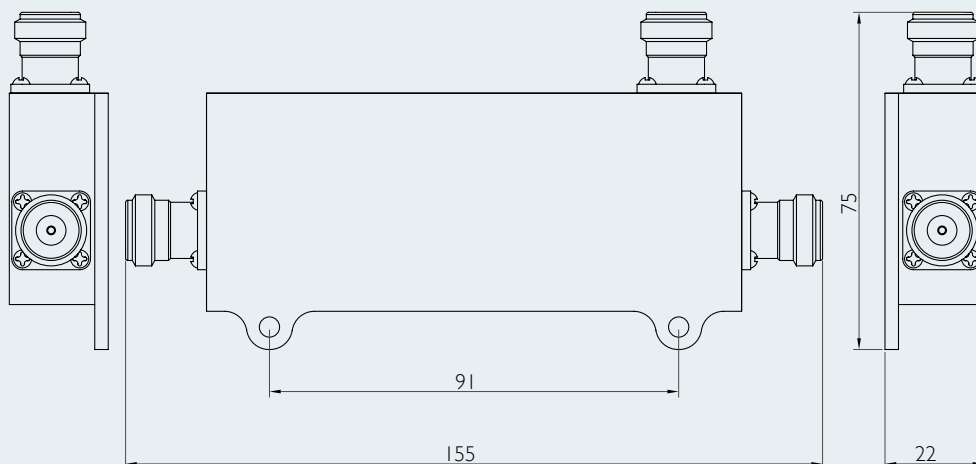
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025A-X-I50							
Coupling (dB) *	5	6	7	10	15	20	30	40
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.5
VSWR	≤1.25							
Insertion Loss(dB)	≤2.1	≤1.7	≤1.4	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥30	≥35	≥40	≥50	≥60
PIM3(dBc)	≤-150@+43dBm×2							
Impedance (Ω)	50							
Power Rating(W)	Typical: 200; Peak: 400							
Connector	N-F							
Application	Outdoor; IP65							
Temperature Range(°C)	-30 ~ + 70							

Dimension (in mm)

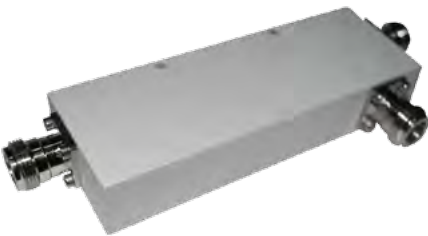


800—2500MHz Directional Coupler

Description: SY-N8025B-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

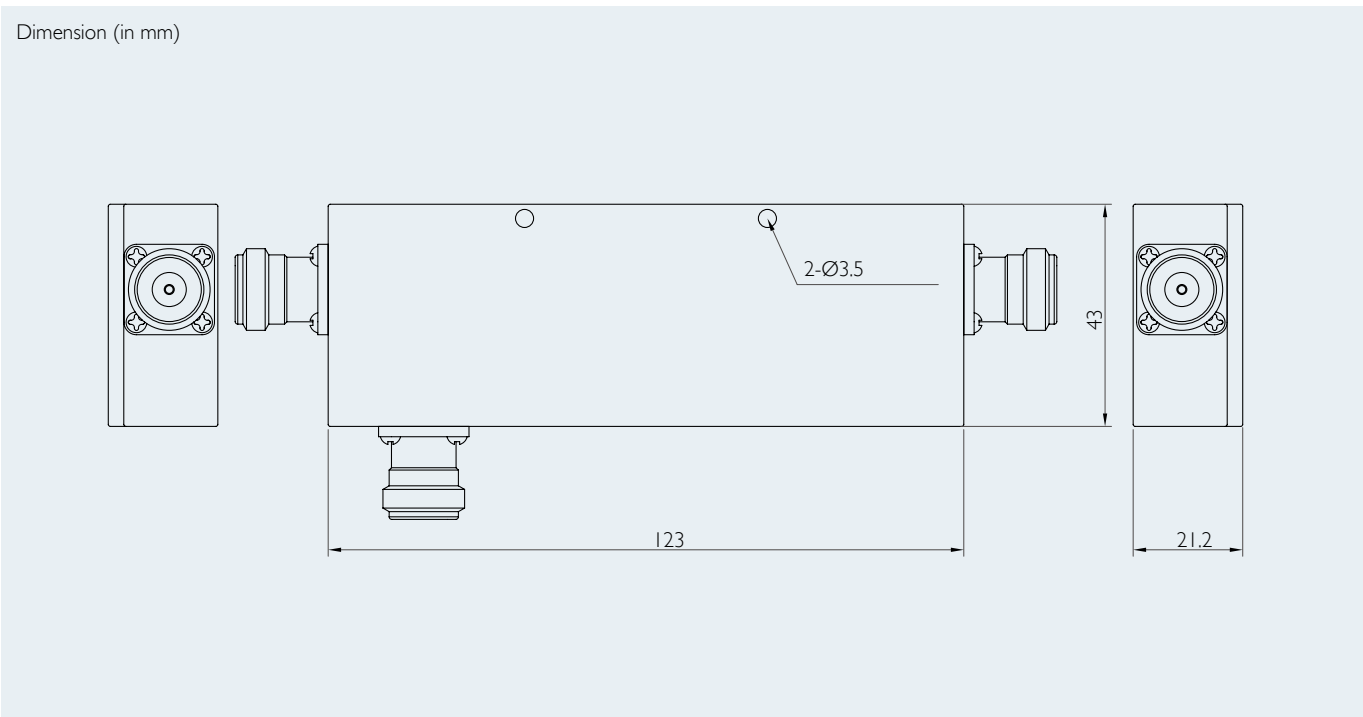
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025B-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150 @ +43dBm×2								
Impedance (Ω)	50								
Power Rating(W)	200								
Connector	N-F								
Application	Outdoor, IP65								
Temperature Range(°C)	-30 ~ + 70								



800—2500MHz Directional Coupler

Description: SY-N8025A-X*-I40 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

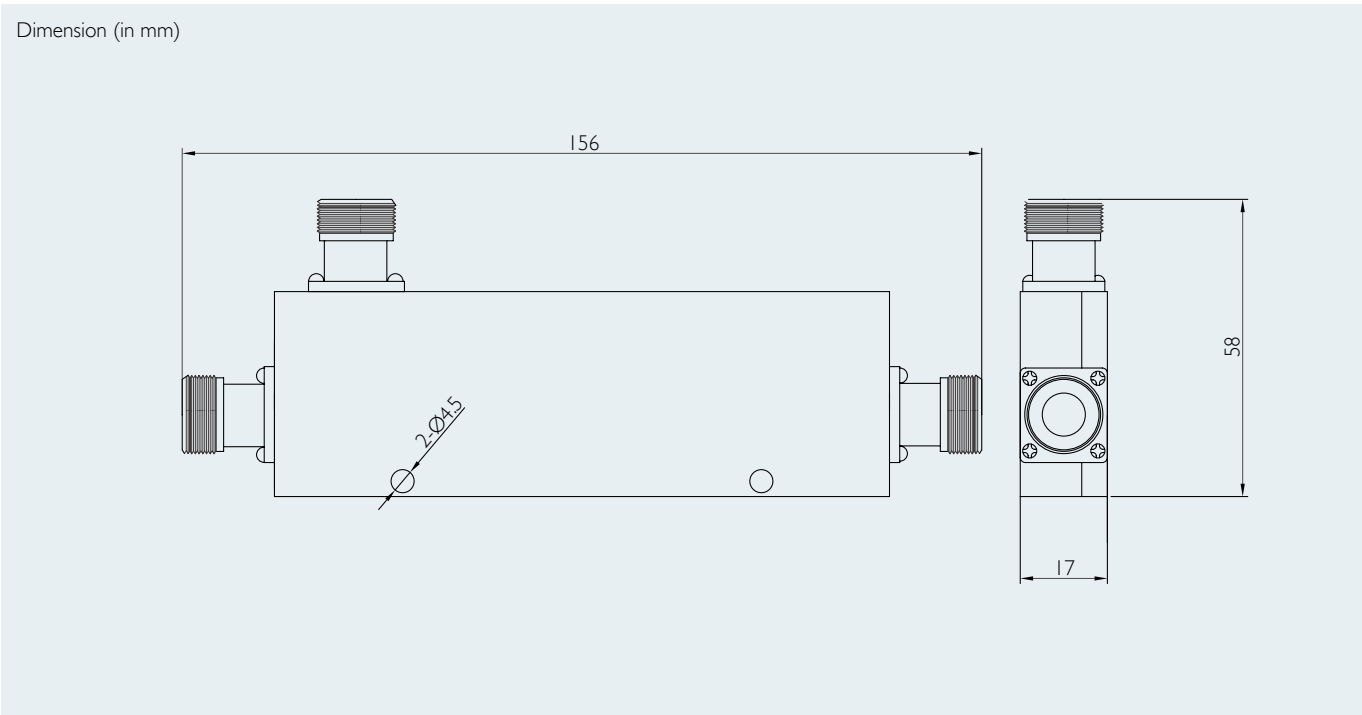
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025A-X-I40								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.6	±0.6	±0.6	±0.6	±0.8	±0.8	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3 / PIM5(dBc)	≤-140 @ +43dBm×2 / ≤-155 @ +43dBm×2								
Impedance (Ω)	50								
Power Rating(W)	200								
Connector	N-F								
Application	Indoor								
Temperature Range(°C)	-30 ~ + 70								



800—2700MHz Directional Coupler

Description: SY-J8027-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

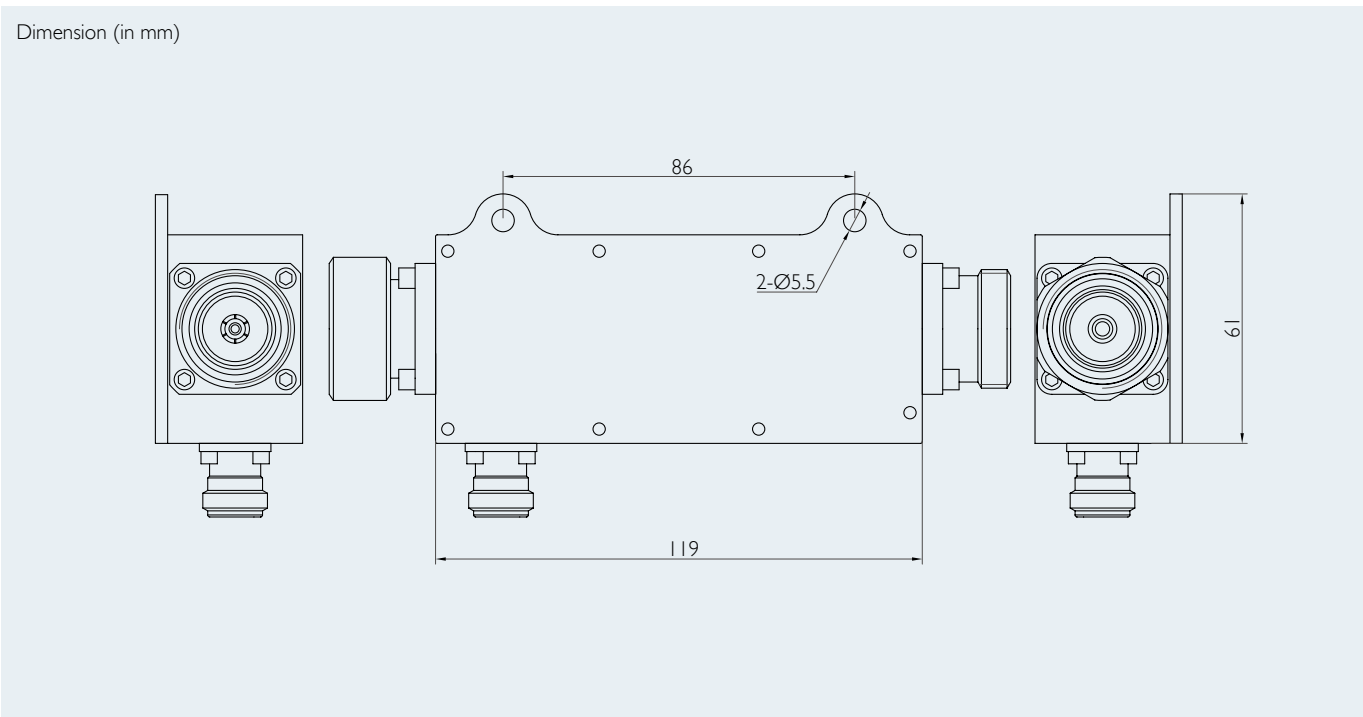
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-J8027-X-I50					
Coupling (dB) *	6	10	15	20	30	40
In-band Ripple (dB)	±0.8	±1.0	±1.0	±1.0	±1.0	±1.5
VSWR	≤1.25					
Insertion Loss(dB)	≤1.76	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥26	≥30	≥35	≥40	≥45	≥55
PIM3(dBc)	≤-150 @ +43dBm×2					
Impedance (Ω)	50					
Power Rating(W)	500					
Connector	Input: DIN-M, Output :DIN-F, Coupling: N-F					
Application	Outdoor, IP65					
Temperature Range(°C)	-30 ~ + 70					



800—2700MHz Directional Coupler

Description: SY-D8027A-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

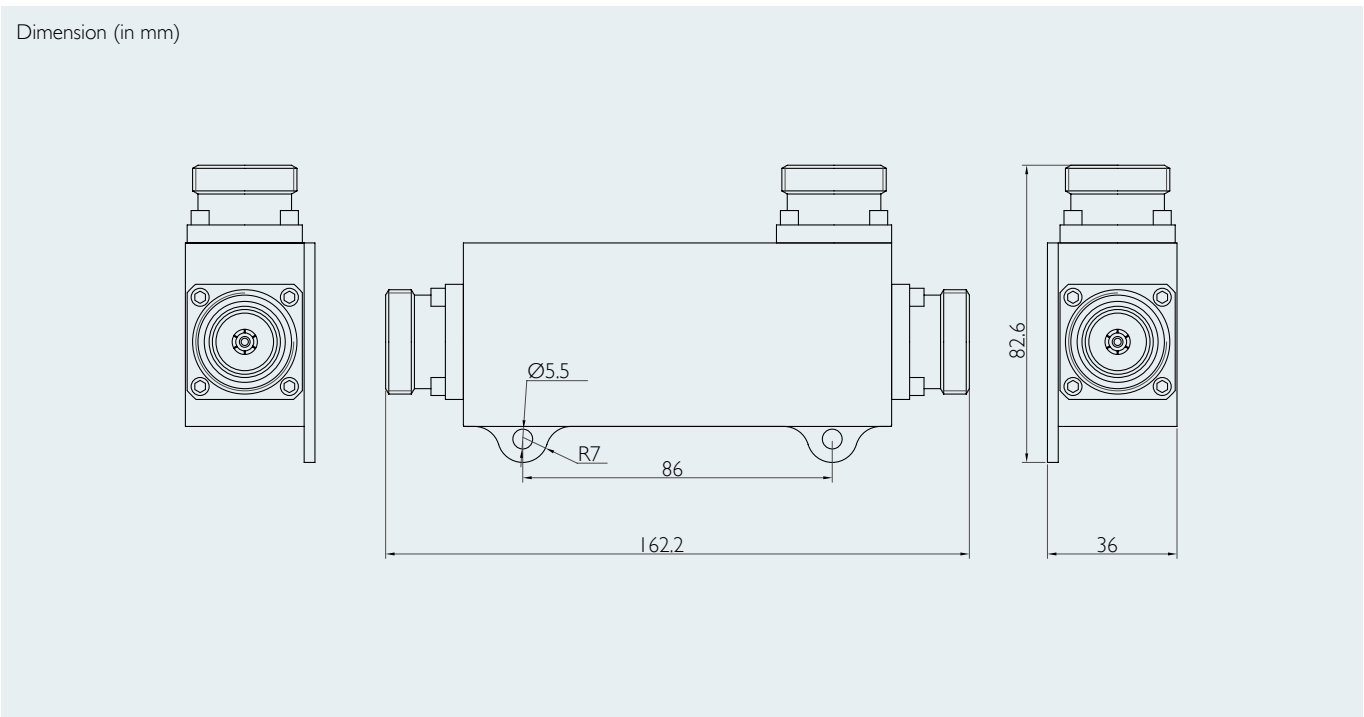
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8027A-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150 @ +43dBmx2								
Impedance (Ω)	50								
Power Rating(W)	500								
Connector	DIN-F								
Application	Outdoor; IP65								
Temperature Range(°C)	-30 ~ + 70								



800—2700MHz Directional Coupler

Description: SY-D8027B-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

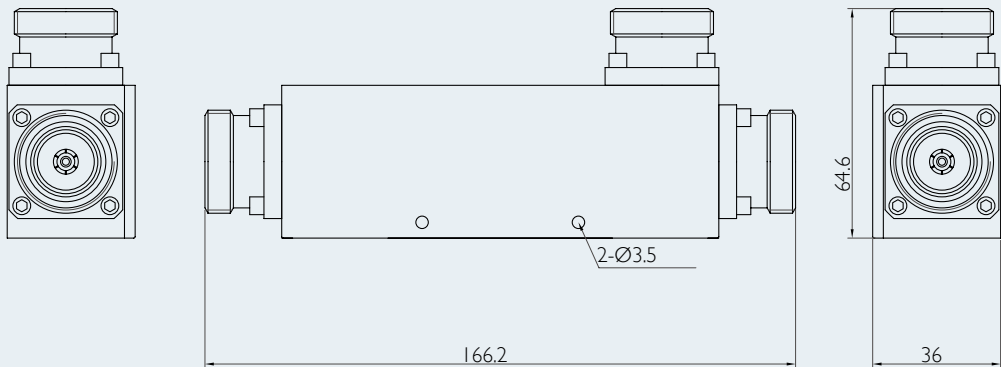
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8027B-X-I50							
Coupling (dB) *	5	6	7	10	15	20	30	40
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.5	±1.5
VSWR	≤1.25							
Insertion Loss(dB)	≤2.1	≤1.7	≤1.4	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥30	≥35	≥40	≥50	≥60
PIM3(dBc)	≤-150 @ +43dBmx2							
Impedance (Ω)	50							
Power Rating(W)	500							
Connector	DIN-F							
Application	Outdoor, IP65							
Temperature Range(°C)	-30 ~ + 70							

Dimension (in mm)



800—2700MHz Directional Coupler

Description: SY-N8027A-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

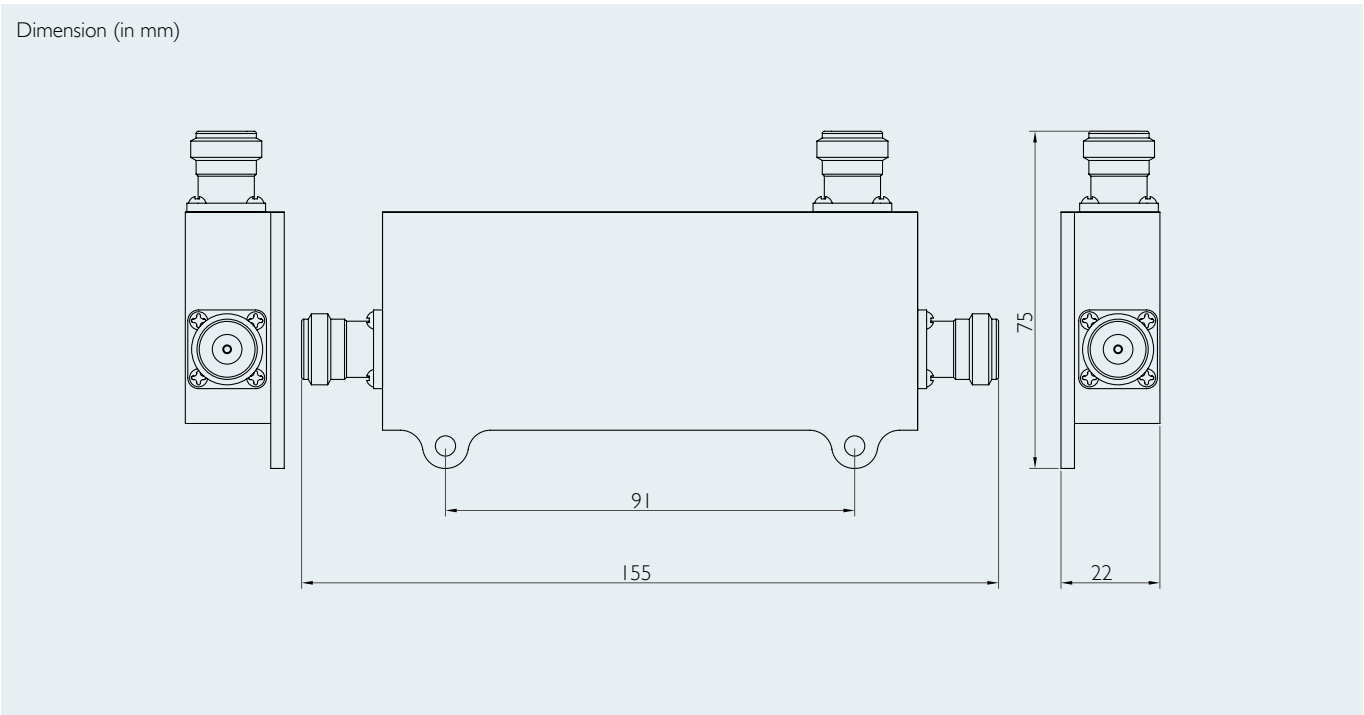
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8027A-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.1	≤1.7	≤1.4	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥30	≥35	≥40	≥50	≥45	≥60
PIM3(dBc)	≤-150 @ +43dBmx2								
Impedance (Ω)	50								
Power Rating(W)	Typical: 200; Peak: 400								
Connector	N-F								
Application	Outdoor; IP65								
Temperature Range(°C)	-30 ~ + 70								

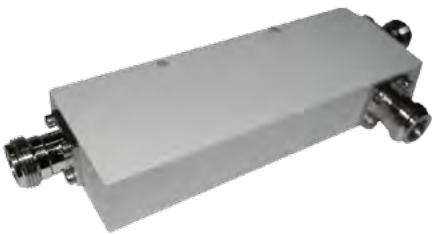


800—2700MHz Directional Coupler De-

scription: SY-N8027B-X*- I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

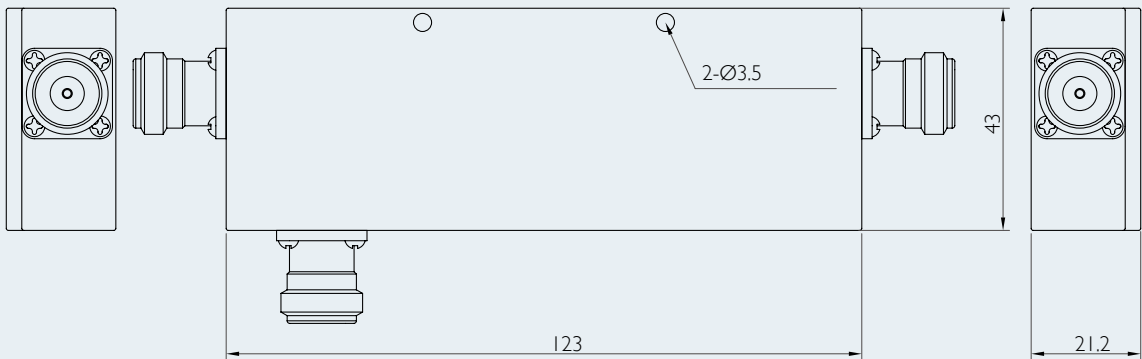
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8027B-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150 @ +43dBm×2								
Impedance (Ω)	50								
Power Rating(W)	300								
Connector	N-F								
Application	Outdoor, IP65								
Temperature Range(°C)	-30 ~ + 70								

Dimension (in mm)



800—2700MHz Directional Coupler

Description: SY-N8027A-X*-I40 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

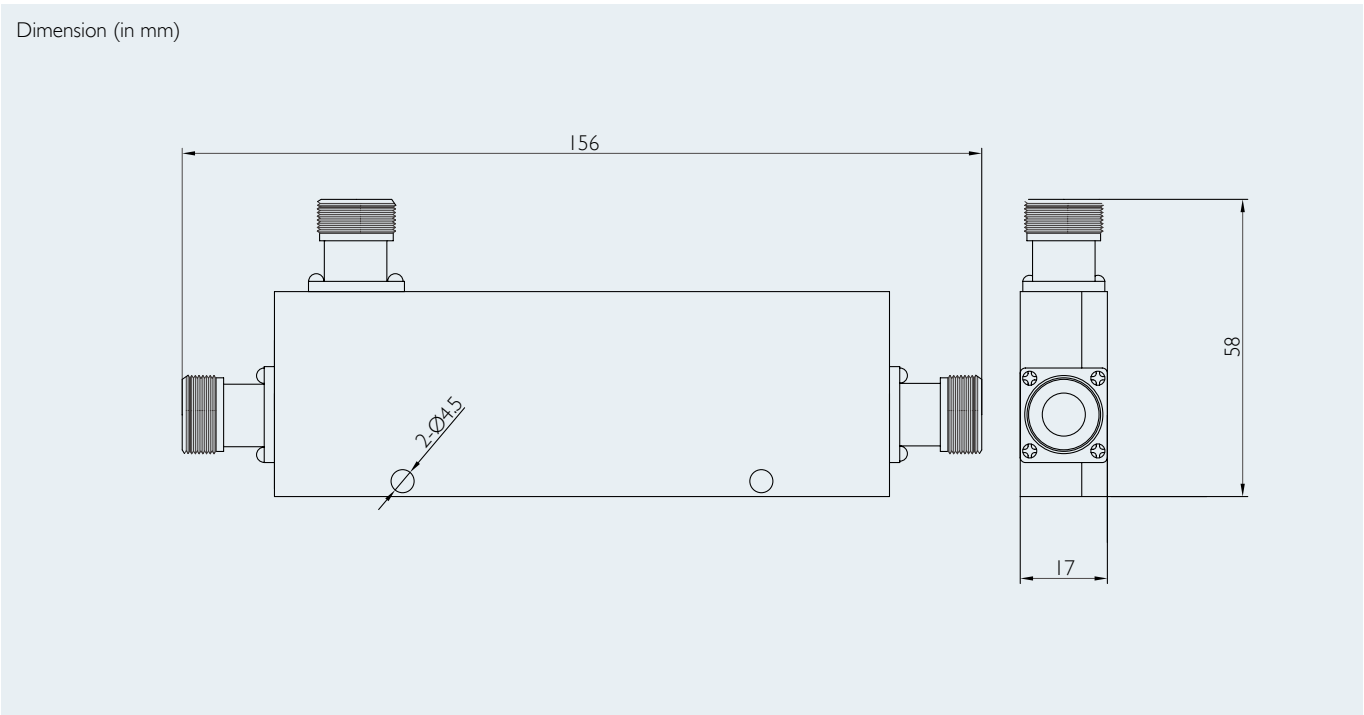
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8027A-X-I40								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3 / PIM5(dBc)	≤-140 @ +43dBm×2 / ≤-155 @ +43dBm×2								
Impedance (Ω)	50								
Power Rating(W)	200								
Connector	N-F								
Application	Indoor								
Temperature Range(°C)	-30 ~ + 70								



698—2700MHz Directional Coupler

Description: SY-J7027-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

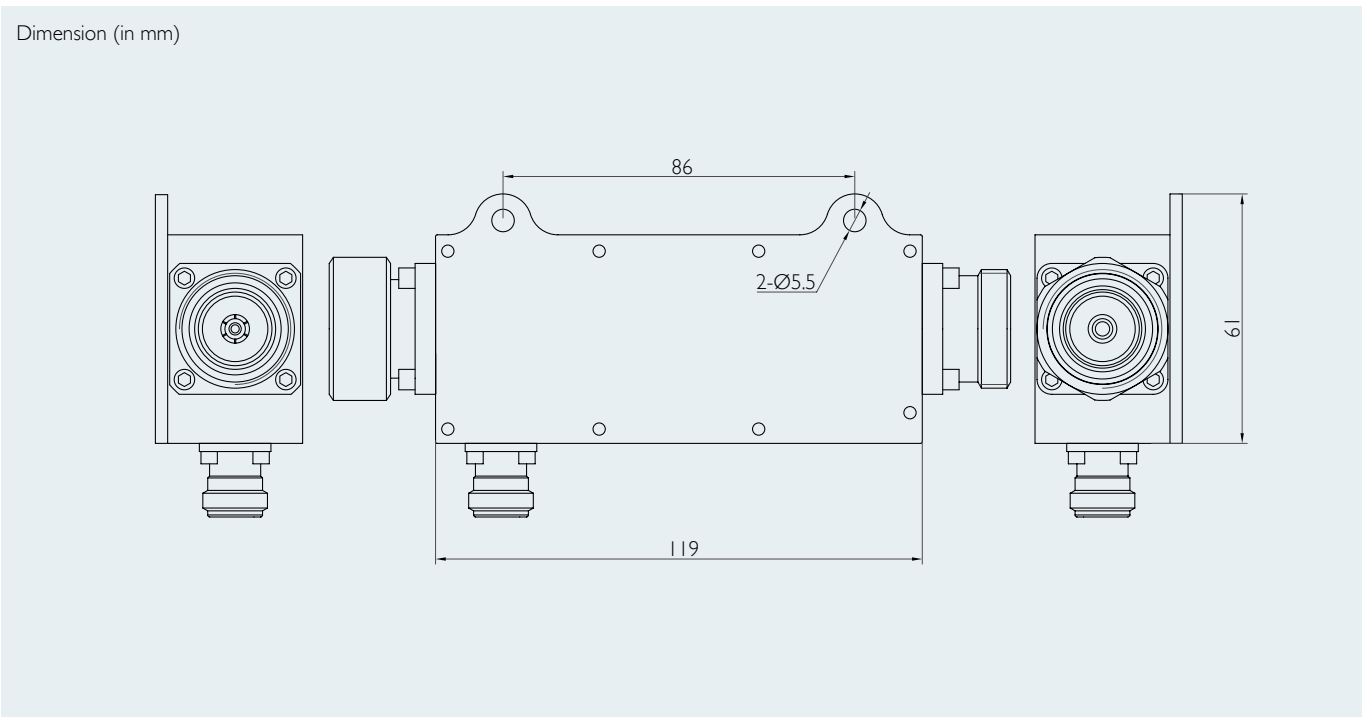
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-J7027-X-I50					
Coupling (dB) *	6	10	15	20	30	40
In-band Ripple (dB)	±1.0	±1.0	±1.0	±1.0	±1.2	±1.5
VSWR	≤1.25					
Insertion Loss(dB)	≤1.76	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥26	≥30	≥35	≥40	≥45	≥55
PIM3(dBc)	≤-150 @ +43dBm×2					
Impedance (Ω)	50					
Power Rating(W)	500					
Connector	Input: DIN-M, Output :DIN-F, Coupling: N-F					
Application	Outdoor, IP65					
Temperature Range(°C)	-30 ~ + 70					



698—2700MHz Directional Coupler

Description: SY-D7027A-X*T-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

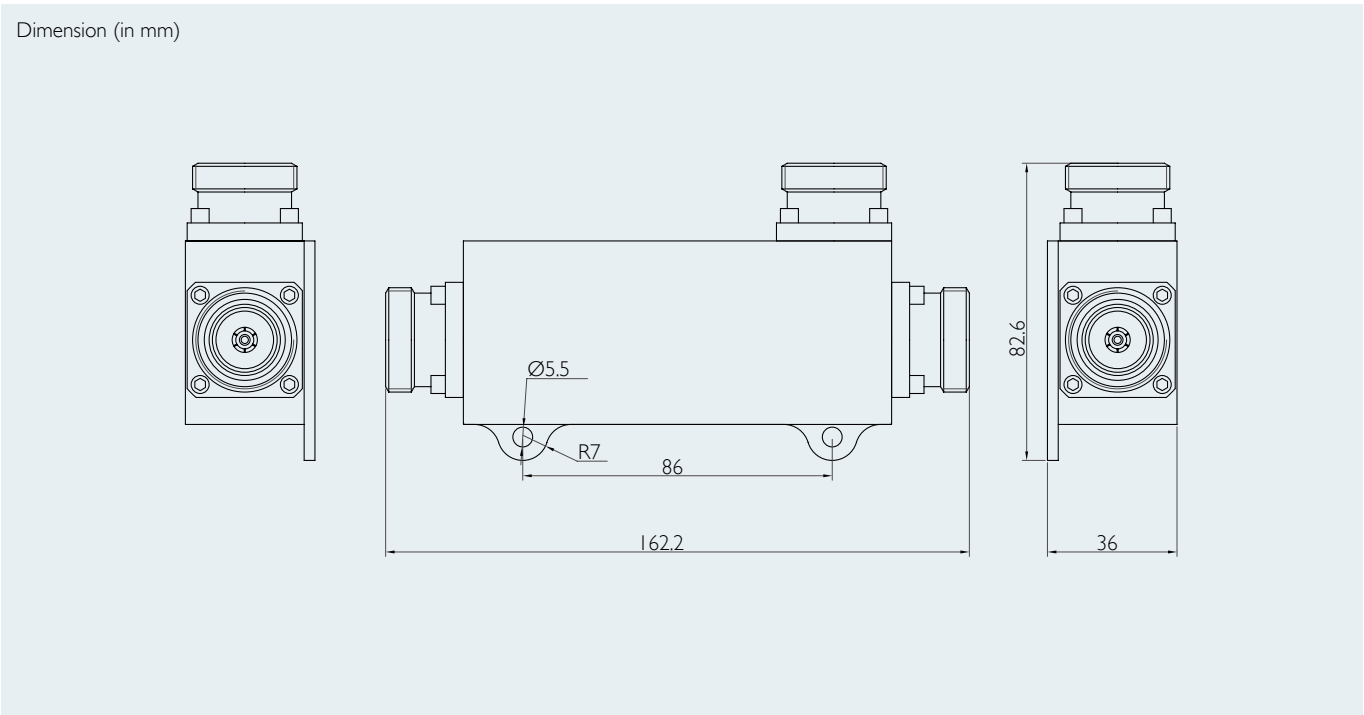
SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D7027A-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.25								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150 @ +43dBmx2								
Impedance (Ω)	50								
Power Rating(W)	500								
Connector	DIN-F								
Application	Outdoor; IP65								
Temperature Range(°C)	-30 ~ + 70								



698—2700MHz Directional Coupler

Description: SY-D7027B-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

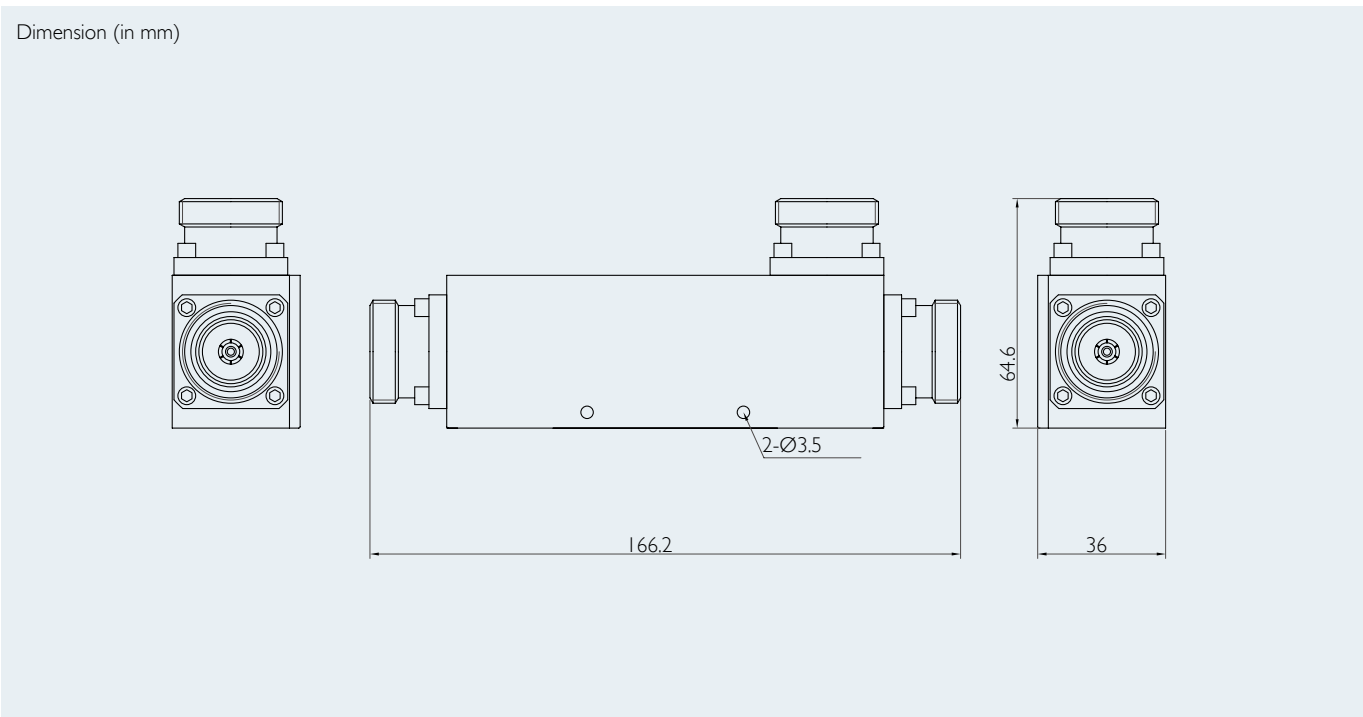
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D7027B-X-I50							
Coupling (dB) *	5	6	7	10	15	20	30	40
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.2	±1.2
VSWR	≤1.25							
Insertion Loss(dB)	≤2.3	≤1.7	≤1.5	≤0.8	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥30	≥35	≥35	≥45	≥55
PIM3(dBc)	≤-150 @ +43dBm×2							
Impedance (Ω)	50							
Power Rating(W)	500							
Connector	DIN-F							
Application	Outdoor, IP65							
Temperature Range(°C)	-30 ~ + 70							



698—2700MHz Directional Coupler

Description: SY-N7027A-X*-I50 series Directional couplers are

passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

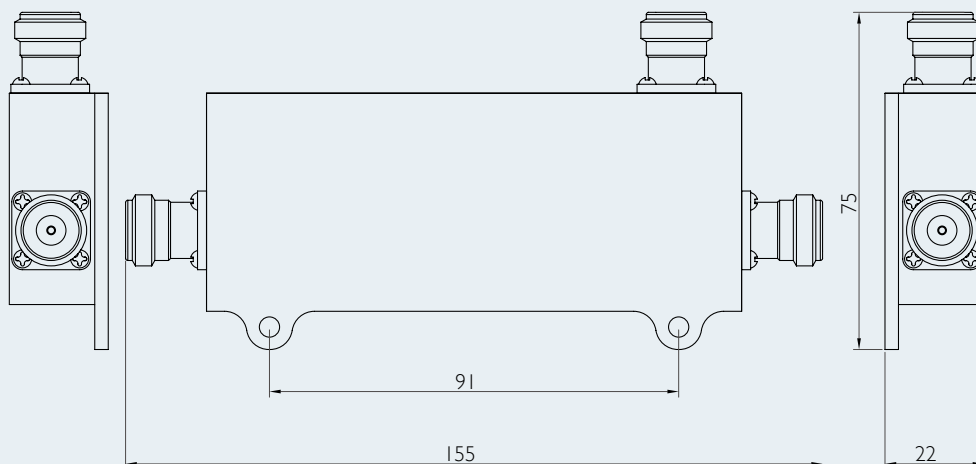
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N7027A-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.2								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150 @ +43dBmX2								
Impedance (Ω)	50								
Power Rating(W)	300								
Connector	N-F								
Application	Outdoor; IP65								
Temperature Range(°C)	-40 ~ + 85								

Dimension (in mm)



698—2700MHz Directional Coupler

Description: SY-N7027B-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

SYNERGYs Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

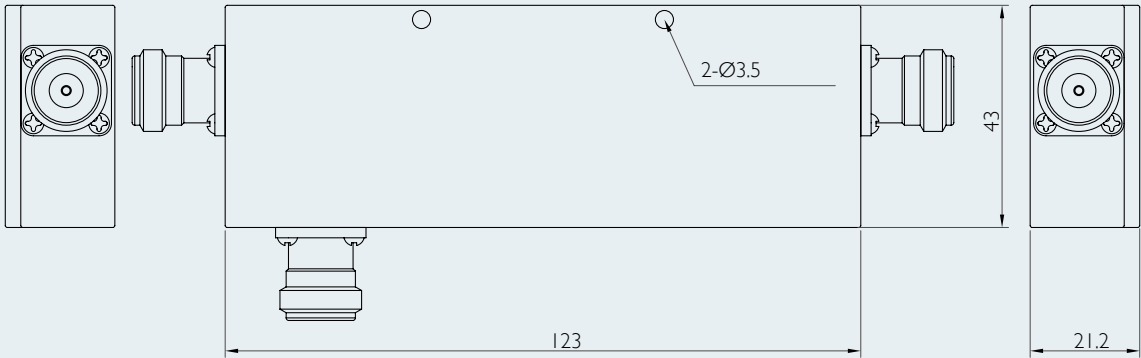
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N7027B-X-I50								
Coupling (dB) *	5	6	7	8	10	15	20	25	30
In-band Ripple (dB)	±0.8	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0	±1.0	±1.0
VSWR	≤1.2								
Insertion Loss(dB)	≤2.0	≤1.6	≤1.35	≤1.1	≤0.7	≤0.4	≤0.3	≤0.2	≤0.2
Isolation(dB)	≥25	≥26	≥27	≥28	≥30	≥35	≥40	≥45	≥50
PIM3(dBc)	≤-150 @ +43dBm×2								
Impedance (Ω)	50								
Power Rating(W)	300								
Connector	N-F								
Application	Outdoor, IP65								
Temperature Range(°C)	-40 ~ + 85								

Dimension (in mm)



698—2700MHz Directional Coupler

Description: SY-N7027A-X*series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

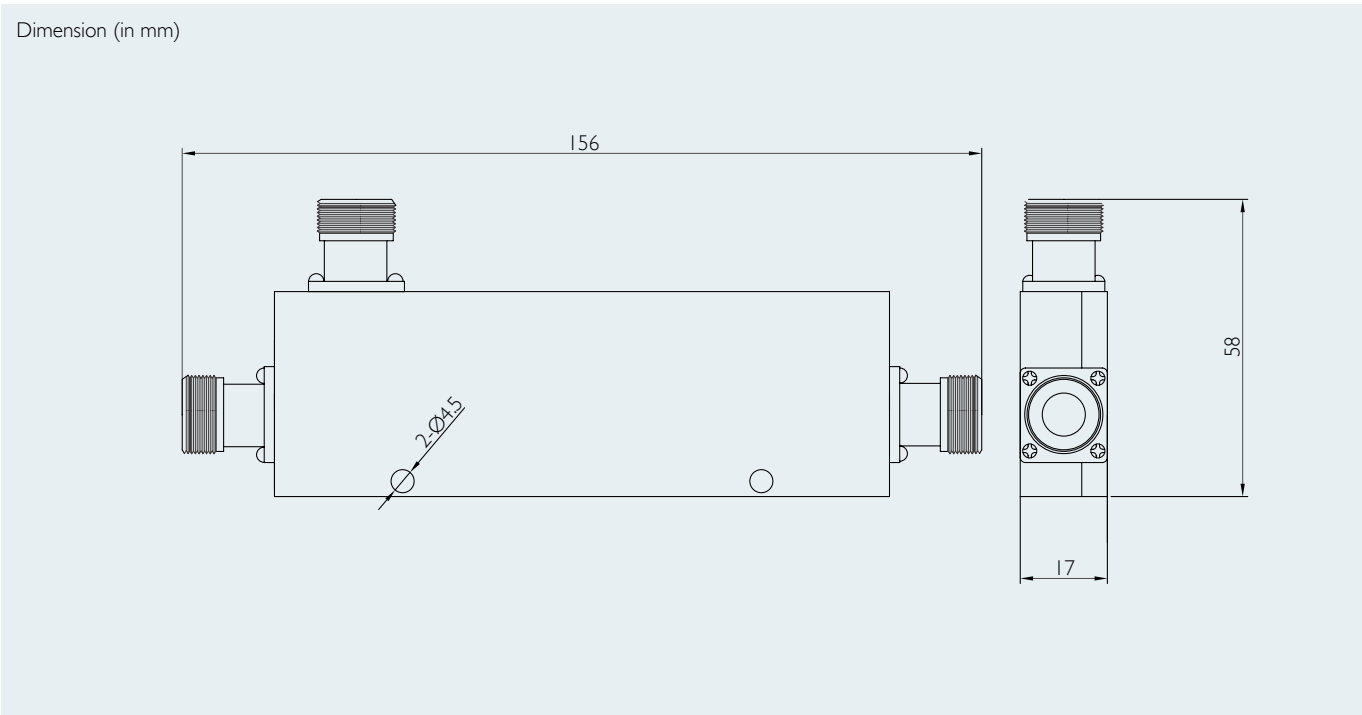
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N7027A-X					
Coupling (dB) *	6	8	10	15	20	30
In-band Ripple (dB)	±1.0	±1.0	±1.0	±1.0	±1.0	±1.2
VSWR	≤1.25					
Insertion Loss(dB)	≤1.5	≤1.1	≤0.7	≤0.4	≤0.2	≤0.2
Isolation(dB)	≥26	≥28	≥30	≥35	≥40	≥50
PIM3 / PIM5(dBc)	≤-140 @ +43dBm×2 / ≤-155 @ +43dBm×2					
Impedance (Ω)	50					
Power Rating(W)	200					
Connector	N-F					
Application	Indoor					
Temperature Range(°C)	-40 ~ +85					



698—3800MHz Directional Coupler

Description: SY-N7038A-X*-150 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

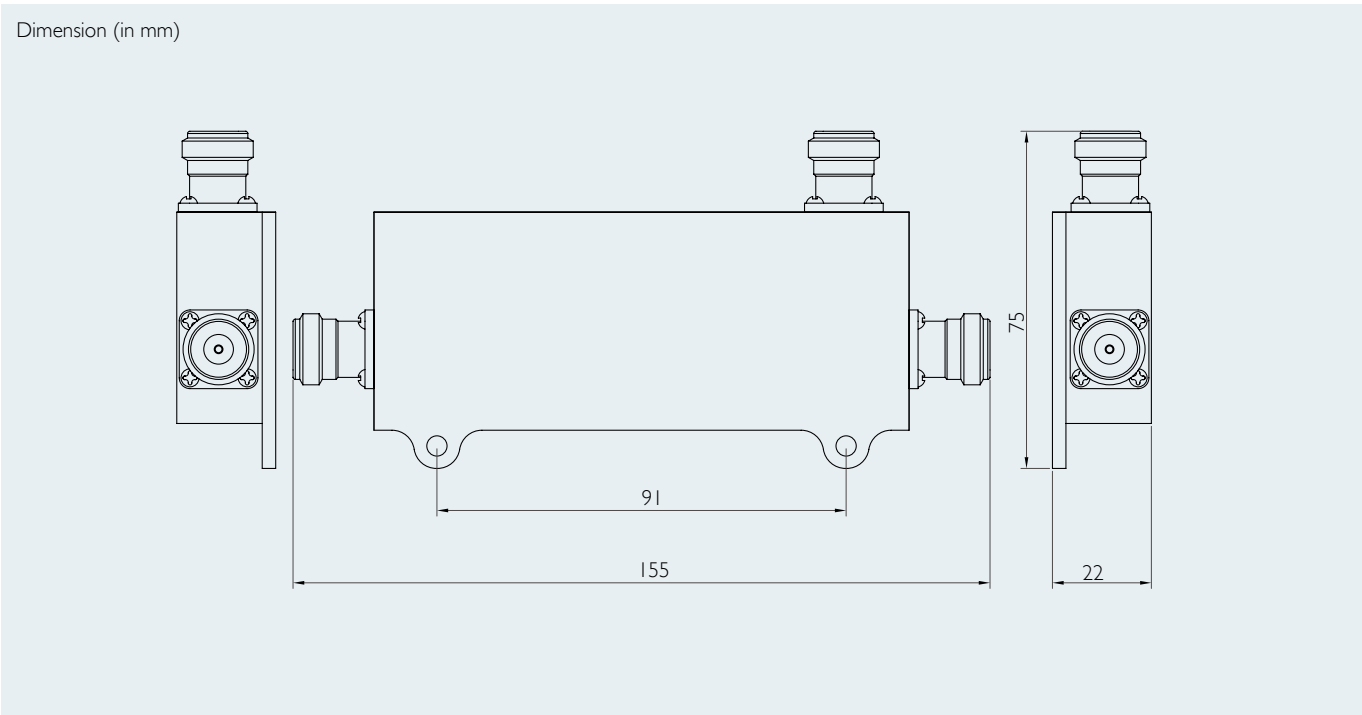
SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N7038A-X-150					
Coupling (dB) *	6	8	10	13	15	20
In-band Ripple (dB)	±1.2	±1.2	±1.2	±1.2	±1.2	±1.2
VSWR	≤1.3					
Insertion Loss(dB)	≤1.7	≤1.2	≤0.7	≤0.5	≤0.45	≤0.3
Isolation(dB)	≥26	≥28	≥30	≥30	≥35	≥35
PIM3(dBc)	≤-150 @ +43dBm×2					
Impedance (Ω)	50					
Power Rating(W)	200					
Connector	N-F					
Application	Outdoor; IP65					
Temperature Range(°C)	-30 ~ + 70					



380—2700MHz Directional Coupler

Description: SY-N3827A-X*-I50 series Directional couplers are passive devices used in the field of radio technology, which are used to unequally couple a defined amount of the electromagnetic power in a transmission mainline to a coupler port enabling the signal to be used in another circuit, an essential feature of directional couplers is that they only couple power flowing in one direction.

SYNERGY's Directional coupler cavity types are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

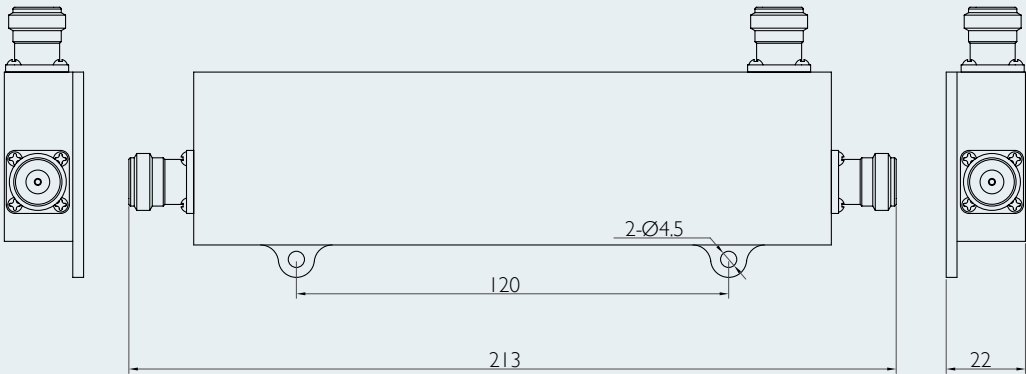
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N3827A-X-I50			
Coupling (dB) *	6	10	15	20
In-band Ripple (dB)	±1.2	±1.2	±1.2	±1.2
VSWR	≤1.3			
Insertion Loss(dB)	≤1.7	≤0.7	≤0.5	≤0.25
Isolation(dB)	≥26	≥30	≥30	≥30
PIM3(dBc)	≤-150 @ +43dBm×2			
Impedance (Ω)	50			
Power Rating(W)	200			
Connector	N-F			
Application	Outdoor; IP65			
Temperature Range(°C)	-30 ~ + 70			

Dimension (in mm)



Hybrid Coupler

Description: SY-D*A-I50 series 3dB Hybrid couplers, 2 in/2 out, are passive devices used in the field of radio technology, which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports,

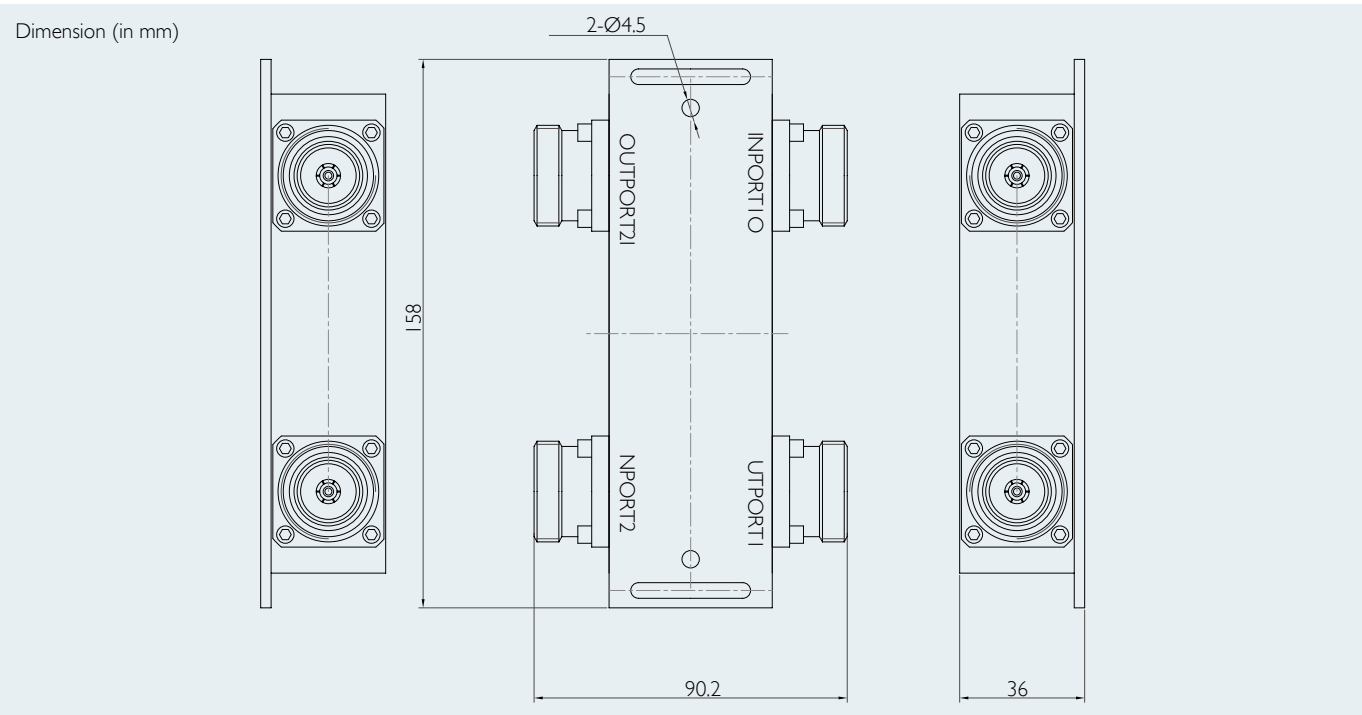
SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8025A-I50	SY-D8027A-I50	SY-D7027A-I50
Frequency Range (MHz)	800-2500	800-2700	698-2700
Insertion loss(dB)	3.5	3.5	3.55
In-band Ripple (dB)	0.5	0.5	1
VSWR	≤1.22	≤1.22	≤1.22
Isolation(dB)	≥25	≥25	≥23
PIM3(dBc)	≤-150 @ +43dBm×2	≤-150 @ +43dBm×2	≤-150 @ +43dBm×2
Application	Outdoor, IP65	Outdoor, IP65	Outdoor, IP65
Impedance (Ω)	50Ω	50Ω	50Ω
Power Rating(W)	250	250	300
Connector	DIN-F	DIN-F	DIN-F
Temperature Range(°C)	-35 ~ +75	-35 ~ +75	-35 ~ +85



Hybrid Coupler

Description: SY-D*B-150 series 3dB Hybrid couplers,2 in/2 out, are passive devices used in the field of radio technology,which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports.

SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

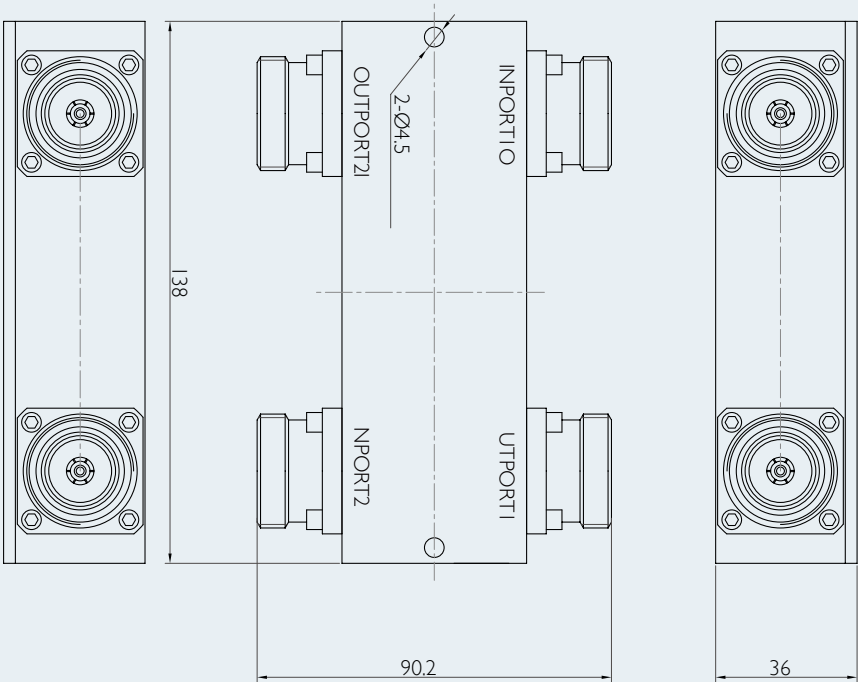
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8025B-I50	SY-D8027B-I50	SY-D7027B-I50
Frequency Range (MHz)	800-2500	800-2700	698-2700
Insertion loss(dB)	3.5	3.5	3.55
In-band Ripple (dB)	0.5	0.5	1
VSWR	≤1.2	≤1.2	≤1.2
Isolation(dB)	≥25	≥23	≥23
PIM3(dBc)	≤-150 @ +43dBmx2	≤-150 @ +43dBmx2	≤-150 @ +43dBmx2
Application	Outdoor, IP65	Outdoor, IP65	Outdoor, IP65
Impedance (Ω)	50	50	50
Power Rating(W)	300	300	300
Connector	DIN-F	DIN-F	DIN-F
Temperature Range(°C)	-35 ~ +85	-35 ~ +85	-35 ~ +85

Dimension (in mm)



Hybrid Coupler

Description: SY-D*A-I50 series 3dB Hybrid couplers, 2 in/2 out, are passive devices used in the field of radio technology, which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports.

SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

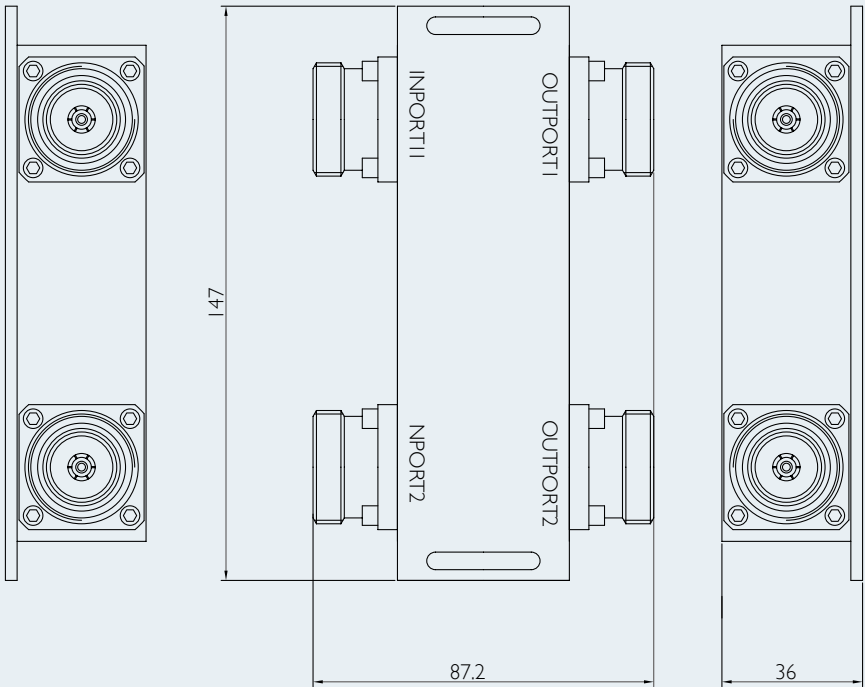
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8025A-I50	SY-D8027A-I50	SY-D7027A-I50
Frequency Range (MHz)	800-2500MHz	800-2700MHz	698-2700MHz
Insertion loss(dB)	3.5	3.5	3.55
In-band Ripple (dB)	0.5	0.5	1
VSWR	≤1.22	≤1.22	≤1.22
Isolation(dB)	≥25	≥25	≥25
PIM3(dBc)	≤-150 @ +43dBm×2	≤-150 @ +43dBm×2	≤-150 @ +43dBm×2
Application	Outdoor; IP65	Outdoor; IP65	Outdoor; IP65
Impedance (Ω)	50	50	50
Power Rating(W)	500	500	500
Connector	DIN-F	DIN-F	DIN-F
Temperature Range(°C)	-35 ~ +75	-35 ~ +75	-35 ~ +75

Dimension (in mm)



Hybrid Coupler

Description: SY-D*A-I40 series 3dB Hybrid couplers,2 in/2 out, are passive devices used in the field of radio technology, which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports.

SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

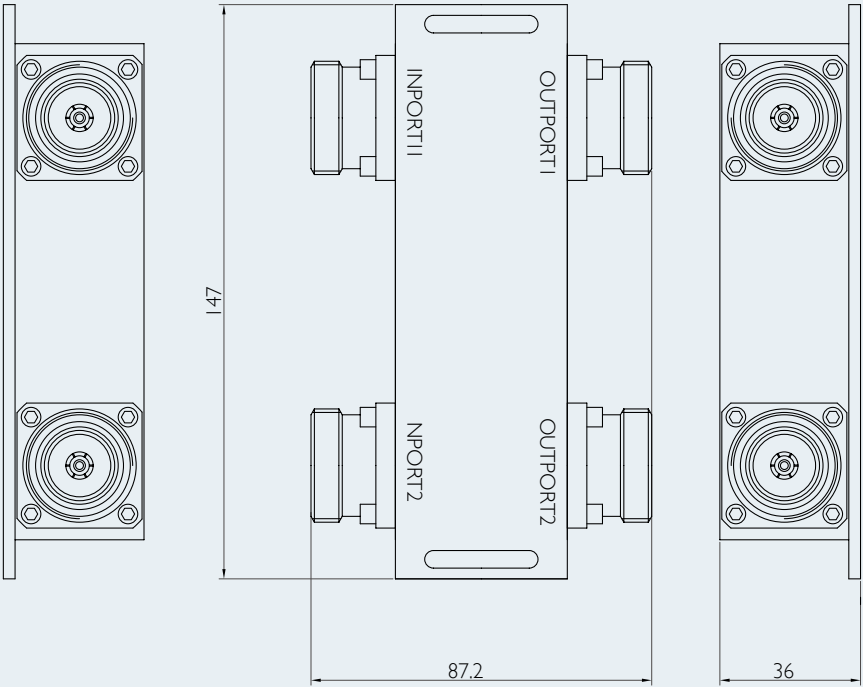
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-D8025A-I40	SY-D8027A-I40	SY-D7027A-I40
Frequency Range (MHz)	800-2500MHz	800-2700MHz	698-2700MHz
Insertion loss(dB)	3.5	3.5	3.55
In-band Ripple (dB)	0.5	±0.5	±1
VSWR	≤1.22	≤1.22	≤1.22
Isolation(dB)	≥25	≥25	≥25
PIM3(dBc)	≤-140 @ +43dBmx2	≤-140 @ +43dBmx2	≤-140 @ +43dBmx2
Application	Indoor	Indoor	Indoor
Impedance (Ω)	50	50	50
Power Rating(W)	500	500	500
Connector	DIN-F	DIN-F	DIN-F
Temperature Range(°C)	-35 ~ +75	-35 ~ +75	-35 ~ +75

Dimension (in mm)



Hybrid Coupler

Description: SY-N*A-I50 series 3dB Hybrid couplers,2 in/2 out, are passive devices used in the field of radio technology, which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports.

SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

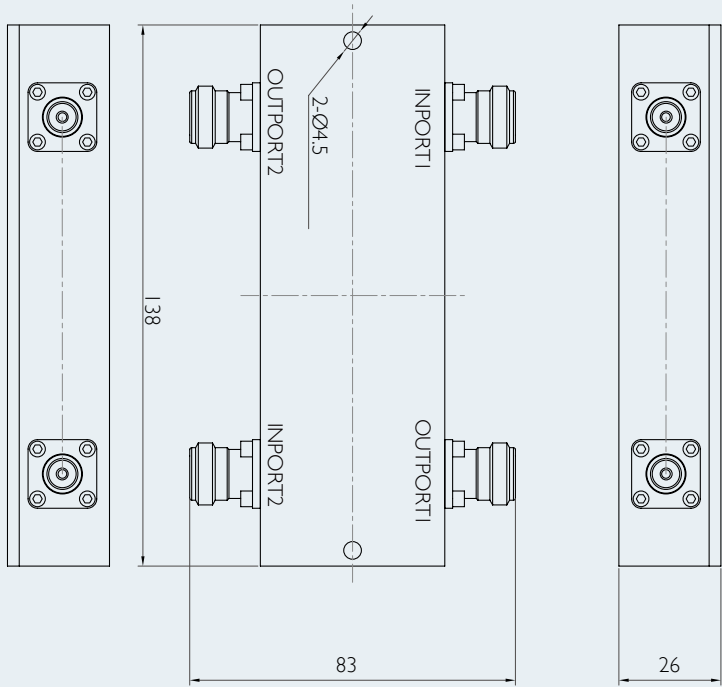
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025A-I50	SY-N8027A-I50	SY-N7027A-I50
Frequency Range (MHz)	800-2500MHz	800-2700MHz	698-2700MHz
Insertion loss(dB)	3.5	3.5	3.5
In-band Ripple (dB)	±0.5	±0.5	±1
VSWR	≤1.2	≤1.2	≤1.2
Isolation(dB)	≥25	≥23	≥23
PIM3(dBc)	≤-150 @ +43dBmx2	≤-150 @ +43dBmx2	≤-150 @ +43dBmx2
Application	Outdoor; IP65	Outdoor; IP65	Outdoor; IP65
Impedance (Ω)	50	50	50
Power Rating(W)	200	200	200
Connector	N-F	N-F	N-F
Temperature Range(°C)	-30 ~ +70	-30 ~ +70	-30 ~ +70

Dimension (in mm)



Hybrid Coupler

Description: SY-N*B-150 series 3dB Hybrid couplers,2 in/2 out, are passive devices used in the field of radio technology,which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports,

SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

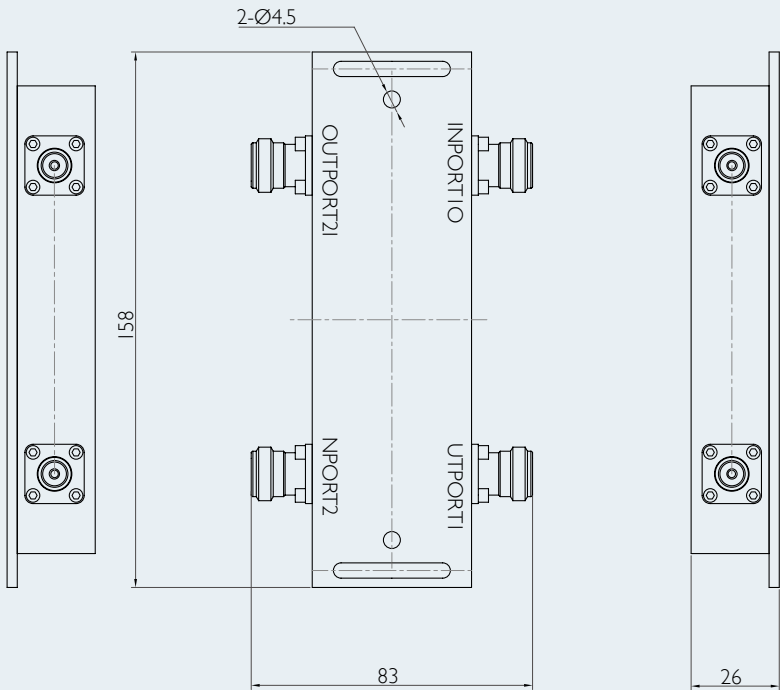
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025B-150	SY-N8027B-150	SY-N7027B-150
Frequency Range (MHz)	800-2500MHz	800-2700MHz	698-2700MHz
Insertion loss(dB)	3.5	3.5	3.55
In-band Ripple (dB)	0.5	0.5	1
VSWR	≤1.2	≤1.2	≤1.2
Isolation(dB)	≥25	≥23	≥23
PIM3(dBc)	≤-150 @ +43dBmx2	≤-150 @ +43dBmx2	≤-150 @ +43dBmx2
Application	Outdoor, IP65	Outdoor, IP65	Outdoor, IP65
Impedance (Ω)	50	50	50
Power Rating(W)	200	200	200
Connector	N-F	N-F	N-F
Temperature Range(°C)	-30 ~ +70	-30 ~ +70	-30 ~ +70

Dimension (in mm)



Hybrid Coupler

Description: SY-N*A-I50 series 3dB Hybrid couplers, 2 in/2 out, are passive devices used in the field of radio technology, which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports,

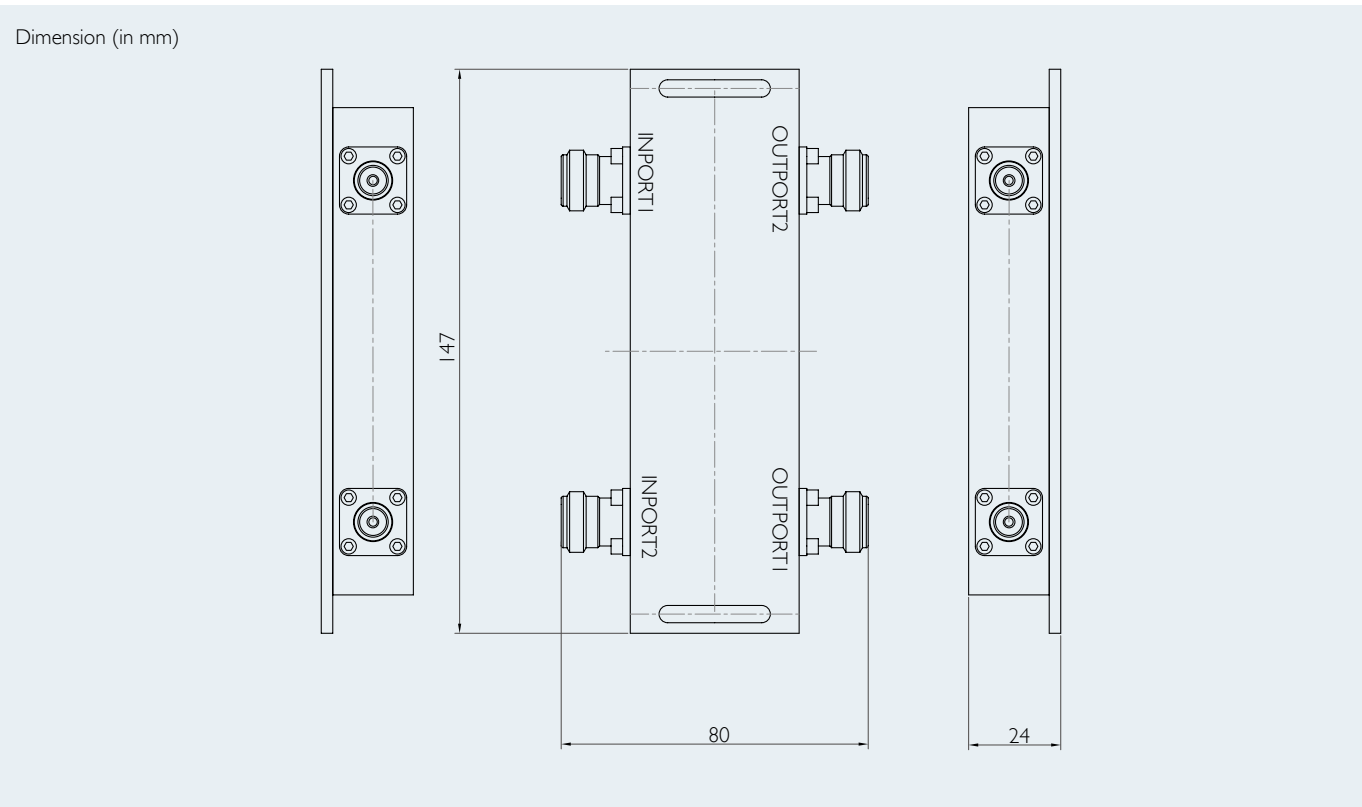
SYNERGY's hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025A-I50	SY-N8027A-I50	SY-N7027A-I50
Frequency Range (MHz)	800-2500MHz	800-2700MHz	698-2700MHz
Insertion loss(dB)	3.5	3.5	3.55
In-band Ripple (dB)	0.5	0.5	1
VSWR	≤1.2	≤1.22	≤1.22
Isolation(dB)	≥25	≥25	≥23
PIM3(dBc)	≤-150 @ +43dBm×2	≤-150 @ +43dBm×2	≤-150 @ +43dBm×2
Application	Outdoor, IP65	Outdoor, IP65	Outdoor, IP65
Impedance (Ω)	50	50	50
Power Rating(W)	200	200	200
Connector	N-F	N-F	N-F
Temperature Range(°C)	-30 ~ +70	-30 ~ +70	-30 ~ +70



Hybrid Coupler

Description: SY-N*A-140 series 3dB Hybrid couplers, 2 in/2 out, are passive devices used in the field of radio technology, which are used both to equally split an input signal with a resultant 90° phase shift between output ports and to combine two signals while maintaining high isolation between the two input ports.

SYNERGY s hybrid couplers are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

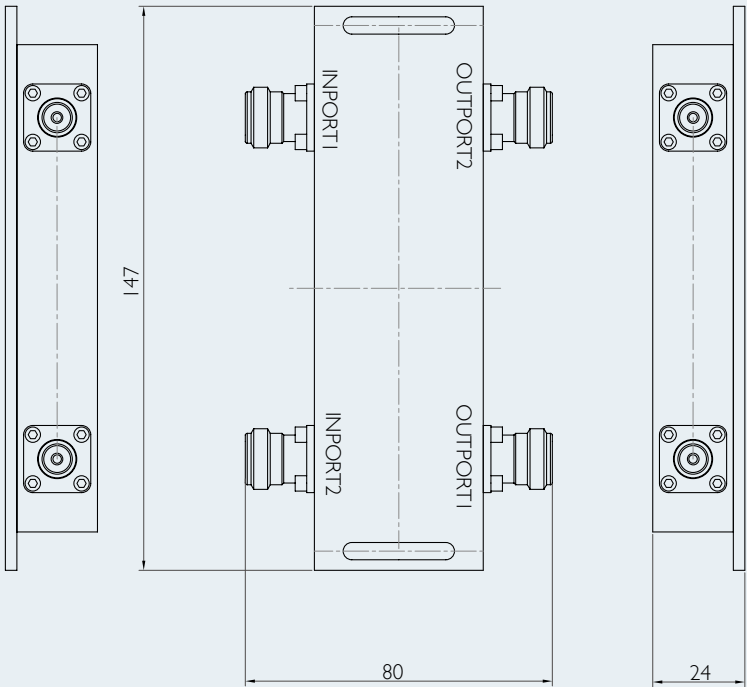
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025A-150	SY-N8027A-150	SY-N7027A-150
Frequency Range (MHz)	800-2500MHz	800-2700MHz	698-2700MHz
Insertion loss(dB)	3.5	3.5	3.55
Ripple(dB)	0.5	0.5	1
VSWR	≤1.2	≤1.22	≤1.22
Isolation(dB)	≥25	≥23	≥23
PIM3(dBc)	≤-140 @ +43dBm×2	≤-140 @ +43dBm×2	≤-140 @ +43dBm×2
Application	≤-155 @ +43dBm×2	≤-155 @ +43dBm×2	≤-155 @ +43dBm×2
Impedance (Ω)	50	50	50
Power Rating(W)	200	200	200
Connector	N-F	N-F	N-F
Temperature Range(°C)	-30 ~ +70	-30 ~ +70	-30 ~ +70

Dimension (in mm)



3-Port Hybrid Coupler

Description: SY-N*A-I00 series 3-Port Hybrid coupler are special case of 3dB hybrid couplers with only two input ports and one output port, which is designed to combine the signals from two input ports into a single output port while maintaining high isolation between the two input ports.

SYNERGY's same frequency combiners are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

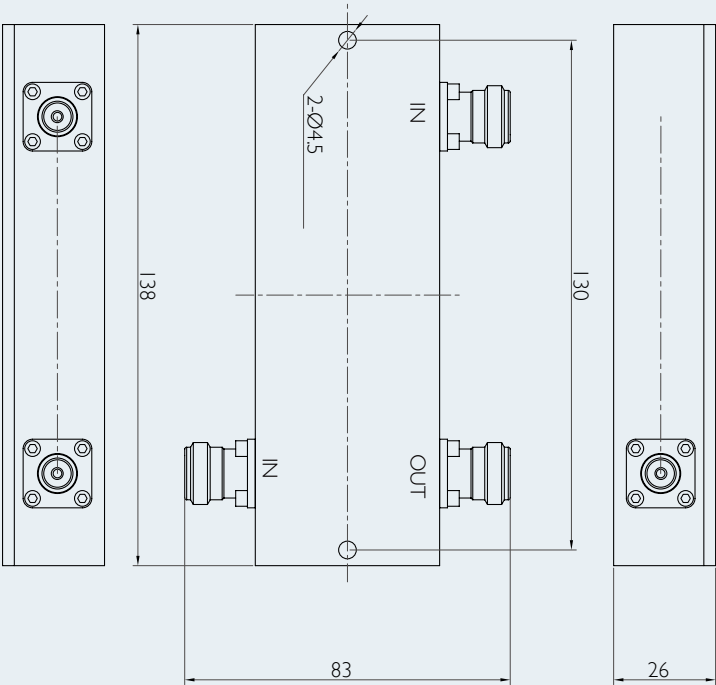
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025A-I00	SY-N8027A-I00	SY-N7027A-I00
Frequency Range (MHz)	800-2500	800-2700	698-2700
Coupling(dB)	≤3.5	≤3.5	≤3.55
VSWR	≤1.25	≤1.25	≤1.3
Isolation(dB)	≥25	≥23	≥23
PIM3(dBc)	Input port:≤-120 @ +43dBm×2	Input port:≤-120 @ +43dBm×2	Input port:≤-120 @ +43dBm×2
	Output port:≤-140 @ +43dBm×2	Output port:≤-140 @ +43dBm×2	Output port:≤-140 @ +43dBm×2
Application	Indoor	Indoor	Indoor
Impedance (Ω)	50	50	50
Power Rating(W)	100	100	100
Connector	N-F	N-F	N-F
Temperature Range(°C)	-25 ~ +65	-25 ~ +65	-25 ~ +65

Dimension (in mm)



3-Port Hybrid Coupler

Description: SY-N8025B-200 series 3-Port Hybrid coupler are special case of 3dB hybrid couplers with only two input ports and one output port, which is designed to combine the signals from two input ports into a single output port while maintaining high isolation between the two input ports.

SYNERGYs same frequency combiners are characterized by low VSWR, low insertion loss, low PIM value, high power capacity and performance stability.

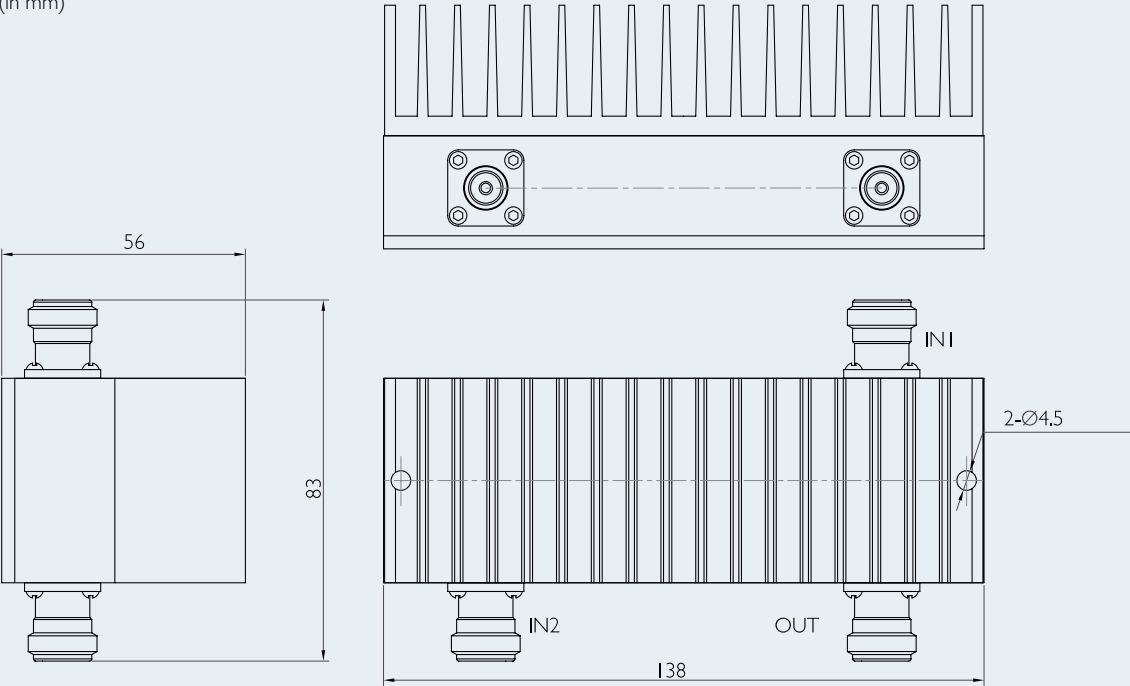
Widely used for DMA/GMS/DCS/UMTS/WIFI/WIMAX etc.



Technical Parameters

Part No.	SY-N8025B-200
Frequency Range (MHz)	800-2500MHz
Coupling(dB)	≤3.5
VSWR	≤1.3
Isolation(dB)	≥20
PIM3(dBc)	Input port:≤-12 0 @ 2x43dBm Output port:≤-140 @ 2x43dBm
Application	Indoor
Impedance (Ω)	50
Power Rating(W)	200
Connector	N-F
Temperature Range(°C)	-25 ~ +65

Dimension (in mm)



Triplexers

Description: Triplexers are passive devices used in the field of radio technology, they are used to combine the signal from a number of different input ports to a single output port.

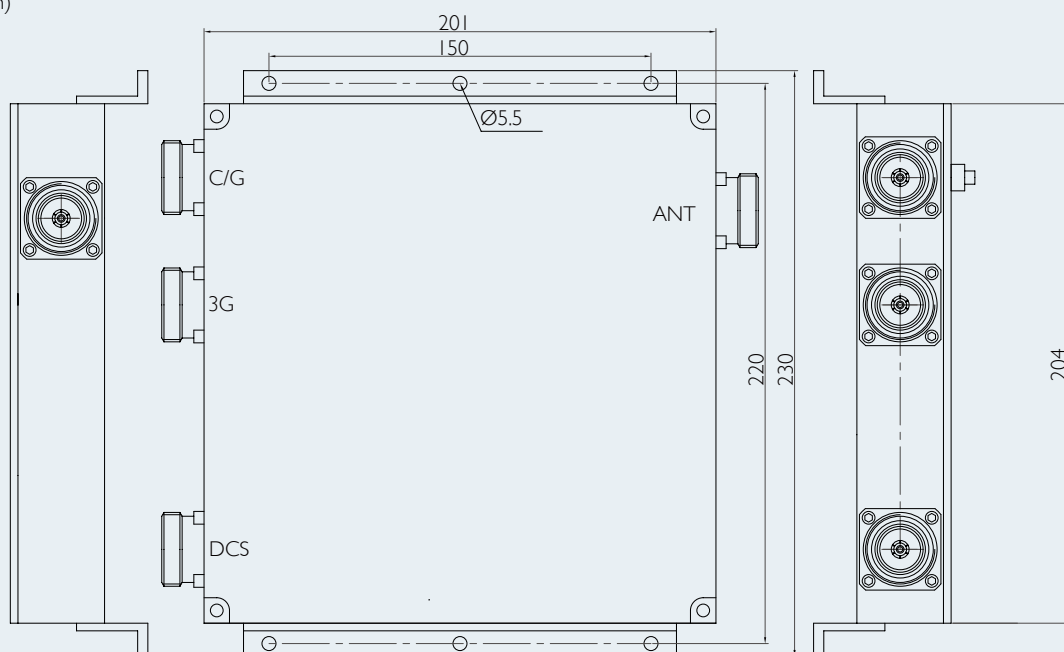
SYNERGY's triplexers are characterized by low VSWR, low insertion loss, low PIM, high Isolation and performance stability.



Technical Parameters

Part No.	SY-TFC-C&G/D/3G-150		
Channels	CDMA/GSM	DCS	3G
Frequency Range(MHz)	890-960	1710-1880	1920-2170
Band Width(MHz)	70	170	250
Insertion Loss(dB)	≤0.2	≤0.5	≤0.6
Stop-band	≥50 @ DCS	≥50 @ CDMA/GSM	≥50 @ CDMA/GSM
Attenuation(dB)	≥50 @3G	≥50 @ 3G	≥50 @ DCS
Return Loss(dB)	≥18	≥18	≥18
Application	Indoor		
Impedance(Ω)	50		
Power Rating(W)	200		
PIM3(dBc)	≤-150 @ +43dBm×2		
Connectors	DIN-F		
Temperature Range(°C)	-33 ~ +55		

Dimension (in mm)



Triplexers

Description: Triplexers are passive devices used in the field of radio technology, they are used to combine the signal from a number of different input ports to a single output port.

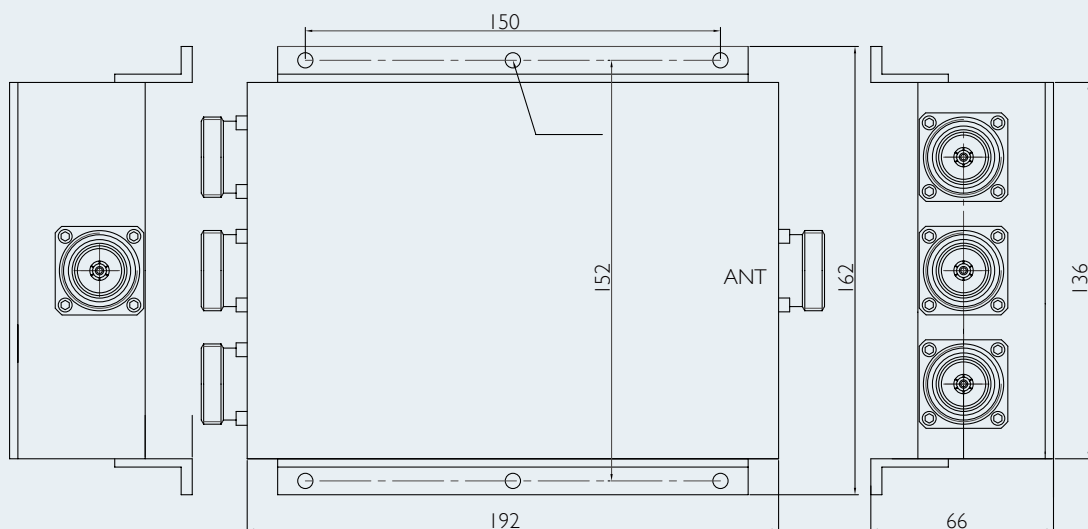
SYNERGY's triplexers are characterized by low VSWR, low insertion loss, low PIM, high isolation and performance stability.



Technical Parameters

Part No.	SY-TFC-C&G/D&3G/LTE-153		
Channels	CDMA/GSM	DCS/3G	LTE
Frequency Range (MHz)	890-960	1710-2170	2525-2690
Band Width (MHz)	70	460	165
Insertion Loss (dB)	≤ 0.2	≤ 0.3	≤ 0.3
Stop-band Attenuation (dB)	≥ 50 @ DCS/3G ≥ 50 @ LTE	≥ 50 @ CDMA/GSM ≥ 50 @ LTE	≥ 50 @ CDMA/GSM ≥ 50 @ DCS/3G
Return Loss (dB)	≥ 18	≥ 18	≥ 18
Impedance(Ω)	50		
Power Rating (W)	200		
PIM3 (dBc)	≤ -153 @ +43dBm $\times 2$		
Connectors	DIN-F		
Temperature Range($^{\circ}\text{C}$)	$-33 \sim +55$		
Mounting accessories	Wall Mountable Installation Bracket included		
Application	Indoor & Outdoor, IP65		

Dimension (in mm)



Triplexers

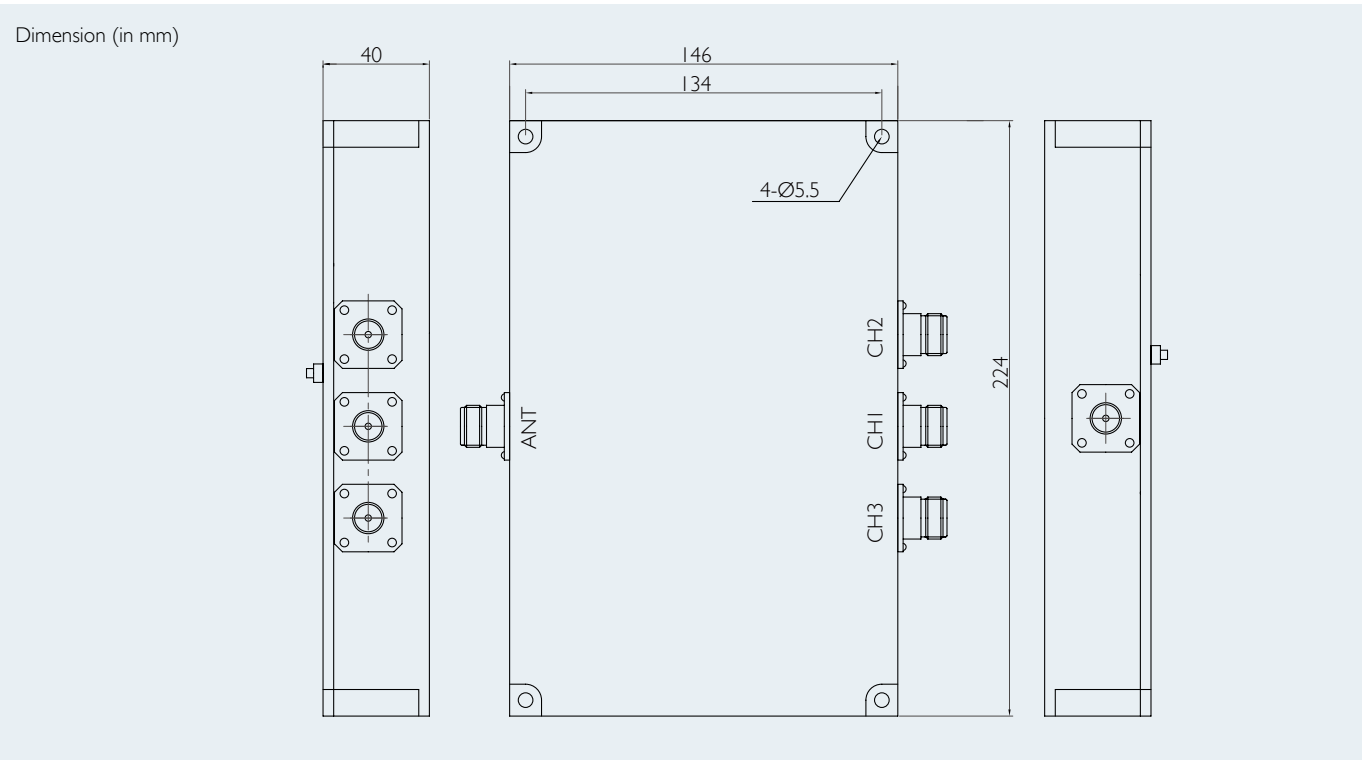
Description: Triplexers are passive devices used in the field of radio technology,they are used to combine the signal from a number of different input ports to a single output port.

SYNERGY's triplexers are characterized by low VSWR, low insertion loss, low PIM, high Isolation and performance stability.



Technical Parameters

Part No.	SY-TFC-C&G/D/3G-I40		
Channels	CH1(CDMA/GSM)	CH2(DCS/2G)	CH3(UMTS/3G)
Frequency Range (MHz)	800-960	1710-1880	1920-2170
Band Width (MHz)	160	170	250
Insertion Loss (dB)	≤0.5	≤0.8	≤0.8
In band Ripple (dB)	≤0.2	≤0.5	≤0.5
Stop-band Attenuation (dB)	≥80 @ CH2	≥80 @ CH1	≥80 @ CH1
	≥80 @ CH3	≥80 @ CH3	≥80 @ CH2
Return Loss (dB)	≥18	≥18	≥18
Impedance(Ω)	50		
Power Rating(W)	200		
PIM3 (dBc)	≤-140 @ +43dBm×2		
Connector	N-F		
Application	Indoor		
Temperature Range(°C)	-33 ~ +55		

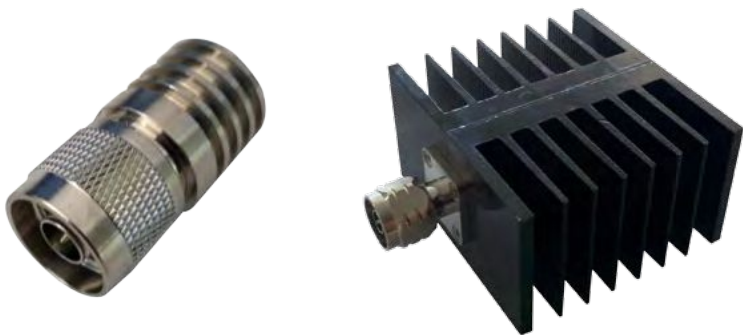


Termination load

Description: Termination loads, also call dummy loads, are the passive 1-port interconnect devices, which provide a resistive power termination to properly terminate the output port of a device or to terminate one end of an RF cable.

SYNERGY's Termination loads are characterized by low VSWR, high power capacity and performance stability.

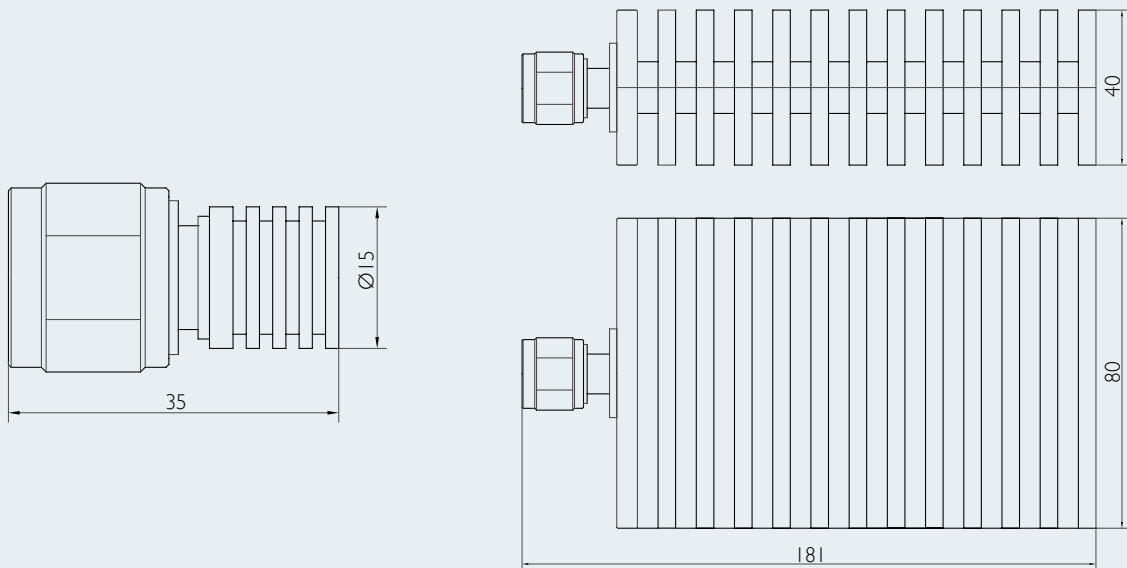
Widely used for DMA/GMS/DCS/UMTS/WIFI/ WIMAX etc.



Technical Parameters

Specifications	SY-NM3-5	SY-NM3-50	SY-NM3-100
Frequency (MHz)	0-3000		
Maximum Power (W)	5	50	100
VSWR	≤1.2		
Impedance(Ω)	50		
Connector Type	N-M		
Operating Temperature (°C)	-33~+55		
Size (mm)	137×Φ 15	137×Φ 50	181×80×40
Humidity	95%		

Dimension (in mm)





900MHz Passive Intermodulation Analyzer



1800MHz Passive Intermodulation Analyzer



2100MHz Passive Intermodulation Analyzer



Spectrum Analyzer



Power Meter