



Product Catalogue

Classification

- ✧ Antenna System
- ✧ In-building System
- ✧ Point of Interface System

Classification

- ✧ Antenna System
- ✧ In-building System
- ✧ Point of Interface System

Guidance

ANTENNA SYSTEM

Type No.	Product Name	Frequency Range(MHz)	Page
98.00818	Dual-band Combiner	380-960/1710-2700	
98.00825	Dual-band Combiner	1710-1885/1920-2170	
98.00829	Trip-band Combiner	1710-1880/1920-2170/2500-2700	
97.00125	GSM900 Filter	890-915MHz&935-960MHz	

IN-BUILDING SYSTEM

98.00078	Dual-band Combiner	889-954/1710-1830	
98.00770	Triple-band Combiner	889-954&1710-1830/1880-2025&2300-2400	
98.00386	Quad-band Combiner	885-960&1710-2025&2300-2380/2400-2500	
98.00766	Quad-band Combiner	889-954&1710-2025&2300-2400/2575-2635	
98.00769	Quad-band Combiner	889-954&1710-2025/2300-2400/2575-2635	
98.00772	Quad-band Combiner	889-954&1710-1830/1880-2025/2300-2400	
98.00771	Quad-band Combiner	889-954/1710-1830/1880-2025&2300-2400	
98.00802	Quad-band Combiner	889-954&1710-1830/1880-2025/2575-2635	
98.00803	Quad-band Combiner	889-954&1710-1830/1880-2025/2300-2400/2575-2635	
98.00808	Dual-band Combiner	1710-1880/1920-2170	
98.00810	Dual-band Combiner	806-960/1710-2170	
98.00809	Triple-band Combiner	800-960/1710-1880/1921-2175	
98.00811	Triple-band Combiner	806-960&1710-2170/2400-2483.5	
98.00399	Triple-band Combiner	806-960/1710-2170/2400-2500	
95.00034	Power Splitter (Square-N/2-way)	698-2700	
95.00035	Power Splitter (Square-N /3-way)	698-2700	
95.00021~95.00023	5dB 6dB,7dB,10dB,15dB 20dB Coupler	698-2700	
95.00012	Hybrid 4 Input/4 Output(DIN)	698-2700	
95.00029	Hybrid 2 Input/2 Output(N)	698-2700	

96.00058	POI	9 Input 2 Output	
96.00063	POI	6 Input 2 Output	
96.00064	POI	7 Input 2 Output	
96.00065	POI	8 Input 2 Output	
96.00066	POI	9 Input 2 Output (Integration Version)	
96.00068	POI	12 Input 2 Output	
96.00071	POI	17 Input 4 Output	
96.00072	POI	15 Input 4 Output	

ANTENNA SYSTEM

Product Specifications

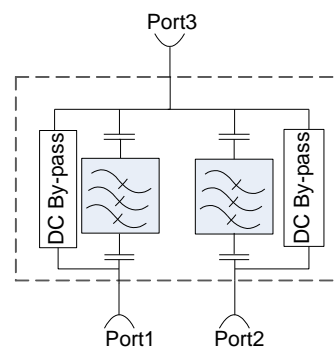
Combiner 380-960/1710-2700MHz

Type No	98 . 00818	
Electrical		
Port	Port1	Port2
Frequency	380-960	1710-2700
Insertion Loss(dB)	≤0.2dB	
Isolation(dB)	≥60 dB	
VSWR	≤1.2	
Impedance	50 Ω	
Input Power(avg)	< 300 watts	
Intermodulation products	≤-160 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor or outdoor (IP 67)	
Lightning protection	3KA ; 10/350us pulse	
MTBF		
Mechanical		
Connectors	7-16 DIN female (long neck)	
Colors	Grey(Powdering)	
Weight		
Dimensions (without connectors)	Single unit : 181*110*52mm	
Packing	1 pc /box	

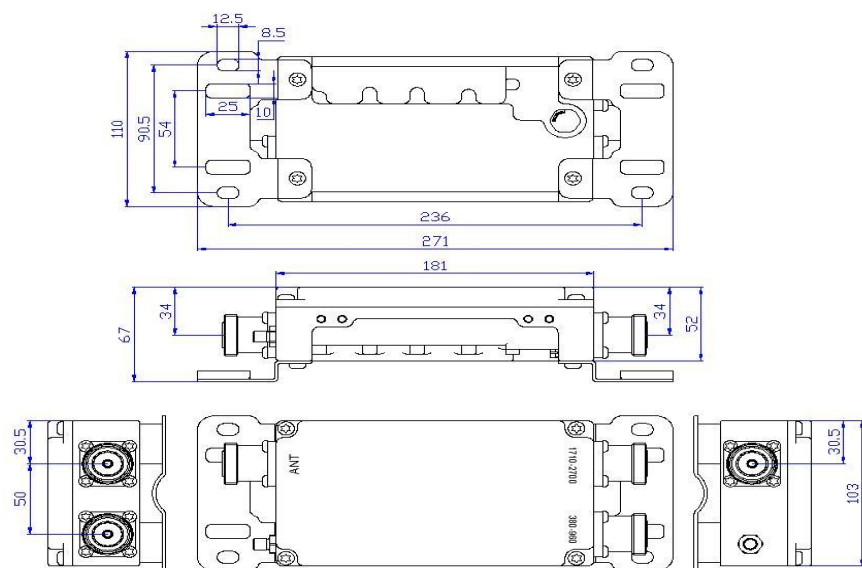
Product picture



Schematic diagram



Outline drawing



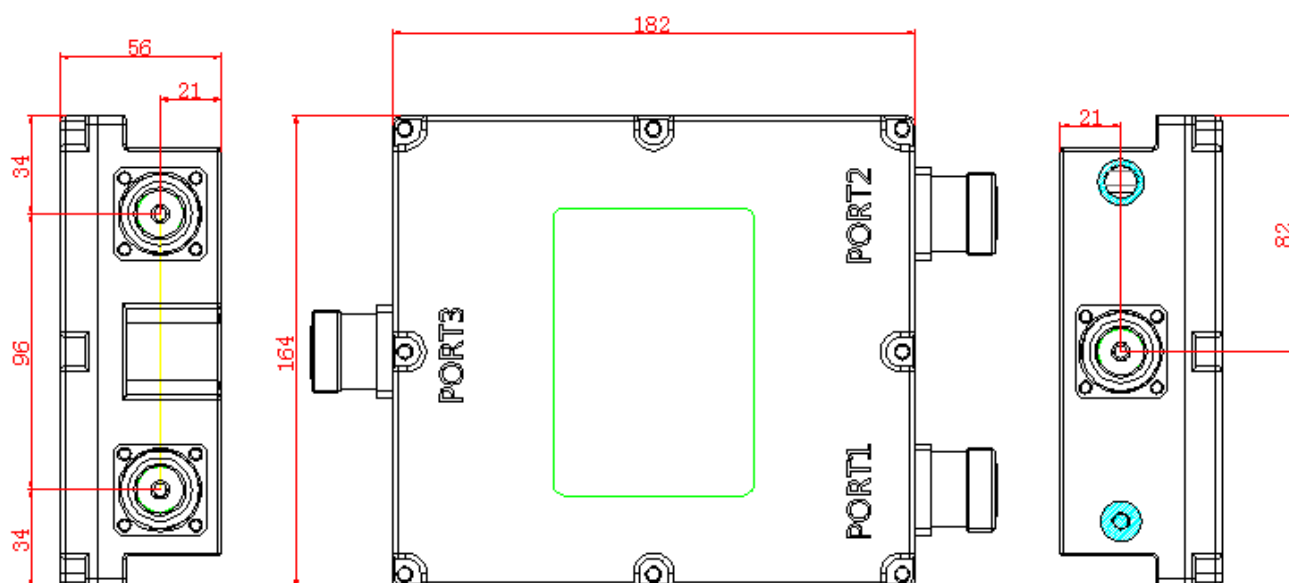
Product Specifications Combiner 1710-1885/1920-2170MHz

Type No	98.00825	
Electrical		
Port	Port1	Port2
Frequency	1710-1880	1920-2170
Insertion Loss(dB)	$\leq 0.3\text{dB}$	
Ripple in band	$\leq 0.25\text{dB}$	
Isolation(dB)	$\geq 50\text{ dB}$	
VSWR	≤ 1.3	
Impedance	50 Ω	
Input Power(avg)	$\geq 300\text{ watts}$	
Intermodulation	$< -160\text{dBc}(3^{\text{rd}}\text{ order; with } 2 \times 20\text{W})$	
DC/AISG	By-pass(max.2500 mA)	
Lightning Protection	3KA; 10/350us pulse	
Environmental		
Temperature Range	$-25\text{ }^{\circ}\text{C} \text{---} +65\text{ }^{\circ}\text{C}(\text{Operating})$	
Application	Indoor or outdoor (IP66)	
Mechanical		
Connectors	3pcs Din-Female(long neck)-single unit	
Weight	Single unit:2.6 Kg	
Dimensions (without connectors)	Single unit : 182*164*56mm	
Packing	1 pc /box	

Product picture



Outline drawing



Product Specifications

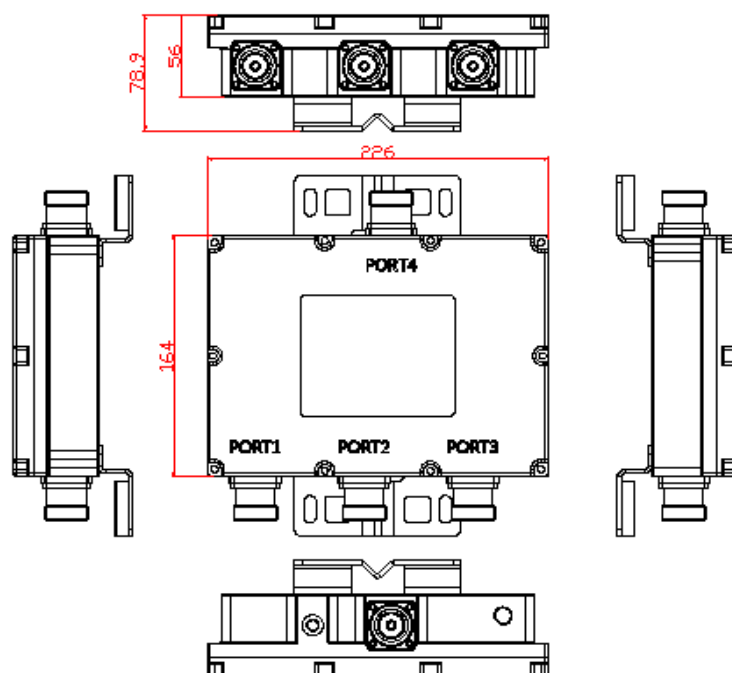
Combiner 1710-1880/1920-2170/2500-2700MHz

Type No	98.00829		
Electrical			
Port	Port1	Port2	Port3
Frequency	1710-1880	1920-2170	2500-2700
Insertion Loss(dB)	≤0.3dB		
Ripple in band	≤0.25dB		
Isolation(dB)	≥50 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	≥300 watts		
Intermodulation	< -160dBc(3 rd order; with 2×20W)		
DC/AISG	By-pass(max.2500 mA)		
Lightning Protection	3KA; 10/350us pulse		
Environmental			
Temperature Range	-25 °C— +65 °C(Operating)		
Application	Indoor or outdoor (IP66)		
Mechanical			
Connectors	4pcs Din-Female(long neck)-single unit		
Weight	Single unit:3.2 Kg		
Dimensions (without connectors)	Single unit : 226*164*56mm		
Packing	1 pc /box		

Product picture



Outline drawing



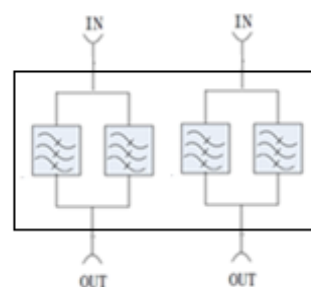
Product Specifications

Filter GSM 900 890-915MHz&935-960MHz

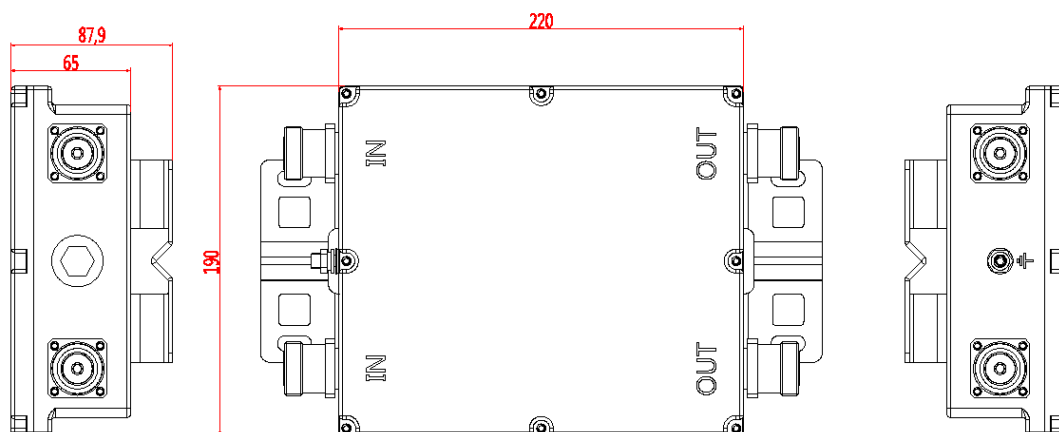
Type No.	97.00125
Electrical	
Frequency	890-915MHz&935-960MHz
Insertion Loss	<0.6dB
Rejection	>45dB@698-880MHz
Impedance	50 Ω
Return loss	>18dB (all port)
Input Power(port1 port2)	60 W(avg.)
Average Power(avg)	≥200W
Intermodulation products	≤-155/-160 dBc(3rd order with 2×20W)
Environmental	
Temperature Range	-20°C to +60°C
Operating humidity	5% ~ 95%
DC/AISG transparency	By-pass(max.2500 ma)
Application	Indoor or Outdoor (IP 67)
Lightning protection	3kA@10/350μs pulse
Mechanical	
Connectors	7-16 DIN female (long neck)
Colors	Grey(Powdering)
Dimensions	Single unit: 220*190*65mm(without bracket)
Packing	1 pc/box

Product picture

Schematic diagram

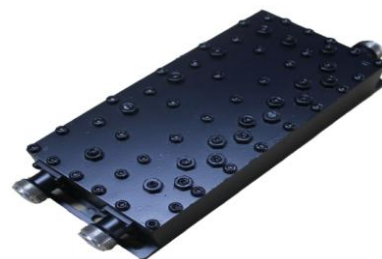
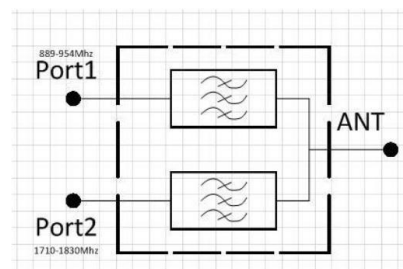
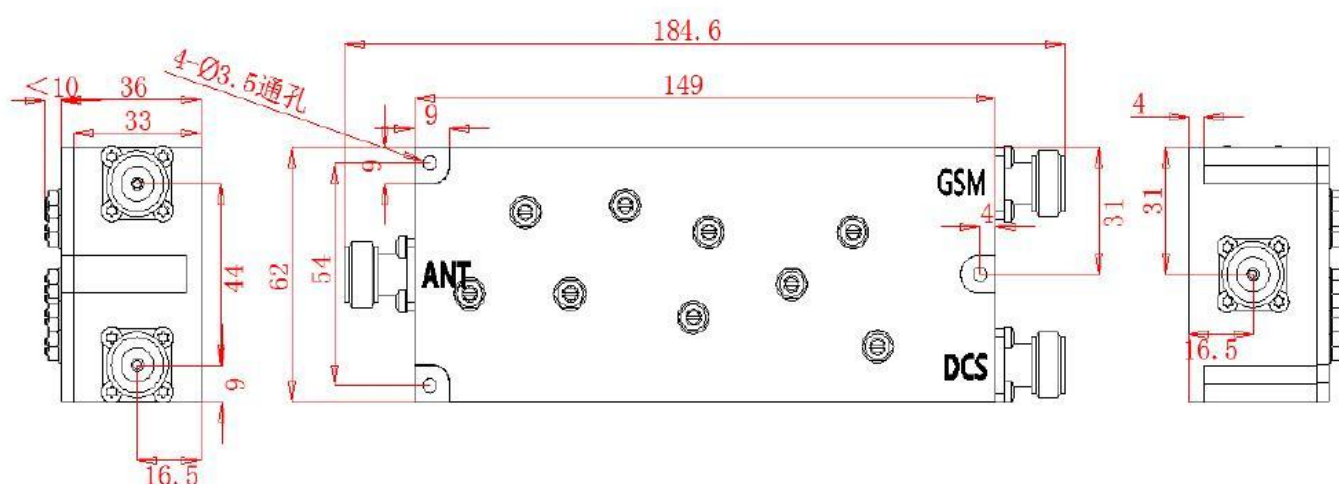


Outline drawing



IN-BUILDING SYSTEM

Type No.	98.00078	
Electrical		
Port	Port1	Port2
Frequency	889-954	1710-1830
Insertion Loss(dB)	≤0.6dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	≤200 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	0.4kg	
Dimensions	184.6*62*36 mm(without connectors)	
Packing	1 pc /box	

Product pictureSchematic diagramOutline drawing

Product Specifications

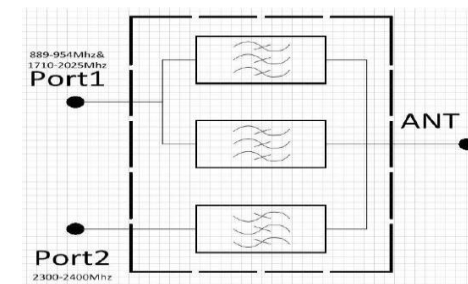
Combiner 889-954&1710-2025/2300-2400 MHz

Type No.	98.00770	
Electrical		
Port	Port1	Port2
Frequency	889-954&1710-2025	2300-2400
Insertion Loss(dB)	≤0.8dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	≤200 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	1.0kg	
Dimensions	127.6*108*30 mm(without connectors)	
Packing	1 pc/box	

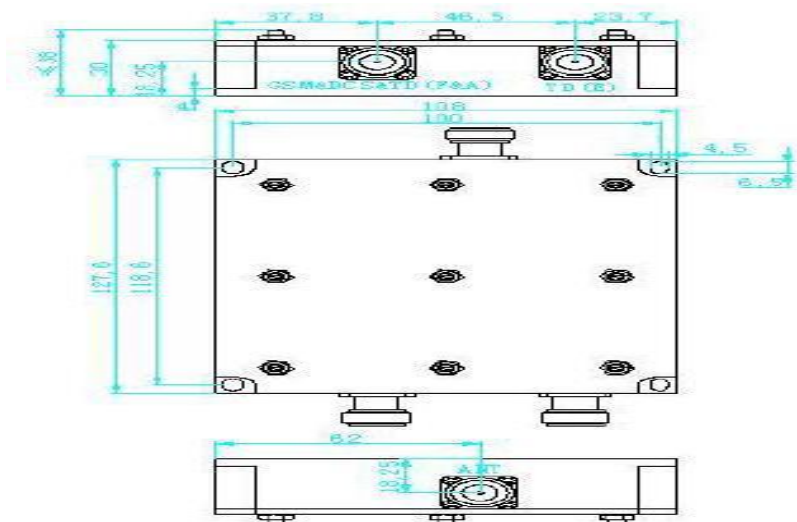
Product picture



Schematic diagram



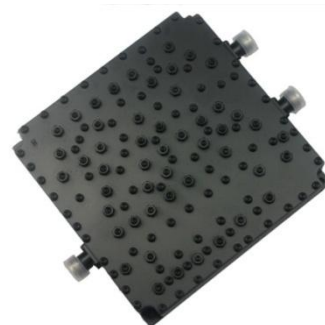
Outline drawing



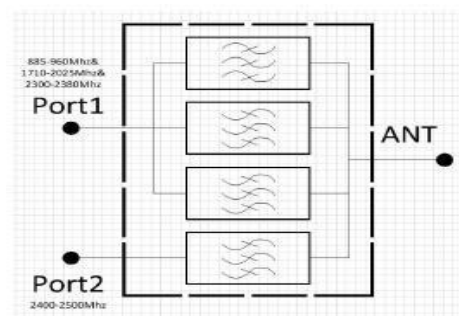
Product Specifications Combiner 889-960&1710-2025&2300-2380/2400-2500MHz

Type No.	98.00386	
Electrical		
Port	Port1	Port2
Frequency	889-960&1710-2025&2300-2380	2400-2500
Insertion Loss(dB)	≤0.6dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	≤200 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	1.0kg	
Dimensions	190*167*30 mm(without connectors)	
Packing	1 pc/box	

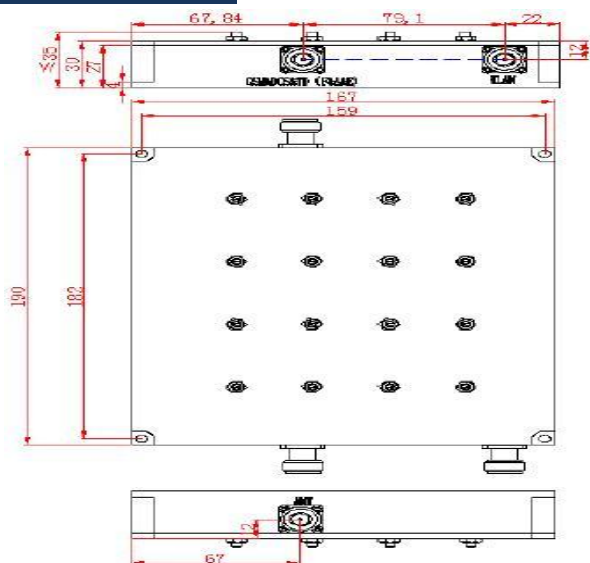
Product picture



Schematic diagram



Outline drawing

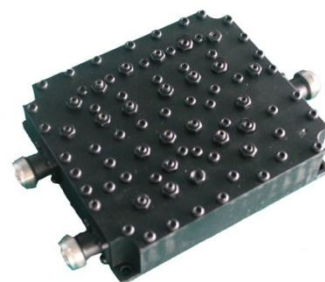


Product Specifications

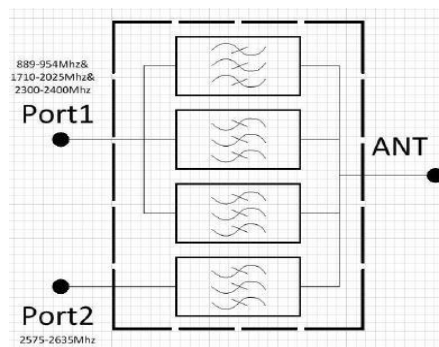
Combiner 889-954&1710-2025&2300-2400/2575-2635MHz

Type No.	98.00766	
Electrical		
Port	Port1	Port2
Frequency	889-954	1710-1830
Insertion Loss(dB)	≤0.8dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	≤200 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	1.2kg	
Dimensions	190*167*30 mm(without connectors)	
Packing	1 pc/box	

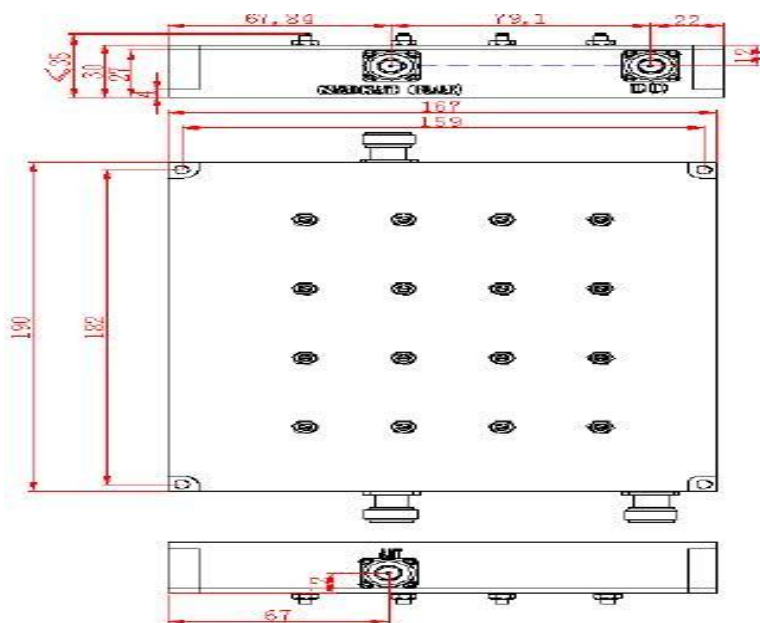
Product picture



Schematic diagram



Outline drawing



Product Specifications

Combiner 889-954&1710-2025/2300-2400/2575-2635MHz

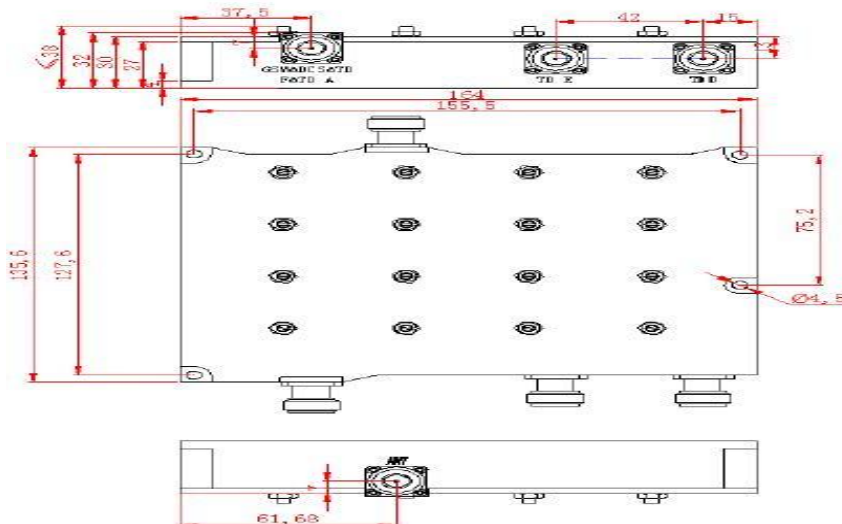
Type No.	98.00771		
Electrical			
Port	Port1	Port2	Port3
Frequency	889-954&1710-2025	2300-2400	2575-2635
Insertion Loss(dB)	≤0.8dB		
Isolation(dB)	≥80 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	≤200 W(avg.)		
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)		
Environmental			
Temperature Range	-20 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	Indoor		
Lightning protection			
MTBF			
Mechanical			
Connectors	4pcs N-Female		
Colors	Black(Painting)		
Weight	1.2kg		
Dimensions	164*135.6*22 mm(without connectors)		
Packing	1 pc/box		

Product picture



Schematic diagram

Outline drawing



Product Specifications

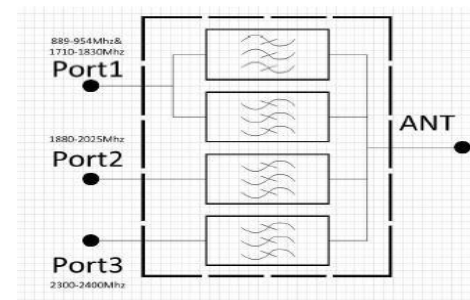
Combiner 889-954&1710-1830/1880-2025/2300-2400MHz

Type No.	98.00772		
Electrical			
Port	Port1	Port2	Port3
Frequency	889-954&1710-1830	1880-2025	2300-2400
Insertion Loss(dB)	≤0.8dB		
Isolation(dB)	≥80 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	≤200 W(avg.)		
Intermodulation products	≤-150 dBc(3 rd order with 2x20W)		
Environmental			
Temperature Range	-20 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	Indoor		
Lightning protection			
MTBF			
Mechanical			
Connectors	4pcs N-Female		
Colors	Black(Painting)		
Weight	1.4kg		
Dimensions	174*142*40 mm(without connectors)		
Packing	1 pc/box		

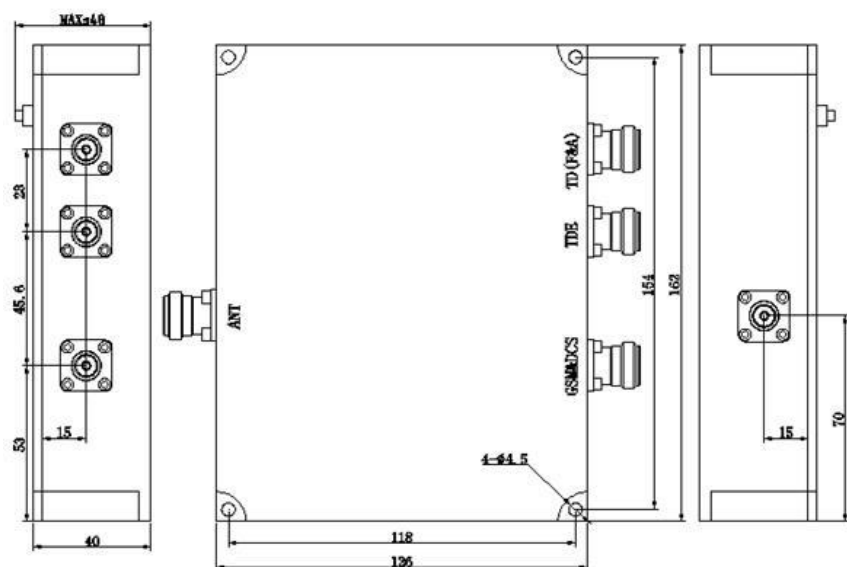
Product picture



Schematic diagram



Outline drawing



Product Specifications

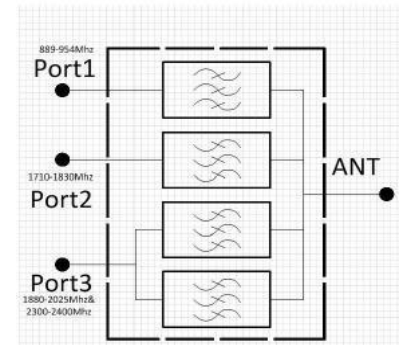
Combiner 889-954/1710-1830/1880-2025&2300-2400MHz

Type No.	98.00771		
Electrical			
Port	Port1	Port2	Port3
Frequency	889-954	1710-1830	1880-2025&2300-2400
Insertion Loss(dB)	≤0.6dB		
Isolation(dB)	≥80 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	≤200 W(avg.)		
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)		
Environmental			
Temperature Range	-20 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	Indoor		
Lightning protection			
MTBF			
Mechanical			
Connectors	4pcs N-Female		
Colors	Black(Painting)		
Weight	1.4kg		
Dimensions	174*142*40 mm(without connectors)		
Packing	1 pc/box		

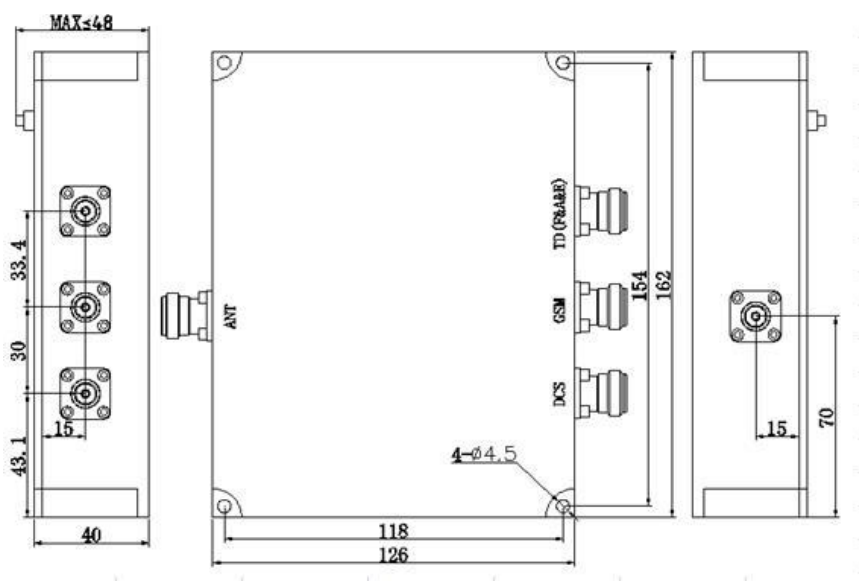
Product picture



Schematic diagram



Outline drawing



Product Specifications

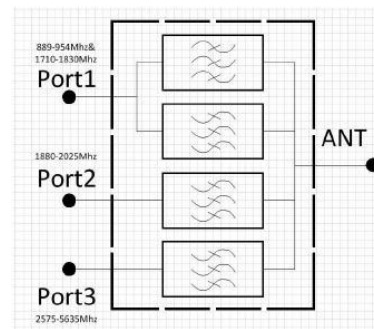
Combiner 889-954&1710-1830/1880-2025/2575-2635MHz

Type No.	98 . 00802		
Electrical			
Port	Port1	Port2	Port3
Frequency	889-954&1710-1830	1880-2025	2575-2635
Insertion Loss(dB)	≤0.8dB		
Isolation(dB)	≥80 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	≤200 W(avg.)		
Intermodulation products	≤-150 dBc(3 rd order with 2x20W)		
Environmental			
Temperature Range	-20 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	Indoor/Outdoor(IP65)		
Lightning protection			
MTBF			
Mechanical			
Connectors	4pcs N-Female		
Colors	Black(Powdering)		
Weight	1.4kg		
Dimensions	174*142*40 mm(without connectors)		
Packing	1 pc/box		

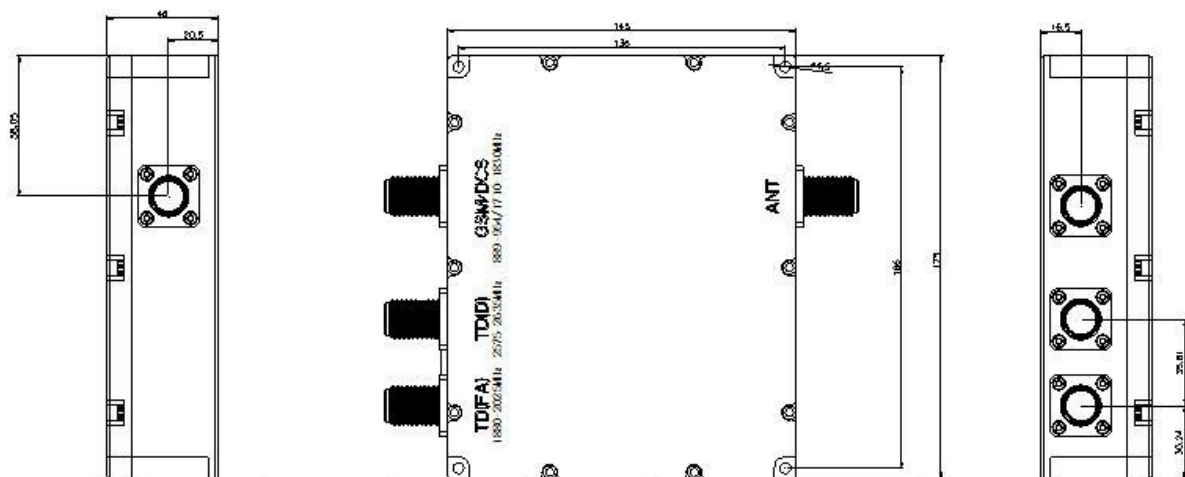
Product picture



Schematic diagram



Outline drawing



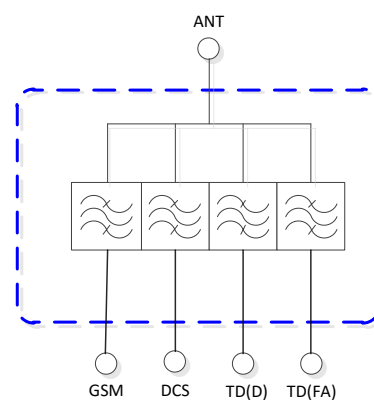
Product Specifications Combiner 889-954/1710-1830/1880-2025/2575-2635MHz

Type No.	98.00803			
Electrical				
Port	Port1	Port2	Port3	Port4
Frequency	889-954	1710-1830	1880-2025	2575-2635
Insertion Loss(dB)	≤0.8dB			
Isolation(dB)	≥80 dB			
VSWR	≤1.3			
Impedance	50 Ω			
Input Power(avg)	≤200 W(avg.)			
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)			
Environmental				
Temperature Range	-20 °C— +55 °C(Operating)			
Operating humidity	5% - 95%			
Barometric pressure				
Application	Indoor/Outdoor(IP65)			
Lightning protection				
MTBF				
Mechanical				
Connectors	5pcs N-Female			
Colors	Black(Powdering)			
Weight	2.0kg			
Dimensions	175*145*46 mm(without connectors)			
Packing	1 pc/box			

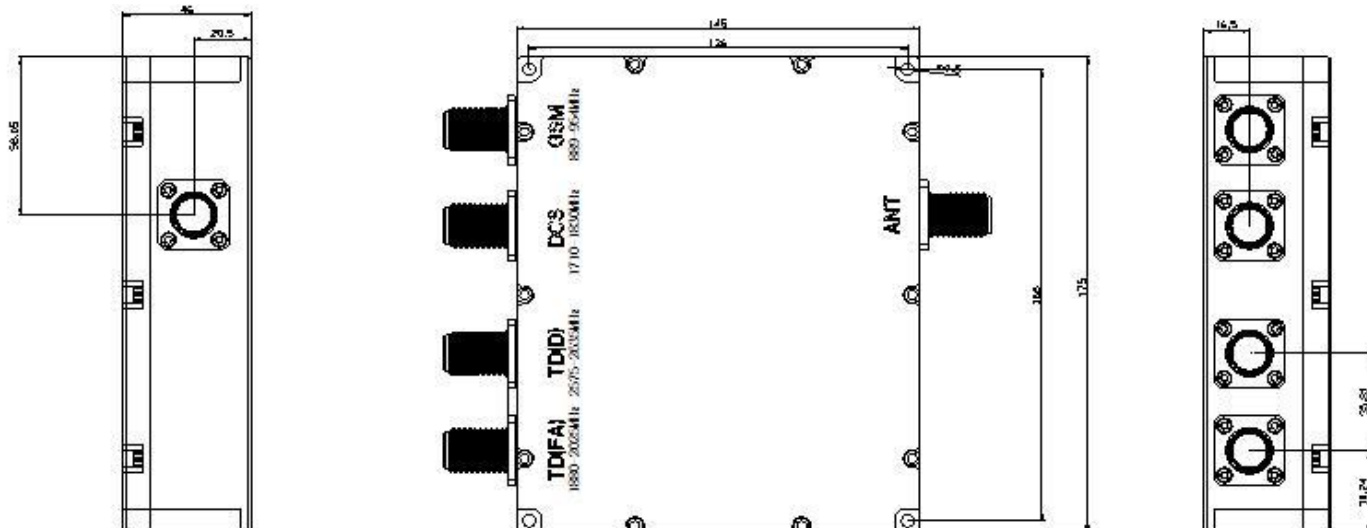
Product picture



Schematic diagram



Outline drawing



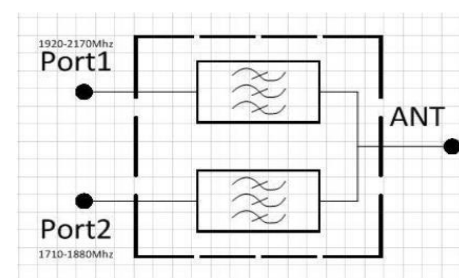
Product Specifications Combiner 1710-1880/1920-2170MHz

Type No.	98.00808	
Electrical		
Port	Port1	Port2
Frequency	1710-1880	1920-2170
Insertion Loss(dB)	≤0.5dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	≤300 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	1.0kg	
Dimensions	171.4*123*45 mm(without connectors)	
Packing	1 pc/box	

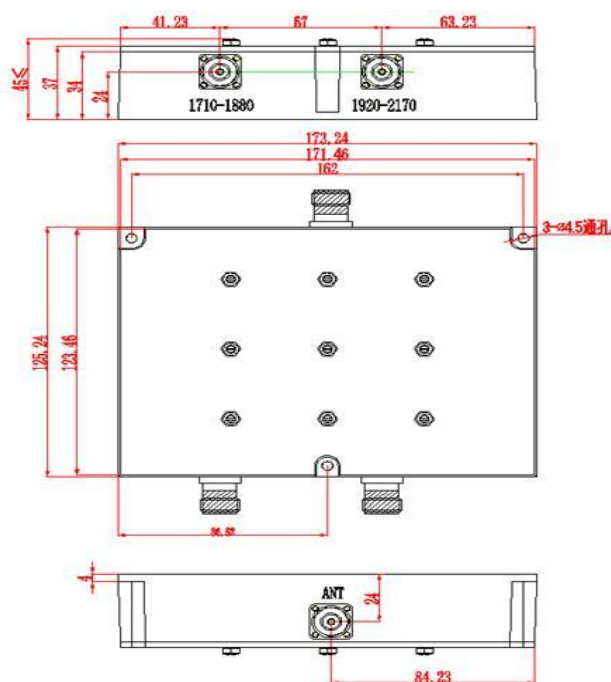
Product picture



Schematic diagram



Outline drawing



Product Specifications

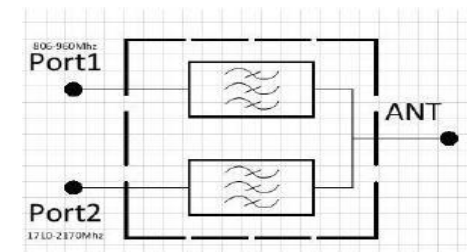
Combiner 806-960/1710-2170MHz

Type No.	98.00810	
Electrical		
Port	Port1	Port2
Frequency	806-960	1710-2170
Insertion Loss(dB)	≤0.5dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	≤300 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	0.96kg	
Dimensions	148*73*30 mm(without connectors)	
Packing	1 pc/box1 pc/box	

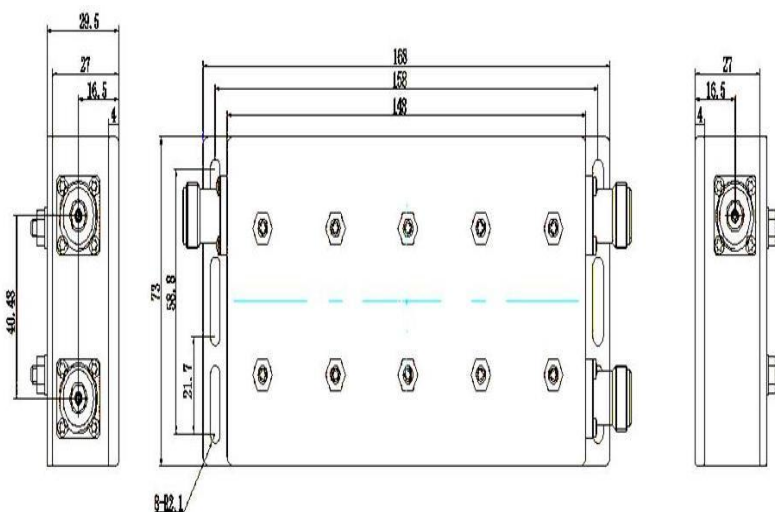
Product picture



Schematic diagram



Outline drawing



Product Specifications

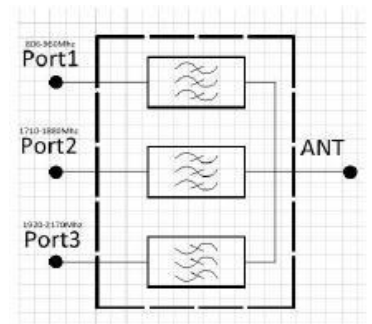
Combiner 800-960/1710-1880/1920-2170MHz

Type No.	98.00809		
Electrical			
Port	Port1	Port2	Port3
Frequency	800-960	1710-1880	1920-2175
Insertion Loss(dB)	≤0.5dB		
Isolation(dB)	≥80 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	300 W(avg.)		
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)		
Environmental			
Temperature Range	-20 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	Indoor		
Lightning protection			
MTBF			
Mechanical			
Connectors	4pcs N-Female		
Colors	Black(Painting)		
Weight	1.2kg		
Dimensions	170*152*35.5 mm(without connectors)		
Packing	1 pc/box		

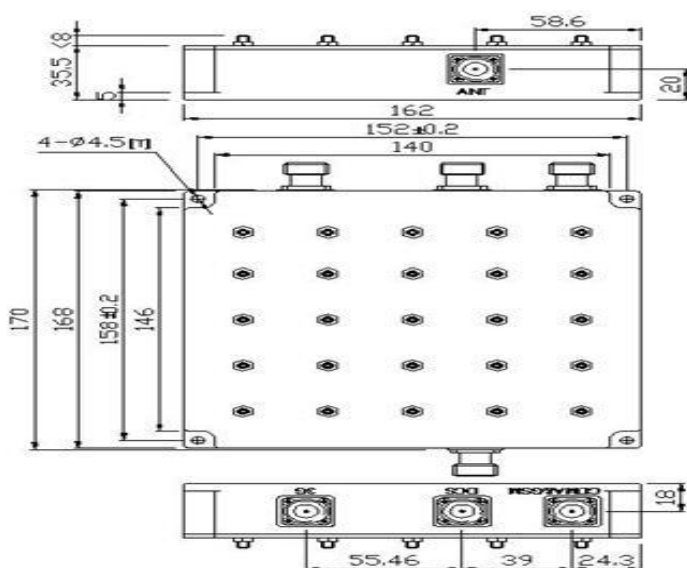
Product picture



Schematic diagram



Outline drawing



Product Specifications

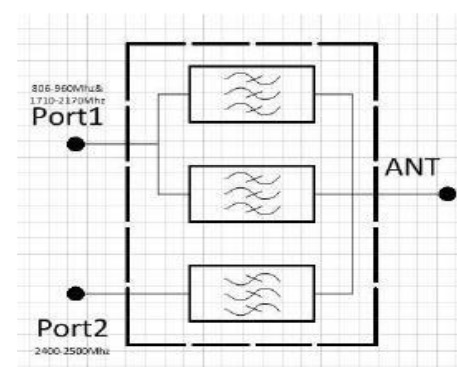
Combiner 800-960&1710-2170/2400-2500MHz

Type No.	98.00811	
Electrical		
Port	Port1	Port2
Frequency	800-960&1710-2170	2400-2500
Insertion Loss(dB)	≤0.5dB	
Isolation(dB)	≥80 dB	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	300 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	3pcs N-Female	
Colors	Black(Painting)	
Weight	0.5kg	
Dimensions	119*104*28 mm(without connectors)	
Packing	1 pcs/box	

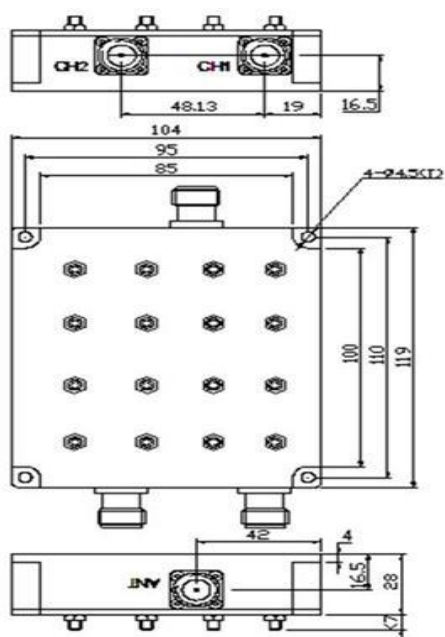
Product picture



Schematic diagram



Outline drawing



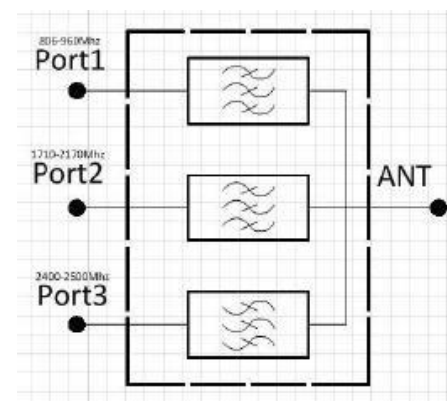
Product Specifications Combiner 800-960/1710-2170/2400-2500MHz

Type No.	98.00399		
Electrical			
Port	Port1	Port2	Port3
Frequency	800-960	1710-1880	2400-2500
Insertion Loss(dB)	≤0.5dB		
Isolation(dB)	≥80 dB		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	300 W(avg.)		
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)		
Environmental			
Temperature Range	-20 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	Indoor		
Lightning protection			
MTBF			
Mechanical			
Connectors	4pcs N-Female		
Colors	Black(Painting)		
Weight	0.8kg		
Dimensions	126.5*111.5*36 mm(without connectors)		
Packing	1 pc/box		

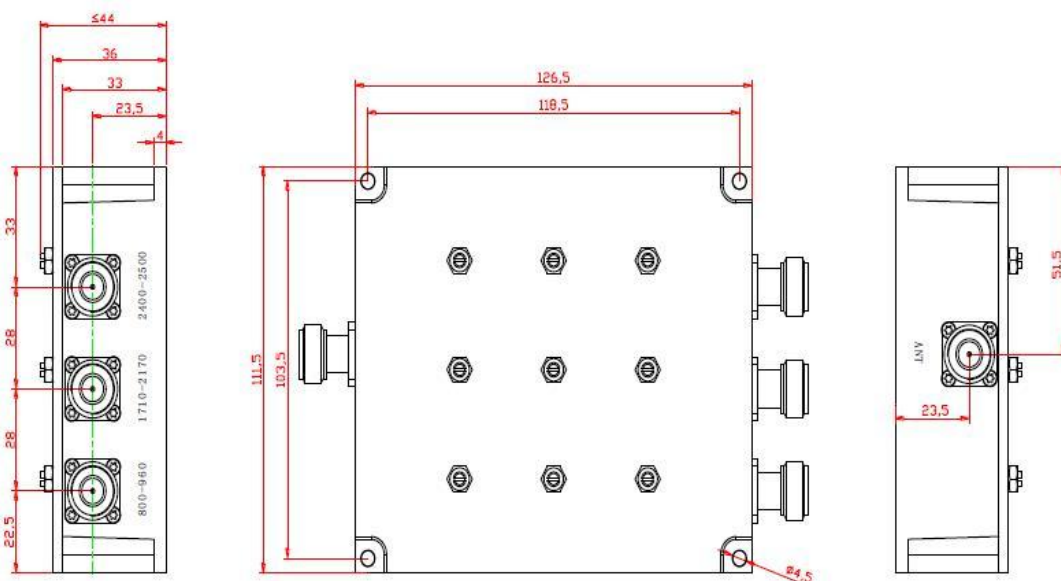
Product picture



Schematic diagram



Outline drawing



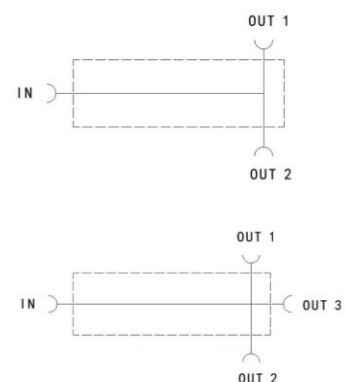
Product Specifications Power Splitter (Square-N/2-way/4-way) 698-2700MHz

Type No.	95.00034	95.00035
Electrical		
Type	Square-N/ 2-way	Square-N/ 3-way
Frequency	698-2700	
Insertion Loss(dB)	≤3.3dB	≤5.2dB
Isolation(dB)		
VSWR	≤1.25	≤1.25
Impedance	50 Ω	
Input Power(avg)	500 W(avg.)	
Intermodulation products	≤-150 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-20 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	Indoor	
Lightning protection		
MTBF		
Mechanical		
Connectors	N-Female	N-Female
Colors	Black(Painting)	
Weight	0.17kg	0.18kg
Dimensions	210*25*25 mm	210*25*25 mm
Packing	1 pc/box	

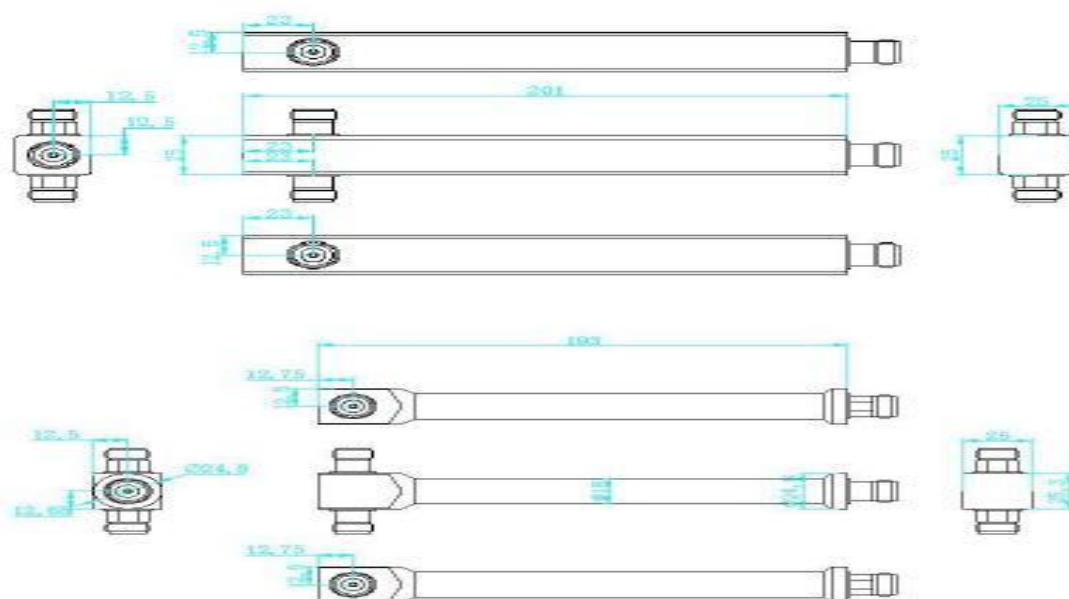
Product picture



Schematic diagram



Outline drawing



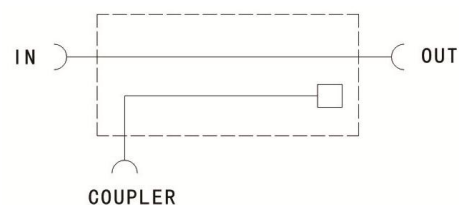
Product Specifications 5dB 6dB,7dB,10dB,15dB 20dB Coupler 698-2700MHz

Type No.	95.00021	95.00022	95.00023	95.00024	95.00025	95.00026
Electrical						
Type	5dB	6dB	7dB	10dB	15dB	20dB
Frequency	698-2700					
Insertion Loss(dB)	≤2.3dB	≤1.76dB	≤1.5dB	≤0.96dB	≤0.44dB	≤0.34dB
Attenuation	±0.8	±0.8	±0.8	±1.0	±1.0	±1.0
Isolation(dB)	≥23 dB	≥24dB	≥25 dB	≥28 dB	≥33 dB	≥38 dB
VSWR	≤1.25					
Impedance	50 Ω					
Input Power(avg)	200 W(avg.)					
Intermodulation products	≤-150 dBc(3 rd order with 2x20W)					
Environmental						
Temperature Range	-20 °C— +55 °C(Operating)					
Operating humidity	5% - 95%					
Barometric pressure						
Application	Indoor					
Lightning protection						
MTBF						
Mechanical						
Connectors	N-Female					
Colors	Black(Painting)					
Weight	0.18kg					
Dimensions	120*40*17 mm					
Packing	1 pc/box					

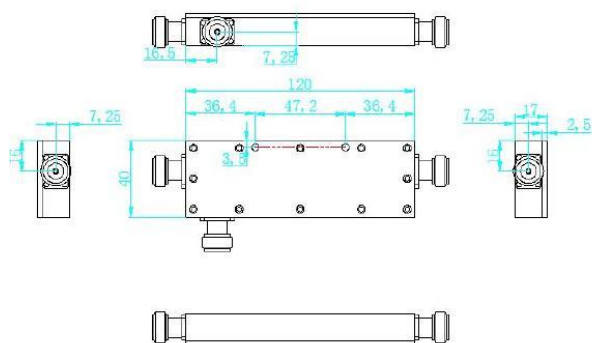
Product picture



Schematic diagram



Outline drawing



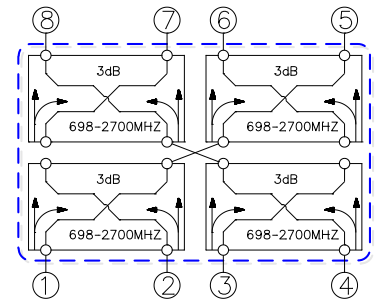
Product Specifications 4*4Hybrid 698-2700MHz

Type No.	95 . 00012
Electrical	
Port	
Frequency	698-2700
Insertion Loss(dB)	≤6.9dB
Isolation(dB)	≥23 dB
VSWR	≤1.25
Impedance	50 Ω
Input Power(avg)	300 W(avg.)
Intermodulation products	≤-160 dBc(3 rd order with 2x20W)
Environmental	
Temperature Range	-45 °C— +75 °C(Operating)
Operating humidity	5% - 95%
Barometric pressure	
Application	IP67
Lightning protection	
MTBF	
Mechanical	
Connectors	7-16 DIN female
Colors	Grey(Powdering)
Weight	
Dimensions	Single unit : 220*104*61.5mm
Packing	1 pc/box

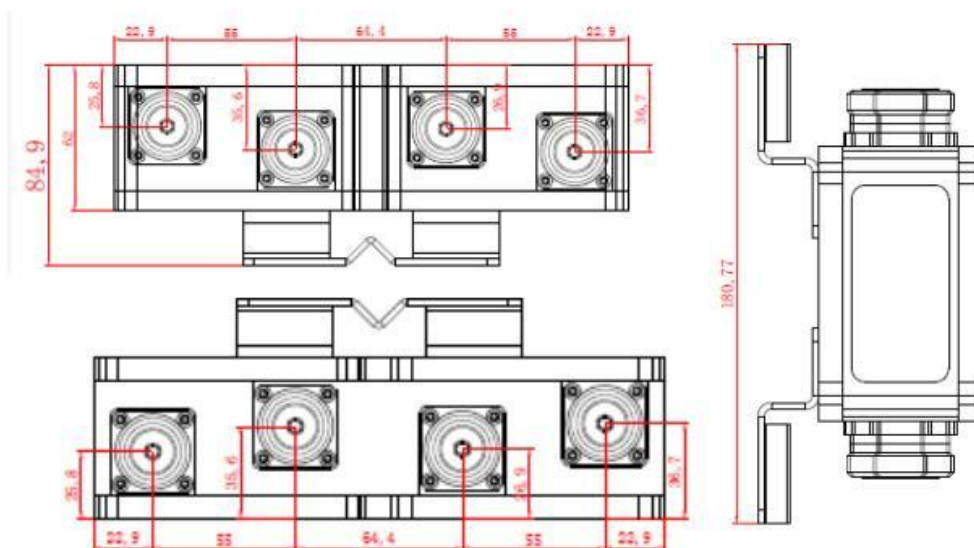
Product picture



Schematic diagram



Outline drawing



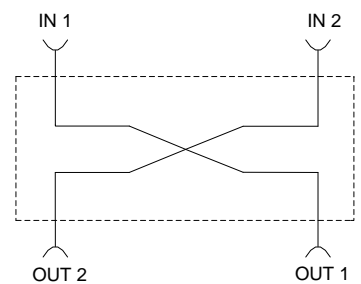
Product Specifications 3 dB Hybrid 698-2700MHz

Type No.	95.00029
Electrical	
Port	
Frequency	698-2700
Insertion Loss(dB)	≤3.5dB
Isolation(dB)	≥23 dB
VSWR	≤1.3
Impedance	50 Ω
Input Power(avg)	200 W(avg.)
Intermodulation products	≤-150 dBc(3 rd order with 2x20W)
Environmental	
Temperature Range	-20 °C— +55 °C(Operating)
Operating humidity	5% - 95%
Barometric pressure	
Application	Indoor
Lightning protection	
MTBF	
Mechanical	
Connectors	N-Female
Colors	Black(Painting)
Weight	
Dimensions	126*81*24.3mm
Packing	1 pc/box

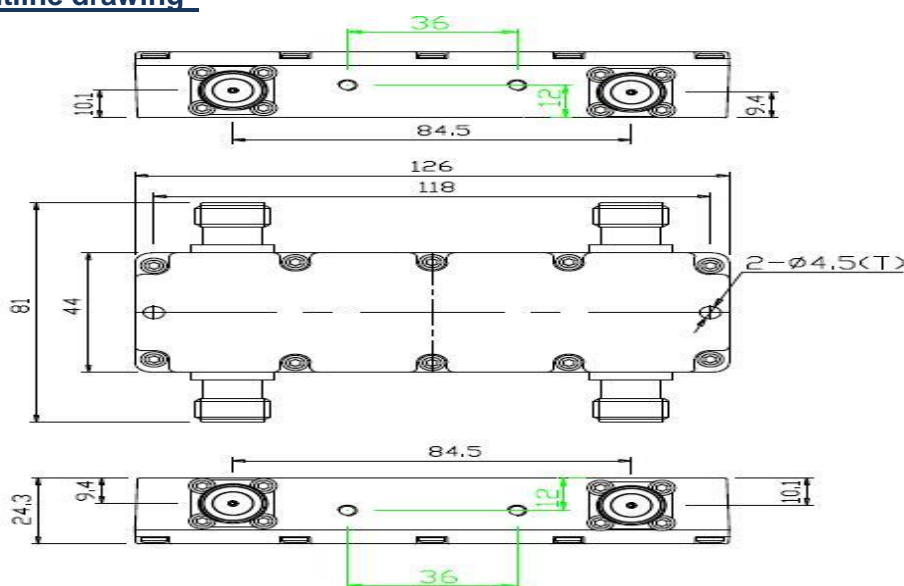
Product picture



Schematic diagram



Outline drawing

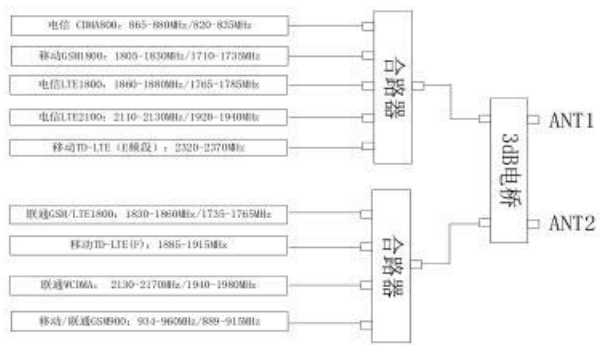


POINT OF INTERFACE

Product Specifications POI 9 inputs and 2 outputs

Type No.	96 . 00058	
Electrical		
Road		Downlink
Frequency	Channel Name GSM900 GSM1800 TD-LTE(F) TD-LTE(E) CDMA800 LTE FDD1.8G LTE FDD2.1G LTE FDD1.8G WCDMA2100	MHz 889-915/934-960 1710-1735/1805-1830 1885-1915 2320-2370 820-835/865-880 1765-1785/1860-1880 1920-1940/2110-2130 1735-1765/1830-1860 1940-1980/2130-2170
Insertion Loss(dB)	≤5.0dB	
Isolation(dB)	≥28 dB(GSM1800/ LTE FDD1.8G) ≥50 dB(GSM1800/LTE FDD1.8G) ≥28 dB(LTE FDD1.8G/LTE FDD1.8G) ≥28 dB(WCDMA2100/ LTE FDD2.1G) ≥50 dB(LTE FDD1.8G/TD-LTE (F)) ≥50 dB(LTE FDD2.1G/TD-LTE (F)) ≥80 dB(Between other ports)	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	200 W(avg.)	
Intermodulation products	≤-155 dBc(3 rd order with 2x20W)	
Environmental		
Temperature Range	-40 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	IP65	
Lightning protection		
MTBF		
Mechanical		
Connectors	2PCS & DIN-Female (ANT);9PCS & N-Female	
Colors		
Weight		
Dimensions		
Packing	1 pc/box	

Schematic diagram



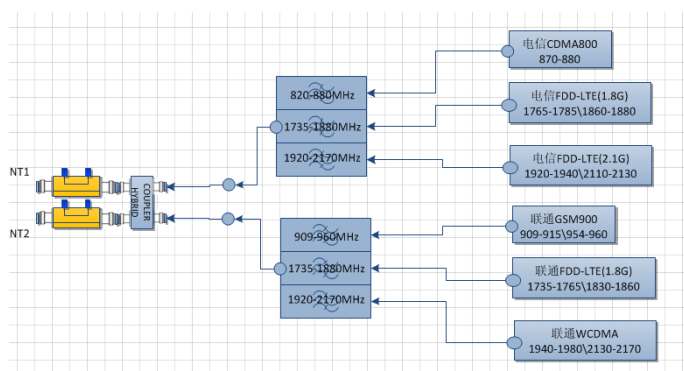
Product picture



Product Specifications POI 6 inputs and 2 outputs

Type No.	96.00063	
Electrical		
Road		Downlink
Frequency	Channel Name CDMA800 LTE FDD 1.8G LTE FDD 2.1G GSM900 GSM/LTE FDD1.8G WCDMA	MHz 820-835/865-880 1765-1785/1860-1880 1920-1940/2110-2130 909-915/954-960 1735-1765/1830-1860 1940-1980/2130-2170
Insertion Loss(dB)	≤5.0dB	
Isolation(dB)	≥25 dB(LTE FDD 1.8G/LTE FDD 1.8G) ≥50 dB(WCDMA2100/LTE FDD 2.1G) ≥80 dB(Between other ports)	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	200 W(avg.)	
Intermodulation products	≤-155 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-40 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	IP65	
Lightning protection		
MTBF		
Mechanical		
Connectors	2PCS & DIN-Female (ANT);6PCS & N-Female(Input,10PCS SMA-Female(test port)	
Colors		
Weight		
Dimensions		
Packing	1 pc/box	

Schematic diagram



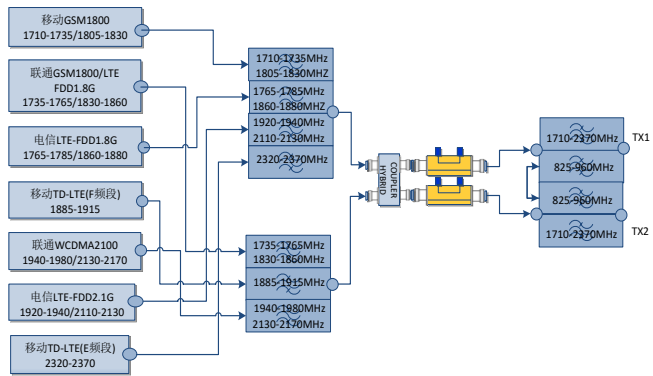
Product picture



Product Specifications POI 7 inputs and 2 outputs

Type No.	96.00064	
Electrical		
Road		Downlink
Frequency	Channel Name GSM1800 TD-LTE(F) TD-LTE(E) LTE FDD1.8G LTE FDD2.1G GSM1800/LTE FDD1.8G WCDMA2100 低频透传：820-960（CDMA800、GSM900）	MHz 1710-1735/1805-1830 1885-1915 2320-2370 1765-1785/1860-1880 1920-1940/2110-2130 1735-1765/1830-1860 1940-1980/2130-2170
Insertion Loss(dB)	≤1.0 ANT1-1NT2 ≤5.5 Input-ANT	
Isolation(dB)	≥28 dB(GSM1800/LTE FDD1.8G) ≥50 dB(GSM1800/LTE FDD1.8G) ≥28 dB(LTE FDD1.8G/LTE FDD1.8G) ≥28dB(WCDMA2100/ LTE FDD2.1G) ≥50 dB(LTE FDD1.8G/TD-LTE（F）) ≥50 dB(LTE FDD2.1G/TD-LTE（F）) ≥80 dB(Between other ports)	
VSWR	(ANT1↔ANT2) ≤1.0dB Others≤1.5dB	
Impedance	50 Ω	
Input Power(avg)	200 W(avg.)	
Intermodulation products	≤-155 dBc(3 rd order with 2x20W)	
Environmental		
Temperature Range	-40 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	IP65	
Lightning protection		
MTBF		
Mechanical		
Connectors	2PCS & DIN-Female (ANT);7PCS & N-Female(Input,11PCS SMA-Female(test port)	
Colors		
Weight		
Dimensions		
Packing	1 pc/box	

Schematic diagram



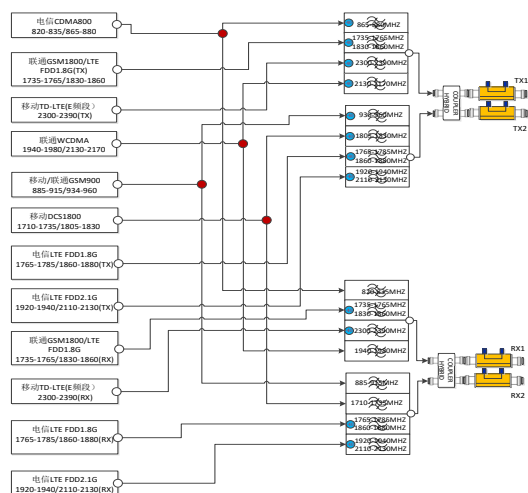
Product picture



Product Specifications POI 8 inputs and 2 outputs

Type No.	96.00065		
Electrical			
Road		Downlink	Uplink
Frequency	Channel Name CDMA800 GSM900 GSM1800 WCDMA GSM/LTE 1800-TX LTE1800-TX LTE2100-TX TD-LTE(E)-TX GSM/LTE 1800-RX LTE1800-RX LTE2100-RX TD-LTE(E)-RX	MHz 870-880 930-960 1805-1830 2130-2170 1735-1765/1830-1860 1765-1785/1860-1880 1920-1940/2110-2130 2320-2370 1735-1765/1830-1860 1765-1785/1860-1880 1920-1940/2110-2130 2320-2370	MHz 825-835 885-915 1710-1735 1940-1980 1735-1765/1830-1860 1765-1785/1860-1880 1920-1940/2110-2130 2320-2370 1735-1765/1830-1860 1765-1785/1860-1880 1920-1940/2110-2130 2320-2370
Insertion Loss(dB)	≤6.0dB		
Isolation(dB)	≥25 dB(GSM1800&GSM/LTE 1800) ≥25 dB(GSM/LTE 1800<E1800) ≥25 dB(WCDMA<E 2100) ≥50 dB(GSM1800<E 1800) ≥80 dB(Between other ports)		
VSWR	≤1.3		
Impedance	50 Ω		
Input Power(avg)	200 W(avg.)		
Intermodulation products	≤-155 dBc(3 rd order with 2x20W)		
Environmental			
Temperature Range	-40 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	IP65		
Lightning protection			
MTBF			
Mechanical			
Connectors	4PCS & DIN-Female (ANT);12PCS & N-Female(Input,		
Colors			
Weight			
Dimensions			
Packing	1 pc/box		

Schematic diagram



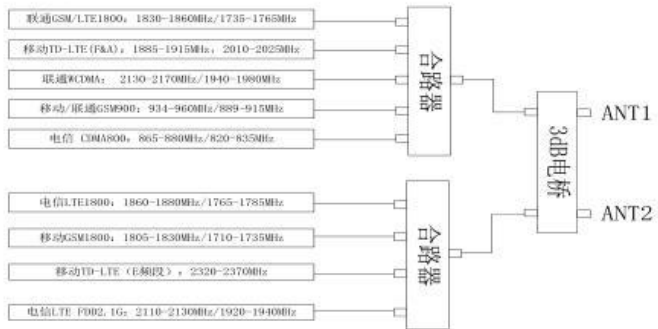
Product picture



Product Specifications POI 9 inputs and 2 outputs Integration Version

Type No.	96.00066	
Electrical		
Road		Downlink
Frequency	Channel Name GSM900 GSM1800 TD-LTE(F&A) TD-LTE(E) CDMA800 LTE FDD1.8G LTE FDD2.1G LTE FDD1.8G/ GSM1800 WCDMA2100	MHz 889-915/934-960 1710-1735/1805-1830 1885-1915,2010~2025 2320-2370 820-835/865-880 1765-1785/1860-1880 1920-1940/2110-2130 1735-1765/1830-1860 1940-1980/2130-2170
Insertion Loss(dB)	≤5.0	
Isolation(dB)	≥28 dB(Between GSM1800& GSM1800/LTE FDD1.8G) ≥50 dB(Between GSM1800<E FDD1.8G) ≥28 dB(Between GSM1800/LTE FDD1.8G& LTE FDD1.8G) ≥28 dB(Between WCDMA 2100& LTE FDD2.1G ≥50 dB(Between LTE FDD 1.8G&TD-LTE(F) ≥50 dB(Between LTE FDD 2.1G&TD-LTE(F) ≥80 dB(Between other ports)	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	200 W(avg.)	
Intermodulation products	≤-155 dBc(3 rd order with 2×20W)	
Environmental		
Temperature Range	-40 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	IP67	
Lightning protection		
MTBF		
Mechanical		
Connectors	2PCS & DIN-Female (ANT);9PCS & N-Female(Input,13PCS SMA-Female(test port)	
Colors		
Weight		
Dimensions		
Packing	1 pc/box	

Schematic diagram



Product picture



Product Specifications POI 12 inputs and 2 outputs

Type No.	96.00068	
Electrical		
Road		Downlink
Frequency	Channel Name	MHz
	GSM900	889-915/934-960
	GSM1800	1710-1735/1805-1830
	TD-LTE(F)	1885-1915
	TD-SCDMA(A)	2010-2025
	TD-LTE(E)	2320-2370
	CDMA800	820-835/865-880
	LTE FDD1.8G	1765-1785/1860-1880
	LTE FDD2.1G	1920-1940/2110-2130
	TD-LTE2.3G	2370-2390
	GSM1800/LTE FDD1.8G	1735-1765/1830-1860
	WCDMA2100	1940-1980/2130-2170
	TD-LTE2.3G	2300-2320
Insertion Loss(dB)	≤ 5.0 dB	
Isolation(dB)	≥28 dB(Between GSM1800& GSM1800/LTE FDD1.8G) ≥50 dB(Between GSM1800<E FDD1.8G) ≥28 dB(Between GSM1800/LTE FDD1.8G& LTE FDD1.8G) ≥28 dB(Between WCDMA 2100& LTE FDD2.1G) ≥28 dB(Between TD-LTE2.3G) ≥50 dB(Between LTE FDD 1.8G&TD-LTE(F) ≥50 dB(Between LTE FDD 2.1G&TD-LTE(F) ≥80 dB(Between other ports)	
VSWR	≤1.3	
Impedance	50 Ω	
Input Power(avg)	200 W(avg.)	
Intermodulation products	≤-155 dBc(3 rd order with 2x20W)	
Environmental		
Temperature Range	-40 °C— +55 °C(Operating)	
Operating humidity	5% - 95%	
Barometric pressure		
Application	IP65	
Lightning protection		
MTBF		
Mechanical		
Connectors	2PCS DIN-Female (ANT);12PCS N-Female(inputs);16 PCS SMA-Female(test port)	
Colors		
Weight		
Dimensions		
Packing	1 pc/box	

Schematic diagram



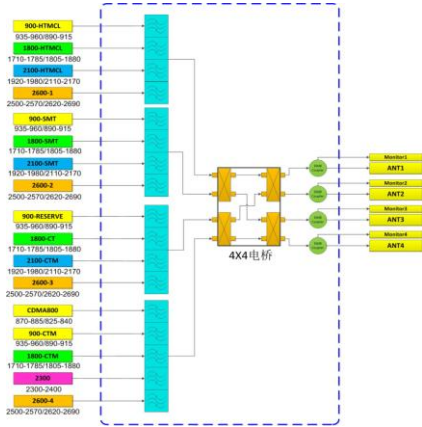
Product picture



Product Specifications POI 17 inputs and 4 outputs

Type No.	96.00071		
Electrical			
Road		Downlink	Uplink
Frequency	Channel Name	MHz	MHz
	CDMA	870-885	825-840
	900(1)	935-960	890-915
	900(2)	935-960	890-915
	900(3)	935-960	890-915
	900(4)	935-960	890-915
	1800(1)	1805-1880	1710-1785
	1800(2)	1805-1880	1710-1785
	1800(3)	1805-1880	1710-1785
	1800(4)	1805-1880	1710-1785
	2100(1)	2110-2170	1920-1980
	2100(2)	2110-2170	1920-1980
	2100(3)	2110-2170	1920-1980
	2300	2300-2400	2300-2400
	2600(1)	2620-2690	2500-2570
	2600(2)	2620-2690	2500-2570
	2600(3)	2620-2690	2500-2570
	2600(4)	2620-2690	2500-2570
Insertion Loss(dB)	$\leq 7.5\text{dB}$ ($\leq 8.0\text{dB}$ for CDMA and 900M)		
Isolation(dB)	$\geq 25\text{dB}$ between the same bands $\geq 80\text{dB}$ 900M TX @ CDMA RX $\geq 80\text{dB}$ CDMA TX @ 900 RX $\geq 80\text{dB}$ between other different bands		
Ripple	$\leq 1.5\text{dB}$ (Max $\leq 2.5\text{dB}$ for CDMA and 900M)		
VSWR	≤ 1.3		
Impedance	50 Ω		
Input Power(avg)	200 W(avg.)		
Intermodulation products	$\leq -155\text{ dBc}$ (3 rd order with 2x20W)		
Environmental			
Temperature Range	-40 °C— +55 °C(Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	IP65		
Lightning protection			
MTBF			
Mechanical			
Connectors	21PCS & DIN-Female (ANT);4PCS & N-Female(Input		
Colors			
Weight			
Dimensions			
Packing	1 pc/box		

Schematic diagram



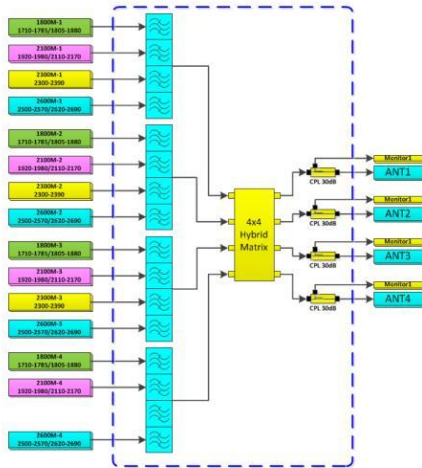
Product picture



Product Specifications POI 15 inputs and 4 outputs

Type No.	96.00072		
Electrical			
Road		Downlink	Uplink
Frequency	Channel Name	MHz	MHz
	1800(1)	1710-1785	1805-1880
	1800(2)	1710-1785	1805-1880
	1800(3)	1710-1785	1805-1880
	1800(4)	1710-1785	1805-1880
	2100(1)	1920-1980	2110-2170
	2100(2)	1920-1980	2110-2170
	2100(3)	1920-1980	2110-2170
	2100(4)	1920-1980	2110-2170
	2300(1)	2300-2390	2300-2390
	2300(2)	2300-2390	2300-2390
	2300(3)	2300-2390	2300-2390
	2600(1)	2500-2570	2620-2690
	2600(2)	2500-2570	2620-2690
	2600(3)	2500-2570	2620-2690
	2600(4)	2500-2570	2620-2690
Insertion Loss(dB)	$\leq 7.8\text{dB}$		
Isolation(dB)	$\geq 25\text{dB}$ between the same bands $\geq 80\text{dB}$ between other different bands		
Ripple	$\leq 1.5\text{dB}$		
VSWR	≤ 1.3		
Impedance	50 Ω		
Input Power(avg)	200 W(avg.)		
Intermodulation products	$\leq -155\text{ dBc}(3^{\text{rd}}$ order with 2x20W)		
Environmental			
Temperature Range	$-40\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$ (Operating)		
Operating humidity	5% - 95%		
Barometric pressure			
Application	IP65		
Lightning protection			
MTBF			
Mechanical			
Connectors	2PCS & DIN-Female (ANT);9PCS & N-Female(Input,13PCS SMA-Female(test port)		
Colors			
Weight			
Dimensions			
Packing	1 pc/box		

Schematic diagram



Product picture

