Passive Components

4X4 Combiner, 819-2700MHz, N Female

UBCS' combiner combines RF signals at a certain impedance level. Our products are designed for use in-building or indoor and can be used to provide wireless coverage in base stations, buildings, subways, tunnels, etc.

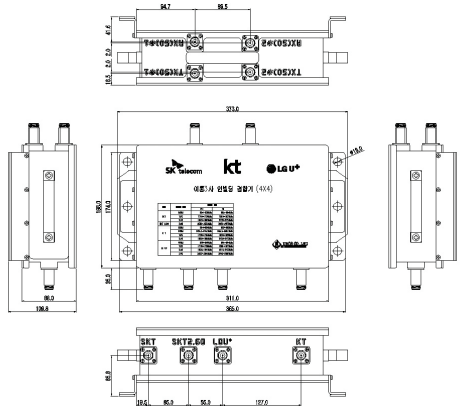
FEATURES / BENEFITS

1. Robust mechanical design
2. Outstanding system characteristics
3. Suitable for in-building (DAS) applications
4. Very low insertion loss

APPLICATIONS

1. 5G Networks
2. Wireless Infrastructure
3. Antenna Systems
4. In-buidling Systems (DAS)
5. Indoor

BLOCK DIAGRAM



SPECIFICATIONS

Impedance		50Ω			
Frequency Range Up To	SK Telecom (Pass Band)	800M		1.8G	2.1G
		824~839MHz 869~884MHz		1715~1735MHz 1810~1830MHz	1940~1960MHz 2130~2150MHz
	KT (Pass Band)	800M	900M	1.8G	2.1G
		814~824MHz 859~869MHz	904.3~914.3MHz 949.3~959.3MHz	1735~1765MHz 1830~1859MHz	1960~1980MHz 2150~2170MHz
	LGU+ (Pass Band)	800M	1.8G	2.1G	2.6G
		839~849MHz 884~894MHz	1770~1780MHz 1861~1870MHz	1920~1940MHz 2110~2130MHz	2520~2540MHz 2640~2660MHz
	SK Telecom 2.6G (Pass Band)	2.6G			
		2500~2520MHz, 2540~2550MHz, 2620~2640MHz, 2660~2670MHz			
Insertion Loss		4.8dB Max. (KT 1.8G TX , LGU+ 1.8G TX 5.8dB Max. KT 1.8G RX , LGU+ 1.8G RX 5.3dB Max.)			
Return Loss		-18.0dB Max. (Input Port)			
Isolation		All other path	22dB Max. / KT 1.8G TX ↔ LGU+ 1.8G TX 20dB Max.		
		LGU+→KT port	48dB Min.@884~894MHz		
			45dB min.@904.3~914.3MHz		
			30dB min.@2110~2130MHz		
		SKT→LGU+ port	50dB min.@1810~1830MHz		
		SKT→KT port	50dB min.@904.3~914.3MHz		
PIMD		"5th -160dBc Min. 7th -170dBc Min @ 43dBm x 2Tone SKT 2.6G Port 3rd (-150dBc), 5th Test			
Max Input Power		SKT port : 240W Max. (avg. power) KT port : 320W Max. (avg. power) LGU+ port : 320W Max. (avg. power) SKT 2.6G port : 80W Max. (avg. power)			
Connector Type		N(F) Type			
Operating Temperature		-30℃ ~ +60℃			
Waterproof (Protection Class)		IP67			
Humidity		95%			

RF Connectivity - Wireless Infrastructure

Passive Components

4X2 Combiner, 100W 3350-3900MHz, N Female

819~2550MHz, 3350~3500MHz, 3500~3600MHz, 3600~3900MHz

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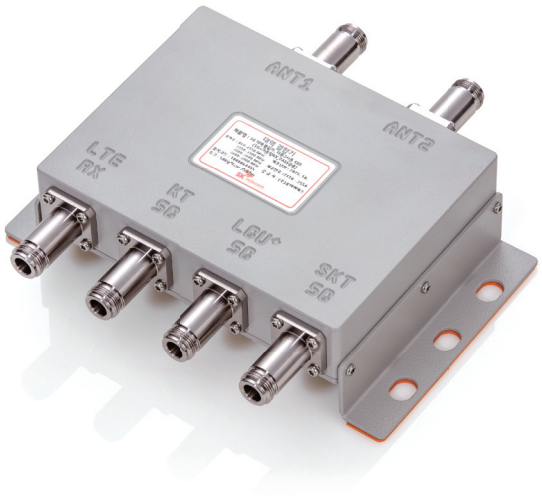
FEATURES / BENEFITS

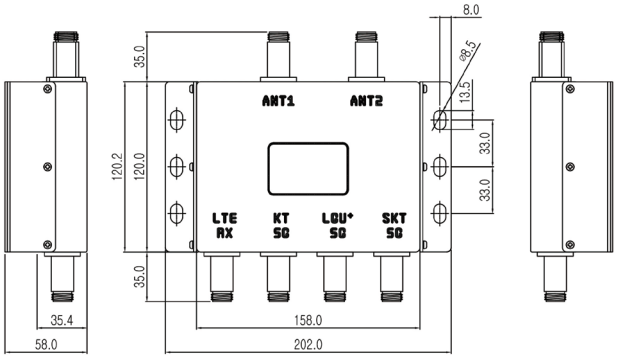
1. Robust mechanical design
2. Outstanding system characteristics
3. Suitable for in-building (DAS) applications
4. Very low insertion loss



APPLICATIONS

1. 5G Networks
2. Wireless Infrastructure
3. Antenna Systems
4. In-buidling Systems (DAS)
5. Indoor

BLOCK DIAGRAM



SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	P1	P2	P3	P4, P5
	KT	SK Telecom	LG U+	LTE(Rx)
	3500~3600MHz	3600~3900MHz	3350~3500MHz	819~2550MHz
Insertion Loss	P1	P2	P3	P4
	-4.5dB Min.	-4.5dB Min.	-4.5dB Min.	-0.4dB Min.
Return Loss	-18.0dB Max. (Input Port)			
Isolation	-20dB Max. (P1↔P2, P1↔P3, P4↔P2,P3)			
	-30dB Max. (P2↔P3, P4↔P1)			
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone			
Connector Type	N Type (F)			
Input Power Rating Per Port	P1	P2	P3	P4, P5
	100W Max.	100W Max.	100W Max.	10W Max.
Operating Temperature	-30 ℃ ~ +60 ℃			
Waterproof (Protection Class)	IP67			
Humidity	95%			

Passive Components

3X2 Combiner, 100W 3350-3900MHz, N / 4.3-10 Female

3350~3500MHz, 3500~3600MHz, 3600~3900MHz

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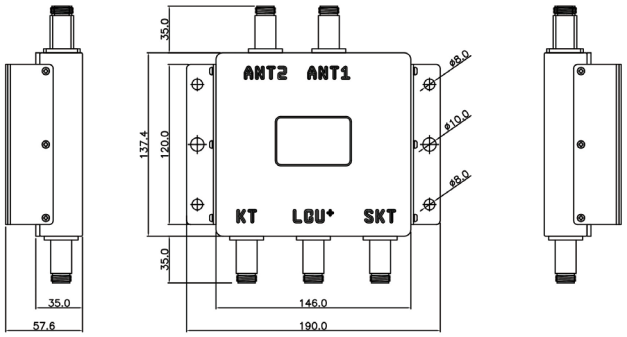
FEATURES / BENEFITS

1. Robust mechanical design
2. Outstanding system characteristics
3. Suitable for in-building (DAS) applications
4. Very low insertion loss

APPLICATIONS

1. 5G Networks
2. Wireless Infrastructure
3. Antenna Systems
4. In-buidling Systems (DAS)
5. Indoor

BLOCK DIAGRAM / LINE UP



SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	P1	P2	P3	-
	KT	SK Telecom	LG U+	
	3500~3600MHz	3600~3900MHz	3350~3500MHz	
Insertion Loss	P1	P2	P3	
	-4.2dB Min.	-4.2dB Min.	-4.2dB Min.	
Return Loss	-18.0dB Max. (Input Port)			
Isolation	-20dB Max. (P1↔P2, P1↔P3)			
	-30dB Max. (P2↔P3)			
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone			
Connector Type	N Type (F) / 4.3-10 (F)			
Input Power Rating Per Port	P1	P2	P3	-
	100W Max.	100W Max.	100W Max.	
Operating Temperature	-30 ℃ ~ +60 ℃			
Waterproof (Protection Class)	IP67			
Humidity	95%			

RF Connectivity - Wireless Infrastructure

Passive Components

3X1 Combiner, 100W 3350~3900, N Female

3350~3500MHz, 3500~3600MHz, 3600~3900MHz

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FEATURES / BENEFITS

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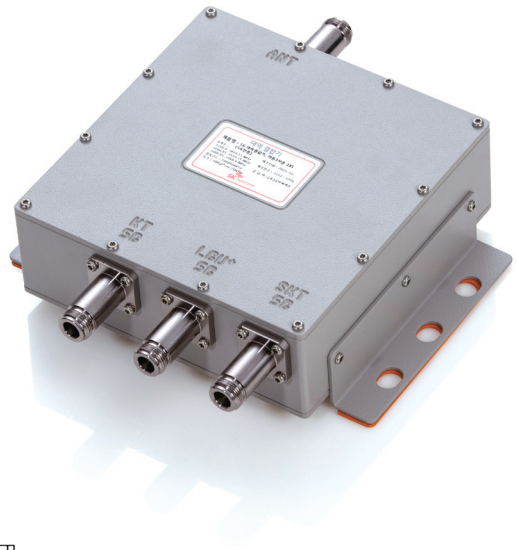
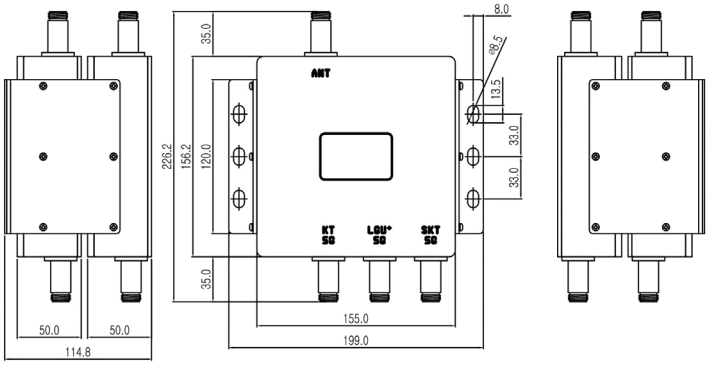
2. Outstanding system characteristics
3. Suitable for in-building (DAS) applications
4. Very low insertion loss



APPLICATIONS

1. 5G Networks
2. Wireless Infrastructure
3. Antenna Systems
4. In-buidling Systems (DAS)
5. Indoor

BLOCK DIAGRAM / LINE UP



SPECIFICATIONS

Impedance	50Ω			
Frequency Range Up To	P1	P2	P3	-
	KT	SK Telecom	LG U+	
	3500~3600MHz	3600~3900MHz	3350~3500MHz	
Insertion Loss	P1	P2	P3	
	-0.7dB Min. (Band AVG.)			
Return Loss	-18.0dB Max. (Input Port)			
Isolation	-20dB Max. (P1↔P2, P1↔P3)			
	-30dB Max. (P2↔P3)			
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone			
Connector Type	N Type (F)			
Input Power Rating Per Port	P1	P2	P3	-
	100W Max.	100W Max.	100W Max.	
Operating Temperature	-30 ℃ ~ +60 ℃			
Waterproof (Protection Class)	IP67			
Humidity	95%			

2X2 Hybrid Combiner, 500W 819-3900MHz, N Female

819~960MHz, 1710~1870MHz, 1885~2170MHz, 2300~2700MHz, 3350~3900MHz

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FEATURES / BENEFITS

1. Robust mechanical design
2. Outstanding system characteristics
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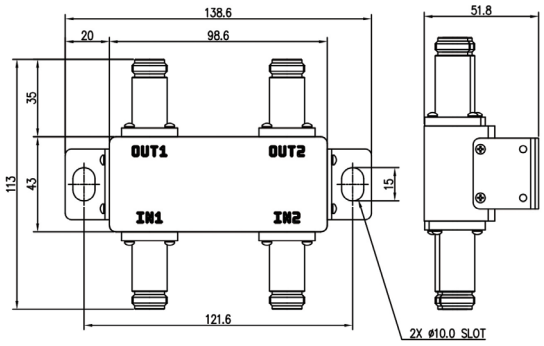
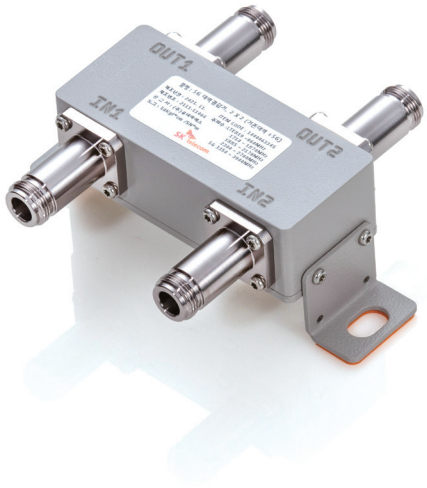
APPLICATIONS

1. 5G Networks
2. Wireless Infrastructure
3. Antenna Systems
4. In-buidling Systems (DAS)
5. Indoor

BLOCK DIAGRAM





SPECIFICATIONS

Impedance	50Ω	
Frequency Range Up To	LTE	5G
	~ 2700MHz	3350~3900MHz
Insertion Loss	-3.8dB Min.	
Return Loss	-18.0dB Max. (Input Port)	
Isolation	-22dB Max.	
PIMD	3rd -155dBc Max. @ 43dBm(CW) 2 Tone	
Connector Type	N Type (F)	
Input Power Rating Per Port	500W Max.	
Operating Temperature	-30 ℃ ~ +60 ℃	
Waterproof (Protection Class)	IP67	
Humidity	95%	