



Stronger Signals - Smarter Networks





About us

The company is one of the leaders in the supply of telecommunications equipment and material for wireless system



We are undertaking custom-made designs & products as per the client's request



Continuous introduction of new technologies



Extensive experience in implementing projects in the field of telecommunication systems












Established cooperation with leaders of the international market

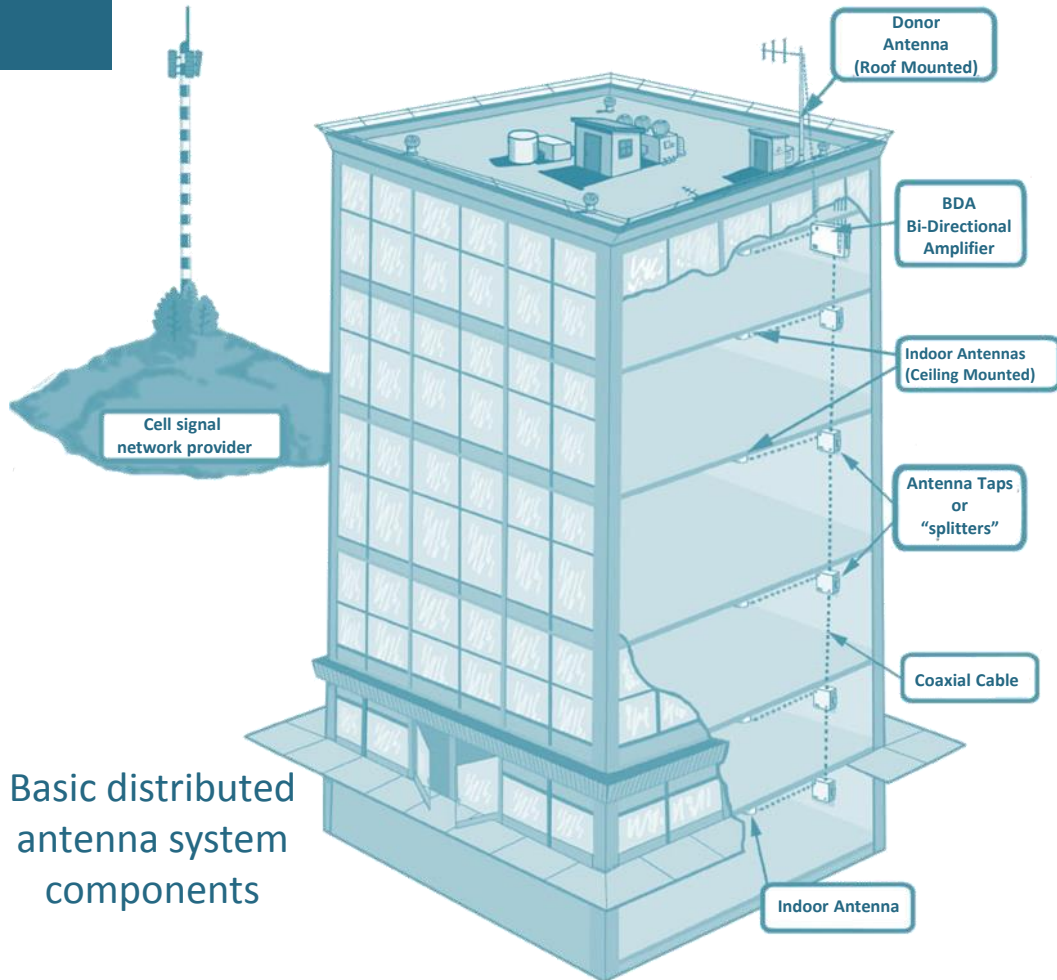


Certification according to domestic and international standards



Signal Coverage Project

		
Office building	Apartment building	Residential area
		
Mall	Hospital	School
		
Hotel	Metro train	Tunnel

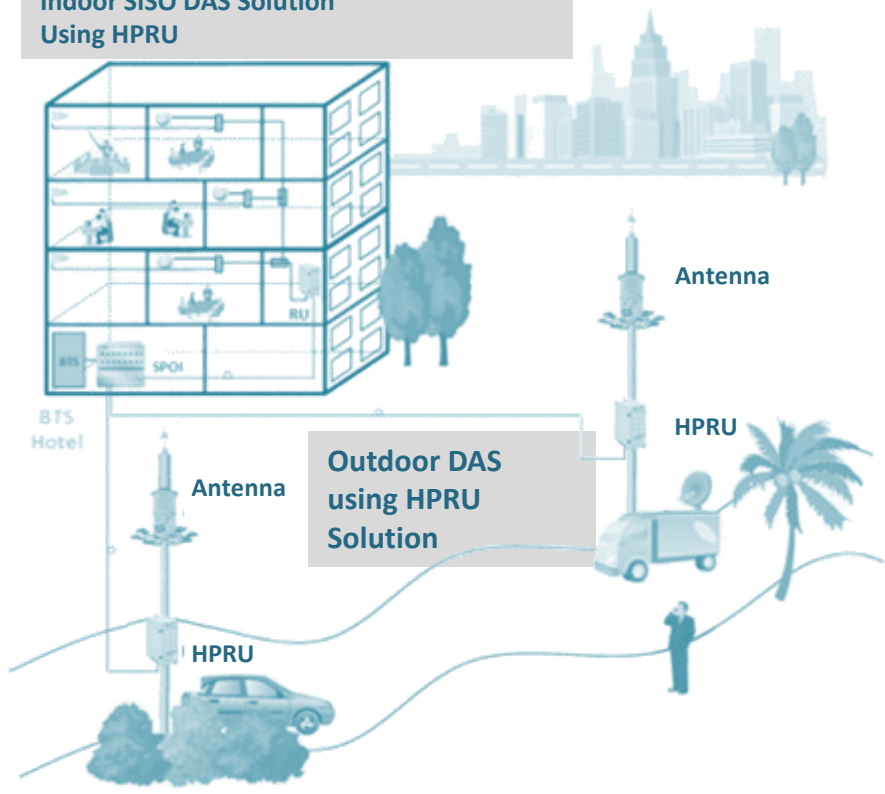


Basic distributed antenna system components

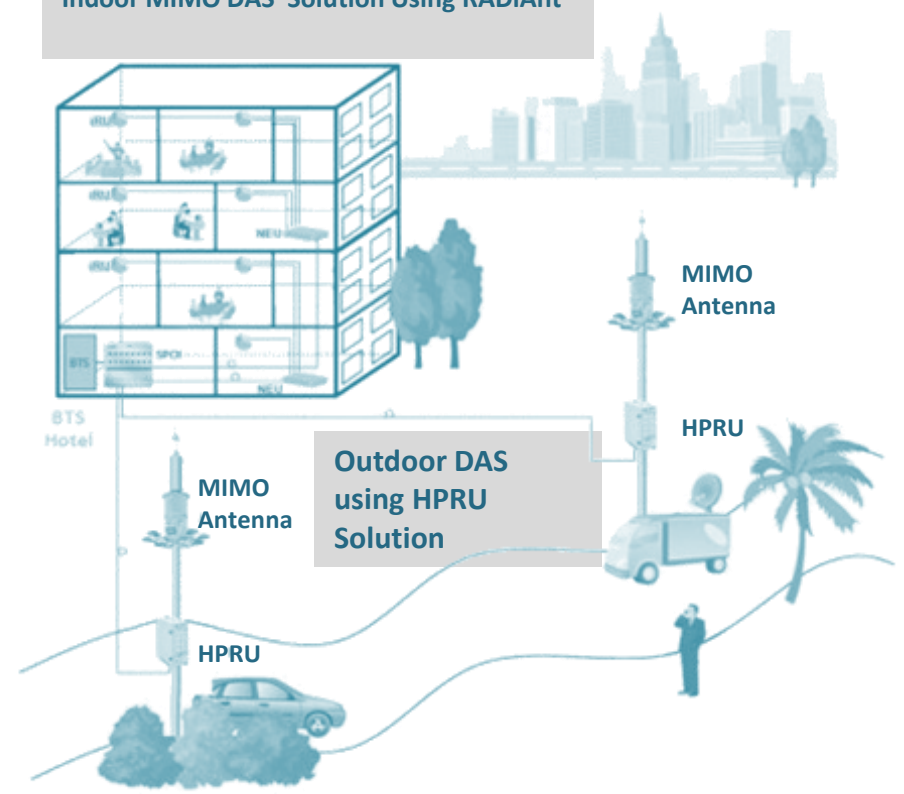


Signal Coverage Project

Indoor SISO DAS Solution Using HPRU

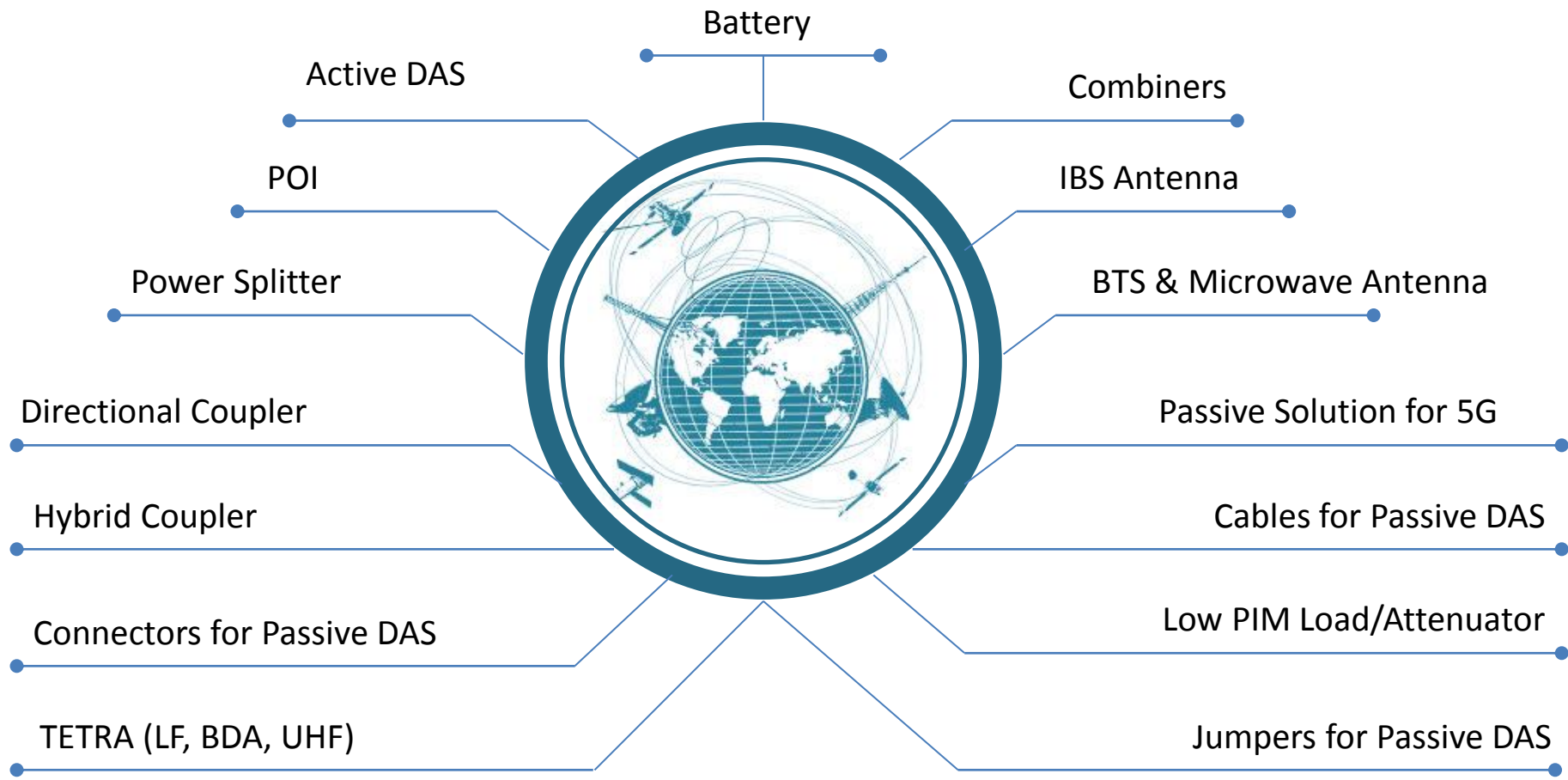


Indoor MIMO DAS Solution Using RADiAnt



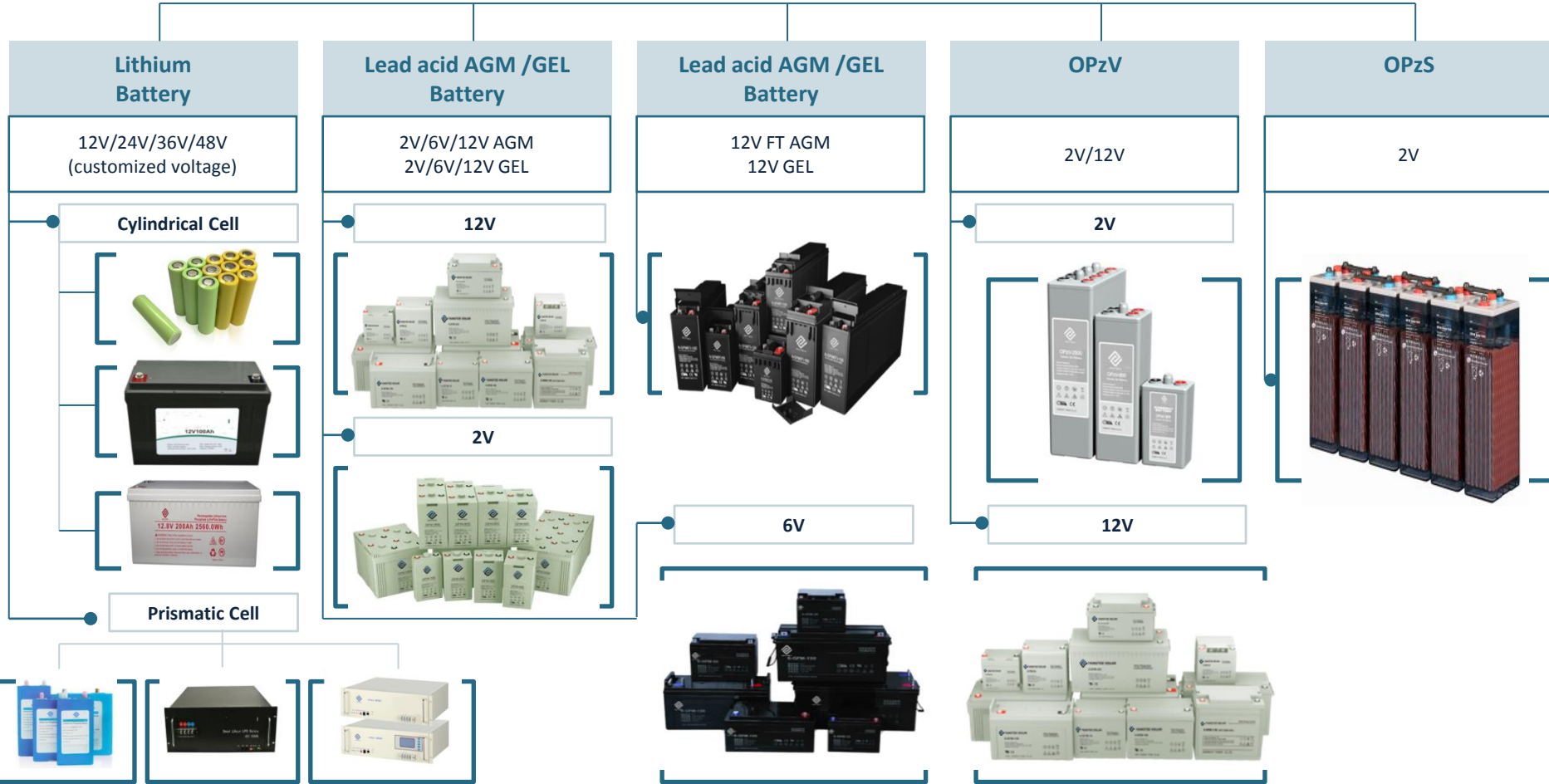


Products





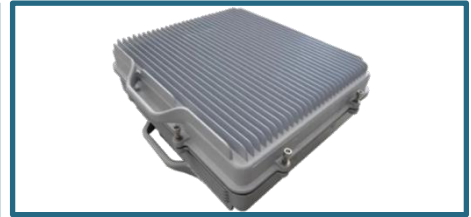
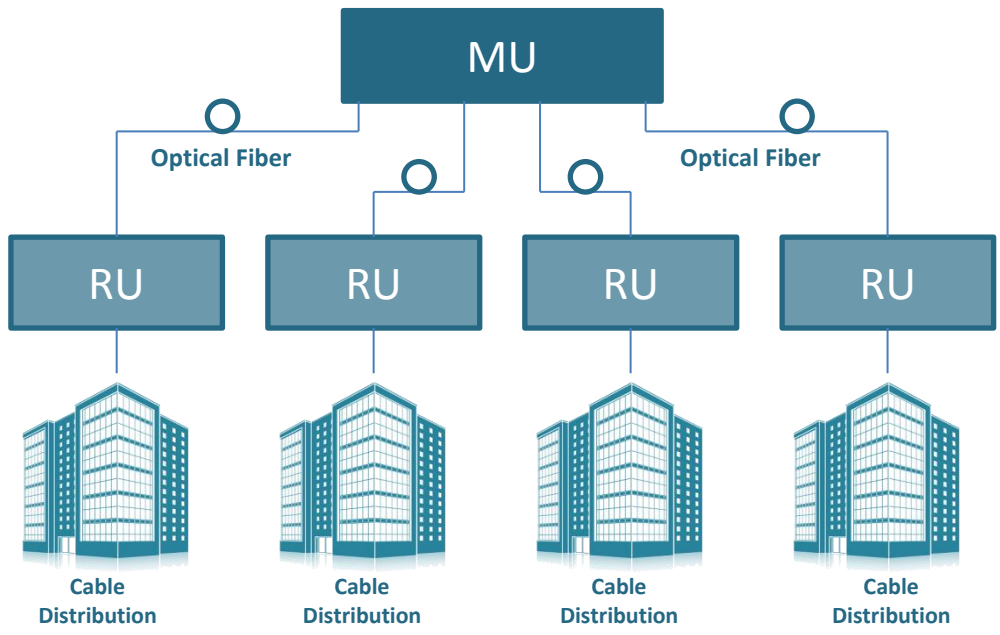
Battery





Active DAS

Products - Digital DAS Solution / Analog DAS Solution / LTE Wireless Repeater/ Amplifier/



Multi-operator, Multi-sector, Multi-band Active and Hybrid DAS

- Supports Full Band SISO or MIMO
- End to End Fiber Connectivity
- Dynamic Capacity Routing





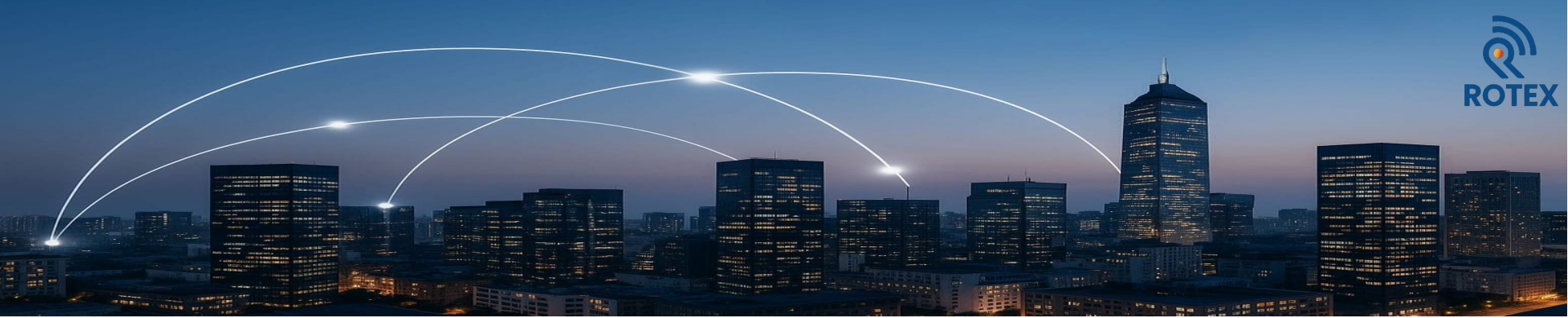
POI (2G/3G/4G & 5G)

POI is used for multi-input and multi-output scenarios. Compared to the distributed components, POI can realize the multi-system combination with low insertion loss, high isolation, low PIM interference and high reliability.

Features

- ✓ Customized frequency band and port numbers
- ✓ Support N, 7/16 Din and 4.3-10 interface
- ✓ Excellent PIM performance
- ✓ Higher power handling





DAS (2G/3G/4G & 5G)

Directional Coupler

Specification	
P/N	RX-DC-727-300-XXNF
	RX-DC-727-300-XXDF
	RX-DC-727-300-XXMF
Frequency band	698~2700MHz & 698~4000MHz
Coupling value	5dB, 6dB, 7dB, 10dB, 15dB, 20dB, 30dB
VSWR	≤1.25
Directivity	≥20dB
PIM	≤-155dBc@2×20W
Connector type	4.3-10 / Din / N female
Power handling	300W





Components for Active & Passive DAS (2G/3G/4G & 5G)

Hybrid Coupler

Specification	
P/N	RX-HC-727-300-2:2NF
	RX-HC-727-300-2:2DF
	RX-HC-727-300-2:2MF
Frequency band	698~2700MHz & 698~4000MHz
Coupling value	3.0±0.8dB
VSWR	≤1.25
Directivity	≥22dB
PIM	≤-155dBc@2×20W
Connector type	4.3-10 / Din / N female
Power handling	300W





Components for Active & Passive DAS (2G/3G/4G & 5G)

Low PIM Load/Attenuator

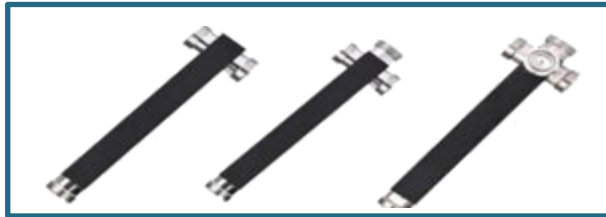
Specification	
P/N	RX-DL-4GHz-XXW-NF/RX-AT-4GHz-XXw/XXdB-NF
Frequency band	698~2700MHz & 698~4000MHz
VSWR	≤1.25
PIM	≤-160dBc@2×20W (For T3series)
	≤-155dBc@2×20W (For T2series)
	≤-150dBc@2×20W (For T1series)
	≤-120dBc@2×20W (For Tseries)
Connector type	4.3-10 / Din / N
Power handling	20W ~ 200 W





Passive Solution for 5G

Power Splitter



Specification			
P/N	RX-PS-740-300-02NF	RX-PS-740-300-02NF	RX-PS-740-300-04NF
	RX-PS-740-300-02DF	RX-PS-740-300-03DF	RX-PS-740-300-04DF
	RX-PS-740-300-02MF	RX-PS-740-300-03MF	RX-PS-740-300-04MF
Frequency band	698~4000MHz	698~4000MHz	698~4000MHz
Number of output ports	2	3	4
VSWR	≤1.25	≤1.3	≤1.3
PIM	≤-161dBc@2×20W (For 4.3-10 interface)		
	≤-155dBc@2×20W (For Din & N interface)		
Connector type	4.3-10 / Din / N female		
Power handling	300W		



Components for Passive DAS (2G/3G/4G & 5G)

IBS Antenna



Specification	
P/N	RX-OCA-727-3/5NF, RX-PPA-727-6.5/8NF, RX-MCA-727-3/5NF, RX-MPA-727-6.5/8NF
Frequency band	698~2700MHz
Gain	Omni: 3.5dBi typical for lower band 6.0dBi typical for higher band Panel: 5.0dBi typical for lower band 8.5dBi typical for higher band
VSWR	≤1.8
3rd PIM	≤-153dBc@2×2W
Isolation for MIMO ports	20 dB
Connector type	N/ 4.3-10 female
Power handling	50W



Components for Passive DAS (2G/3G/4G & 5G)

IBS Antenna

Specification	
P/N	RX-LPDA-727-10/11-NF
Frequency band	698~2700MHz
Gain	806-960 MHz: 10 dBi 806-960 MHz: 10 dBi 1710-2500 MHz: 11 dBi 1710-2500 MHz: 11 dBi
VSWR	≤1.5
3rd PIM	≤-153dBc@2×20W
Connector type	N/ 4.3-10 female
Power handling	100W





Components for Passive DAS (2G/3G/4G & 5G)

IBS Antenna

Indoor Wide band Omni Antenna 4x4 MIMO				
P/N		RX-4P-MCA-727-2.5/5NF		
Frequency band		MHz	698~2700	1710-2700
Gain		dBi	3±0.5	4±1
Polarization			Linear×4	
Beam width (Typical)	Horizontal	deg	OMNI (360)	
	Vertical		90	85
VSWR			≤1.8	≤1.5
Isolation		dB	>17	>20
PIM, 3rd Order, 2 x 20 W		dBc	≤-150	
Power handling		W	50	
Impedance		ohm	50	





Passive Solution for 5G

IBS Antenna

Specification	
P/N	RX-OCA-740-3/5NF
	RX-PPA-740-6.5/8NF
	RX-MCA-740-3/5NF
	RX-MPA-740-6.5/8NF
Frequency band	698~4000MHz
Gain	Omni: 3.5dBi typical for lower band 6.0dBi typical for higher band. Panel: 5.0dBi typical for lower band 8.5dBi typical for higher band
VSWR	≤1.8 typical
Isolation for MIMO ports	20 dB typical
3rd PIM	≤-153dBc@2×20W
Connector type	N/ 4.3-10 female
Power handling	50W





Antennas

(2G/3G/4G & 5G)

BTS Antenna 1

Electrical Specifications			
P/N		RX698-2690XXX6i6i6i360A	
Frequency band		MHZ	698~960 1710-2690
Gain		dBi	6 6
Polarization			$\pm 45^\circ$ $2 \times \pm 45^\circ$
Beam width (Typical)	Horizontal	deg	360
	Vertical		35 32
VSWR			≤ 1.5
Isolation		dB	≥ 25
PIM, 3rd Order, 2 x 20 W		dBc	≤ -150
Input Power per Port, maximum		W	150
Impedance		ohm	50
Lightning Protection			Direct Ground

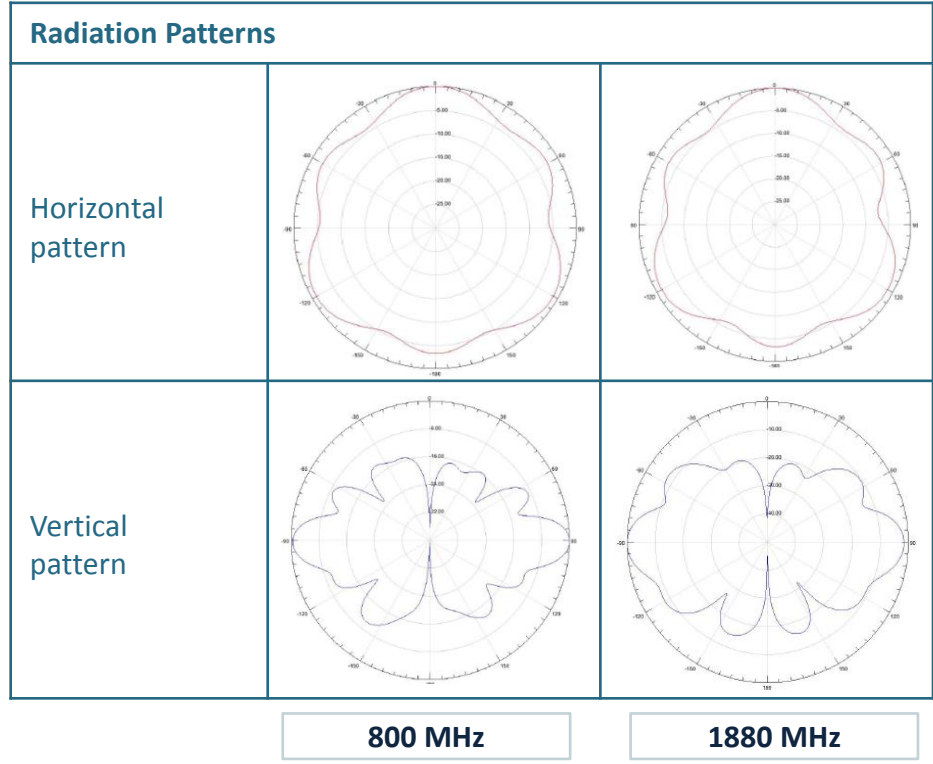




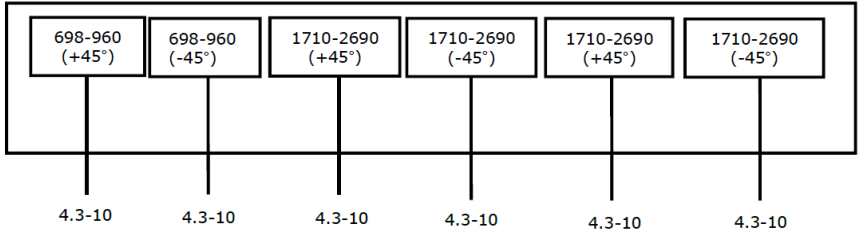
Antennas

(2G/3G/4G & 5G)

BTS Antenna 1



Mechanical Specifications		
Connector Type		6×4.3-10 Female
Antenna Dimensions (Height x Diameter)	mm	800x355
Weight	kg	12
Radome Material and Color		Fiberglass
Survival Wind Speed	km/hr	200
Operational Temperature	oC	-40 to +60
Operational Humidity	%	< 90





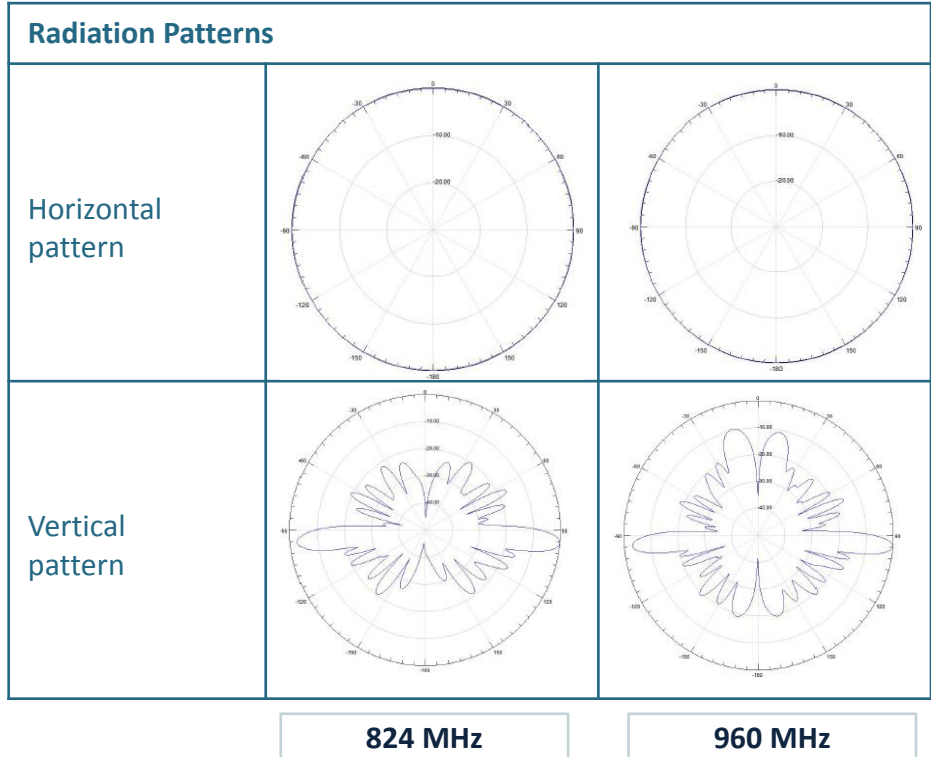
BTS Antenna 2

Electrical Specifications			
P/N		RX806-960V11i360C	
Frequency band		MHz	806-960
Gain		dBi	11.0±1.0
Polarization		Vertical	
Beam width (Typical)	Horizontal	deg	360
	Vertical		7±1
VSWR			≤1.5:1
Isolation		dB	≥25
PIM, 3rd Order, 2 x 20 W		dBc	-150
Maximum Power		W	250





BTS Antenna 2



Mechanical Specifications		
Dimensions, H x Dia	mm	3000x52
Weight, without Mounting Kit	kg	4,5
Radom Material and Color		Fiberglass, gray
Connector Type and Location		7/16 DIN Female, Bottom
Mounting hardware	mm	Φ40~Φ80
Maximum Wind Velocity	Km/h	200
Operational Temperature	oC	-40 до +60
Operational Humidity	%	< 90



BTS Antenna 3

Electrical Specifications					
P/N		RX1710-2690_3400-3800XXXXXXXX11_11i65_65A			
Frequency band		MHz	1710-2170	2200-2690	3400-3800
Gain		dBi	11.0	11.3	11.0
Polarization			4× ± 45		4× ± 45
Beam width (Typical)	Horizontal	deg	70	60	68
	Vertical		37	26	30
Front-to-Back Ratio		dB	≥20		≥20
Port Isolation		dB	≥25		≥25
VSWR			≤1.5		≤1.5
PIM, 3rd Order, 2 x 20 W		dBc	-150		n/a
Maximum Power		W	150		
Impedance		ohm	50		
Lightning Protection			Direct Ground		

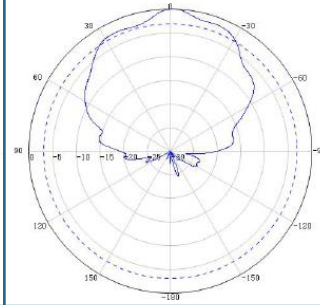
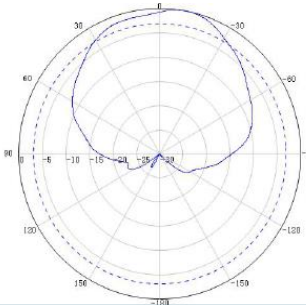




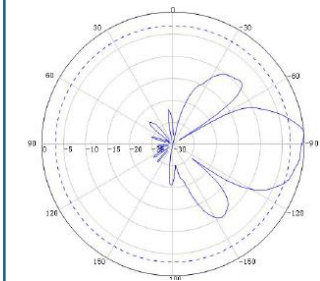
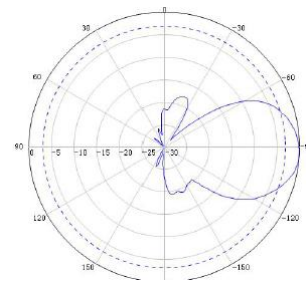
BTS Antenna 3

Radiation Patterns

Horizontal pattern



Vertical pattern



1800 MHz

3500 MHz

Mechanical Specifications

Dimensions, (H x Wx D)	mm	500x418x140
Weight, without Mounting Kit	kg	7.8
Weight, with Mounting Kit	kg	13.1
Radom Material and Color		UV Resistant PVC, Light Grey, RAL7035
Connector Type and Location		16×4.3-10 Female, Botton
Survial Wind Speed	Km/h	200
Operational Temperature	oC	-40 до +60
Operational Humidity	%	< 90
Shipping Dimensions, (HxWxD)	mm	840x480x210
Shipping Weight	kg	14.5



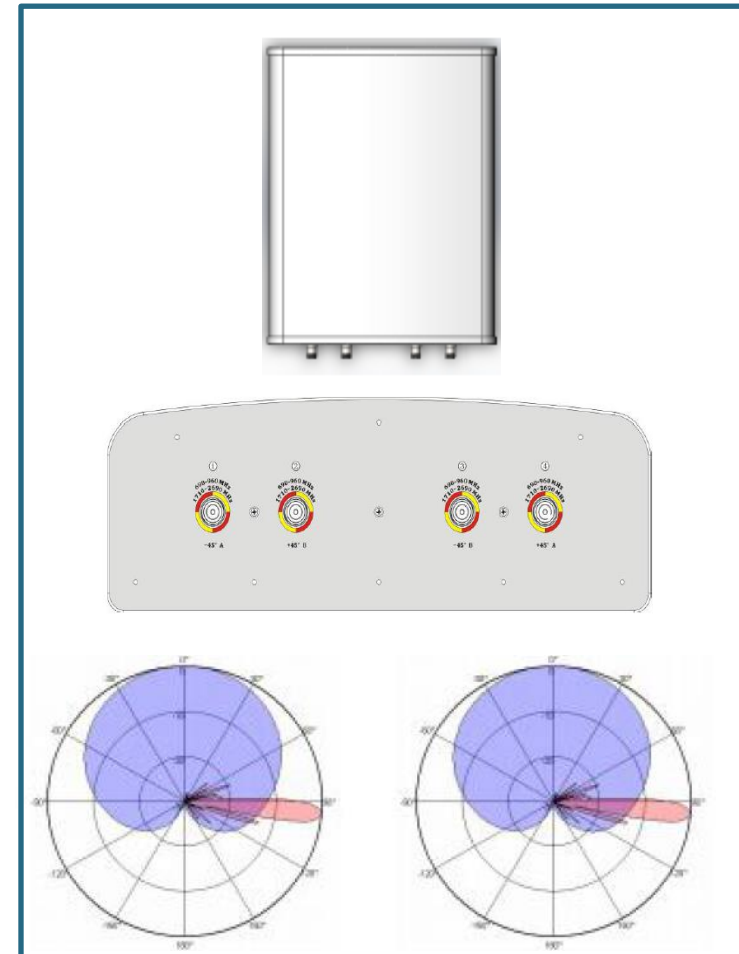
BTS Antenna 4

Outdoor directional broadband base station antenna							
Electrical Specifications							
P/N	RX-CF030R1214Q06C01						
Frequency band	MHz	698-806	806-960	1710-1880	1920-2170	2300-2400	2600-2700
Gain	dBi	12±0.5	12±0.5	14.5±0.5	14.5±0.5	14.5±0.5	14.5±0.5
Polarization		± 45°					
Horizontal 3dB lobe width		35±5	33±5	32±5	31±5	30±5	28±5
Vertical 3dB lobe width		35±5	33±5	32±5	31±5	30±5	28±5
Front to back ratio	dB	≥25					
Cross polarization ratio	dB	≥15(±60°≥10)					
Electric downtilt	(°)	6°					
Sidelobe suppression (first sidelobe above mainlobe)	dB	≥12					
Standing wave ratio		<1.5					
Isolation: within the system	dB	25±1					
Port impedance	ohm	50					
Maximum input power per port	W	100					
Third-order intermodulation IM3 (2x43 dBc)		≤ - 150					
Lightning Protection		DC ground					



BTS Antenna 4

Mechanical Specifications		
Connector type		4*4.3-10-Female
Connector position		Bottom
Dimensions (L×W×H)	mm	550*450*145
Packing size	mm	680*542*237
Antenna weight	kg	10
Packed weight	kg	11
Wind load (N, at 150km/h) front/side/back	N	166/46/186
Radome material		PVC
Wind speed	Km/h	216
Radome color		Gray
Mechanical tilt	(°)	0~8
Working temperature	(°C)	-40~+60
Diameter of pole	mm	Φ50~Φ89





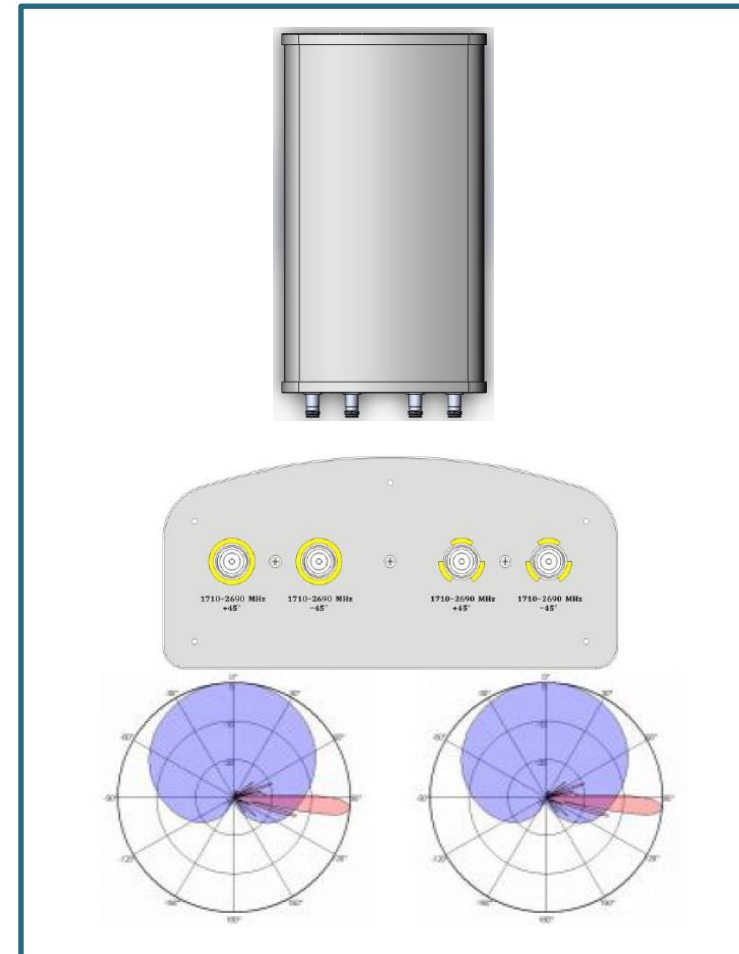
BTS Antenna 5

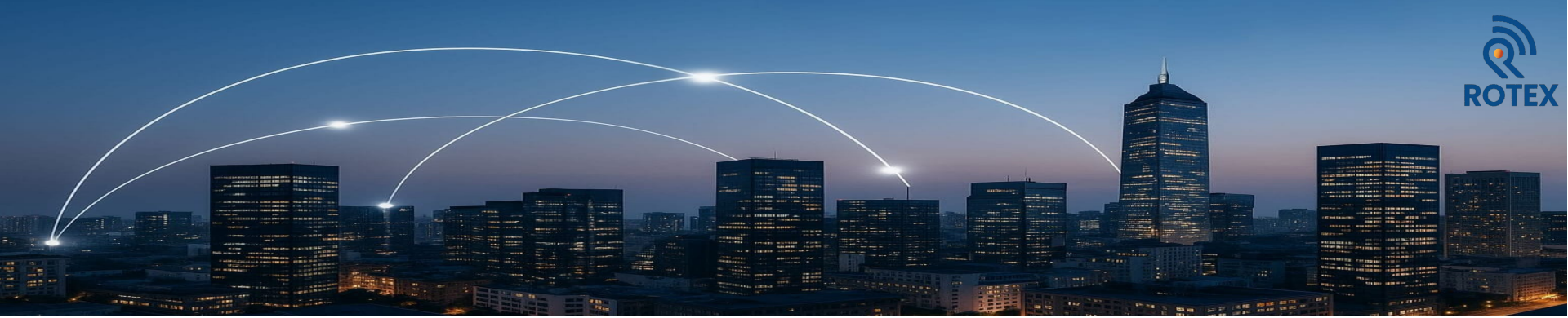
Outdoor Directional Plate Antenna					
Electrical Specifications					
P/N	RX-ED065R0015Q06M01				
Frequency band	MHz	1710-1880	1920-2170	2300-2400	2600-2700
Gain	dBi	14.3±0.5	14.3±0.5	14.7±0.8	14.3±0.8
Polarization		± 45°			
Horizontal 3dB lobe width		65±3	65±3	65±3	65±3
Vertical 3dB lobe width		15±3	15±3	14±3	14±3
Front to back ratio	dB	≥30			
Cross polarization ratio	dB	≥15(±60°≥10)			
Electric downtilt	(°)	6°			
Sidelobe suppression (first sidelobe above mainlobe)	dB	-15			
Standing wave ratio		<1.5			
Isolation: within the system	dB	≥25			
Port impedance	ohm	50			
Maximum input power per port	W	100			
Third-order intermodulation IM3 (2x43 dBc)		≤ - 150			
Lightning Protection		DC ground			



BTS Antenna 5

Mechanical Specifications		
Connector type		4 x 7/16 DIN Female
Connector position		Bottom
Dimensions (L×W×H)	mm	495*280*125
Packing size	mm	635*345*220
Antenna weight	kg	
Packed weight	kg	
Wind load (N, at 150km/h) front/side/back	N	166/46/186
Radome material		PVC
Wind speed	Km/h	216
Radome color		Gray
Mechanical tilt	(°)	0~8
Working temperature	(°C)	-40~+60
Diameter of pole	mm	Φ50~Φ89





Cables

P/N	Description
RX-FC-12	Cable Feeder type 1/2"
RX-FC-78	Cable Feeder type 7/8"
RX-FC-114	1 1/4" Feeder Cable
RX-FC-158	Cable Feeder 1 5/8"
RX-50FC-12	1/2" Coaxial 2Gh 50 Ohm
RX-50FC-78	7/8" Coaxial 2Gh 50 Ohm





Jumpers

Jumper 3m N male straight to N female straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-3M
Jumper 1m N male right angled to N male straight, 1/2" superflex cable	RX-JC1/2NM-NMR-SF-1M
Jumper 2m N male right angled to N male straight, 1/2" superflex cable	RX-JC1/2NM-NMR-SF-2M
Jumper 3m N male right angled to N male straight, 1/2" superflex cable	RX-JC1/2NM-NMR-SF-3M
Jumper 0.2m N male straight to N male straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-0.2M
Jumper 0.5m N male straight to N male straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-0.5M
Jumper 1m N male straight to N male straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-1M
Jumper 2m N male straight to N male straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-2M
Jumper 3m N male straight to N male straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-3M
Jumper 5m N male straight to N male straight, 1/2" superflex cable	RX-JC1/2NM-NM-SF-5M
Jumper 1m N male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2NM-DM-SF-1M
Jumper 2m N male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2NM-DM-SF-2M
Jumper 3m N male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2NM-DM-SF-3M
Jumper 5m N male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2NM-DM-SF-5M
Jumper 2m N male straight to DIN male right angle, 1/2" superflex cable	RX-JC1/2NM-DMR-SF-2M
Jumper 1m DIN male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2DM-DM-SF-1M
Jumper 2m DIN male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2DM-DM-SF-2M
Jumper 3m DIN male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2DM-DM-SF-3M
Jumper 5m DIN male straight to DIN male straight, 1/2" superflex cable	RX-JC1/2DM-DM-SF-5M





Connectors

DIN Type	Din Female connector for 1/2" flexible RF cable	RX-CN-DF-CF 12
	Din Female connector for 1/2" Super flexible RF cable	RX-CN-DF-CF12S
	Din Female connector for 1-1/4" flexible RF cable	RX-CN-DF-CF 114
	Din Female connector for 1-5/8" flexible RF cable	RX-CN-DF-CF 158
	Din Female Right Angle for 1/2" flexible RF cable	RX-CN-DFR-CF12
	Din Female Right Angle for 1/2" Super flexible RF cable	RX-CN-DFR-CF12S
	Din Male connector for 1/2" flexible RF cable	RX-CN-DM-CF12
	Din Male connector for 1/2" Super flexible RF cable	RX-CN-DM-CF12S
	Din Female connector for 7/8" coaxial RF cable	RX-CN-DF-CF78
	Din Male connector for 7/8" coaxial RF cable	RX-CN-DM-CF78
Din Male connector for 1-1/4" flexible RF cable	RX-CN-DM-CF114	
N Type	N Female connector for 1/2" flexible RF cable	RX-CN-NF-CF12
	N Female connector for 1/2" Super flexible RF cable	RX-CN-NFCF12S
	N Female Angle connector for 1/2" flexible RF cable	RX-CN-NFR-CF12
	N Female Angle connector for 1/2" Super flexible RF cable	RX-CN-NFR.CF12S
	N Male connector for 1/2" flexible RF cable	RX-CN-NM-CF12
	N Male connector for 1/2" Super flexible RF cable	RX-CN-NM-CF12S
	N Male Angle connector for 1/2" flexible RF cable	RX-CN-NMR-CF12
	N Male Angle connector for 1/2" Super flexible RF cable	RX-CN-NMR-CF12S



Connectors

4.3 – 10 Type	4.3-10 Female connector for 1/2" flexible RF cable	RX-CN-MNDF-CF12
	4.3-10 Female connector for 7/8" flexible RF cable	RX-CN-MNDF-CF78
	4.3-10 Female Right Angle connector for 1/2" flexible RF cable	RX-CN-MNDFR.CF12
	4.3-10 Female Right Angle connector for 1/2" Super flexible RF cable	RX-CN-MNDFR-CF12S
	4.3-10 Male connector for 1/2" flexible RF cable	RX-CN-MNDM-CF12
	4.3-10 Male connector for 7/8" flexible RF cable	RX-CN-MNDM-CF78
	4.3-10 Male Right Angle connector for 1/2" flexible RF cable	RX-CN-MNDMR-CF12
	4.3-10 Male Right Angle connector for 1/2" Super flexible RF cable	RX-CN-MNDMR-CF12S



