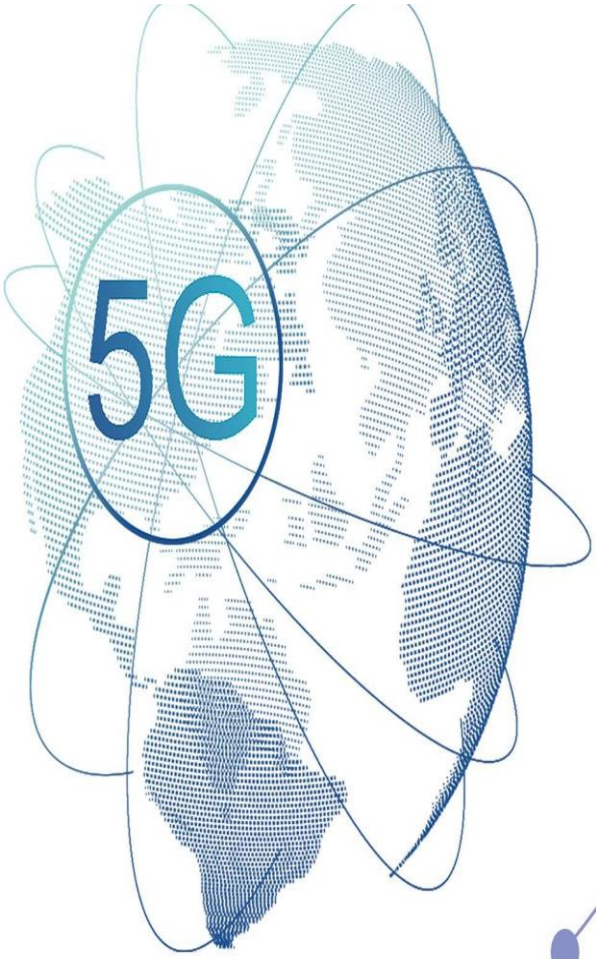
5G

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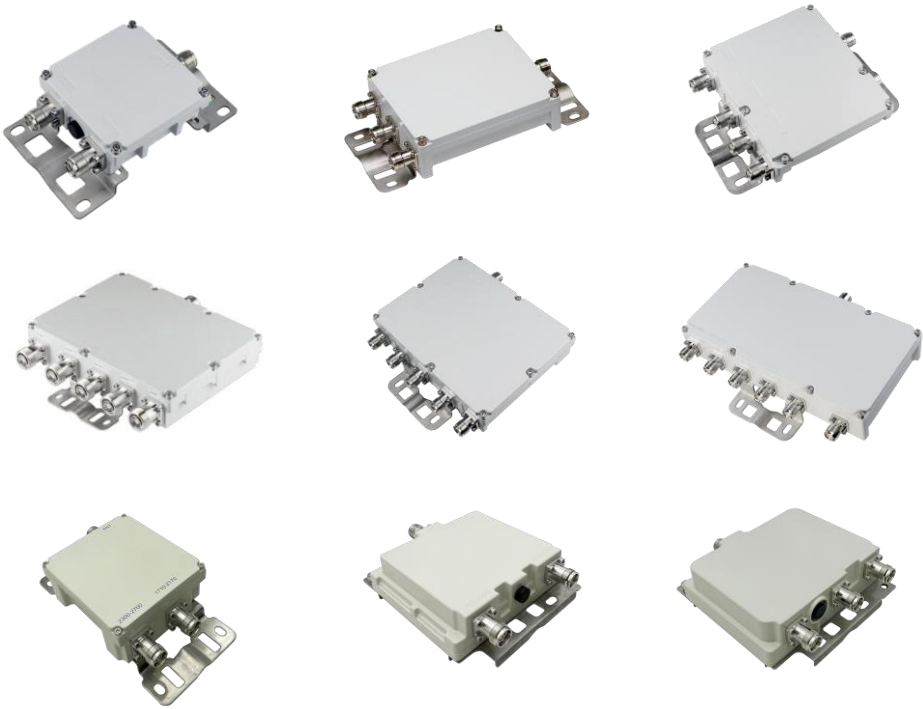
Product Pictures

Combiner, 2 Ways, 3 Ways, 4 Ways, 5 Ways, 6 Ways



Point of Interface, POI 8in 4out, 10in 4out, 12in 4out, 16in 4out

Hybrid Coupler, 2in 1out, 2in 2out, 4in 4out, 3in 3out






Directional Coupler



RF Attenuator








Termination Load






Cavity Power Splitter / Divider



Micro-Strip Power Splitter / Divider



Omni Ceiling Antenna






Directional Panel Antenna, Yagi Antenna





Connector, Adaptor

Jumper Cable

Coaxial Cable

HCAAY-50-6 (1/4")

HRCAY-50-9 (1/2"S)

HCAAY-50-12 (1/2")

HCAAY-50-22 (7/8")

HCAAY-50-32 (1-1/4")

HCAAY-50-42 (1-5/8")

Low Power Repeater, Digital Pico Repeater

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc.

17/20/23/27dBm (50/100/200/500mW) Customizable

High Power Repeater, Digital Repeater, MCPA Inline Booster

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc.

33/37dBm (2/5W)

40/43dBm (10/20W)

High Power Fiber Optical Repeater, Digital Fiber Optical Repeater

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc

30/33/37/40/43dBm (1/2/5/10/20W) Customizable

Master Unit (MU)

Remote Unit (RU)

Master Unit (MU)

Remote Unit (RU)

Combiner, 2 Ways, 3 Ways, 4 Ways

Main Features

- **Combiner For Feeder Sharing**
- **300W Power Handing, High Reliability**
- **High Directivity / Isolation**
- **Low VSWR, Low PIM(IM3)**

CB-2-I5G-43Fi

CB-3-DW-DFi

CB-4-GRX5G-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	CB-2-I5G-43Fi	CB-4-GRX5G-43Fi

Electrical Specifications

Frequency Range	Port1: 698-2700MHz Port2: 3300-3800MHz	Port1: 698-960MHz Port2: 1710-2170MHz Port3: 2300-2690MHz Port4: 3300-3800MHz
Insertion Loss	≤0.3dB	≤0.4dB
VSWR	≤ 1.25	≤ 1.25
Power Rating	≤ 300W(avg.)	≤ 300W
PIM (IM3)	≤ -155dBc @ 2×43dBm	≤ -155dBc @ 2×43dBm
DC/AISG	By-pass(max.2500mA)	
Isolation	≥50dB	
Impedance	50Ω	

Environmental Specifications

Lightning Protection	3KA;10/350us pulse	
Operating Temperature	-40℃to +65℃	
Environment Humidity	0% to 95%	
Application	IP67	IP67

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3-10 Female	
Weight	1.1 Kg	3.0 Kg
Dimensions (Without Connectors)	110*110*44mm	195*170*50mm

Combiner, 5 Ways, 6 Ways

Main Features

- **Combiner For Feeder Sharing**
- **300W Power Handing, High Reliability**
- **High Directivity / Isolation**
- **Low VSWR, Low PIM(IM3)**

CB-5-GDWX5G-43DFi

CB-5-GDWX5G-43Fi

CB-6-070918212638-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	CB-5-GDWX5G-43Fi	CB-6-070918212638-43Fi

Electrical Specifications

Frequency Range	Port1: 380-960MHz Port2: 1427-1880MHz Port3: 1920-2170MHz Port4: 2300-2690MHz Port5: 3300-3800MHz	Port1: 698-803MHz Port2: 824-960MHz Port3: 1710-1880MHz Port4: 1920-2170MHz Port5: 2300-2700MHz Port6: 3300-3800MHz
Insertion Loss	≤ 0.5dB	≤ 0.5dB
VSWR	≤ 1.25	≤ 1.25
Power Rating	≤ 300W(avg.)	≤ 300W(avg.)
PIM (IM3)	≤ -155dBc @ 2×20W	≤ -155dBc @ 2×20W
DC/AISG	By-pass(max.2500mA)	
Isolation	≥50dB	
Impedance	50Ω	

Environmental Specifications

Lightning Protection	3KA;10/350us pulse	
Operating Temperature	-40℃to +85℃	
Environment Humidity	0% to 95%	
Application	IP67	IP67

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3-10 Female	
Weight	3.5 Kg	4.0 Kg
Dimensions (Without Connectors)	260*195*52mm	330*170*62mm

Combiner, 2 Ways, 3 Ways

Main Features

- **Combiner For Feeder Sharing**
- **300W Power Handing, High Reliability**
- **High Directivity / Isolation**
- **Low VSWR, Low PIM(IM3)**

CB-2-182126-43Fi

CB-2-DW-43Fi

CB-3-182126-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	CB-2-DW-43Fi	CB-3-182126-43Fi

Electrical Specifications

Frequency Range	Port1: 1710-1880MHz Port2: 1920-2170MHz	Port1: 1710-1880MHz Port2: 1920-2170MHz Port3: 2300-2700MHz
Insertion Loss	≤ 0.3dB	≤ 0.3dB
VSWR	≤ 1.25	≤ 1.25
Power Rating	300W	300W
PIM (IM3)	≤ -155dBc @ 2×20W	≤ -155dBc @ 2×20W
DC/AISG	By-pass(max.2500mA)	
Isolation	≥50dB	
Impedance	50Ω	

Environmental Specifications

Lightning Protection	3KA;10/350us pulse	
Operating Temperature	-20℃to +60℃	
Environment Humidity	0% to 95%	
Application	IP67	IP67

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3-10 Female	
Weight	1.5 Kg	2.3 Kg
Dimensions (Without Connectors)	145*136*46 mm	169*146*49mm

Tel : +9

Hybrid Coupler, 2in 1out, 2in 2out

Main Features

- Wide Frequency Range
- High Directivity / Isolation
- Cavity Structure, High Power Handing
- Excellent Coupling Flatness
- Low Insertion Loss, Low VSWR, Low PIM(IM3)

HC22-0738-43Fi

HC22-0738-DFi

HC21-0738-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	HC22-0738-43Fi	HC22-0738-DFi	HC21-0738-43Fi

Electrical Specifications

Frequency Range	698-3800MHz	698-3800MHz	698-3800MHz
VSWR	≤ 1.25	≤ 1.25	≤ 1.25
Isolation	≥ 25 dB	≥25 dB	≥ 25 dB
Power Rating	300W / Input port	300W / Input port	150W / Input port
Impedance	50Ω		
Insertion Loss	≤3.5dB (Including Distribution Loss and Fluctuation)		
PIM (IM3)	≤ -155 dBc @ 2×20W	≤ -155 dBc @ 2×20W	≤ -155 dBc @ 2×20W

Environmental Specifications

Operating Temperature	-25℃to +55℃		
Environment Humidity	0% to 95%		
Application	IP65	IP65	IP65

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3- 10 Female		
Material	Cavity aluminum silver-plated; Connector: Copper		
Size	154×50.6×37.5mvm	155×47×36mm	220×170×61mm
Weight	0.5Kg	0.65Kg	4.0Kg

Hybrid Coupler, 4in 4out, 3in 3out

Main Features

- Wide Frequency Range
- High Directivity / Isolation
- Cavity Structure, High Power Handing
- Excellent Coupling Flatness
- Low Insertion Loss, Low VSWR, Low PIM(IM3)

HC44-0738-43Fi

HC44-0738-DFi

HC33-0738-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	HC44-0738-DFi	HC33-0738-43Fi

Electrical Specifications

Frequency Range	698-3800MHz	698-3800MHz
Insertion	≤ 6.2dB ± 0.6dB	≤ 5.0dB ± 0.6dB
VSWR	≤ 1.25	≤ 1.25
Isolation	≥ 25dB	≥ 25dB
Power Rating	300W / input port	300W / Input port
PIM (IM3)	≤ -155 dBc @ 2×20W	≤ -155dBc @ 2×20W
Impedance		

Environmental Specifications

Operating Temperature	-20℃to +60℃	
Environment Humidity	0% to 95%	
Application	IP65	IP65

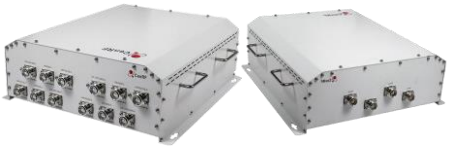
Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3-10 Female	
Material	Cavity aluminum silver-plated; Connector: Copper	
Size	216×104×63mm	200×100×25mm
Weight	2.8Kg	1.25Kg

Point of Interface, POI 12in 4out, 10in 4out

Main Features

- High Directivity / Isolation
- High Power Handing
- Low VSWR, Low PIM(IM3)
- High Reliability



POI-12I4O-DWL-DFi

POI-10I4O-DLW-VN

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	POI-12I4O-DWL-NFi	POI-10I4O-DLW-VN

Electrical Specifications

Frequency Range (MHz)	DCS LTE1800 –x4 (1710 - 1880MHz) WCDMA UMTS2100 –x4 (1920 - 2170MHz) LTE2600 –x4 (2500 - 2690MHz)	DCS LTE1800 –x4 (1710 - 1880MHz) WCDMA UMTS2100 –x4 (1920 - 2170MHz) LTE2300 LTE2600 –x2 (2300 - 2690MHz)
Isolation Between Same Systems	≥30dB	
Isolation Between Different Systems	≥90dB	
Insertion Loss	Typical ≤7dB, Max 7.8dB	
VSWR	≤ 1.25	
Power Rating	200W / Input port (Continuous Wave)	200W / Input port (Continuous Wave)
PIM(IM3)	≤ -155dBc @ 2x20W	≤ -155dBc @ 2x20W
Impedance	50Ω	

Environmental Specifications

Operating Temperature	-20℃to +60℃
Environment Humidity	5% to 97%
Application	Indoor type

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3- 10 Female	
Input Port	12 Ports, DIN-Female	10 Ports, DIN-Female
Output Port (To DAS)	4 Ports, DIN-Female	4 Ports, DIN-Female
Size	540x462.4x180mm	460x402.4x180mm
Weight	30 Kg	25 Kg

Point of Interface, POI 8in 4out, 16in 4out

Main Features

- **High Directivity / Isolation**
- **High Power Handing**
- **Low VSWR, Low PIM(IM3)**
- **High Reliability**

POI-8I4O-DW-NFi

POI-16I4O-DW-NFi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	POI-8I4O-DW-NFi	POI-16I4O-DW-NFi

Electrical Specifications

Frequency Range (MHz)	LTE DCS1800-1 LTE DCS1800-2 LTE DCS1800-3 LTE DCS1800-4	(UL890-915 / DL935-960) (UL1710-1785 / DL1805-1880)	GSM900-1~4 LTE DCS1800-1~4	(UL890-915 / DL935-960) (UL1710-1785 / DL1805-1880)
	WCDMA UMTS2100-1 WCDMA UMTS2100-2 WCDMA UMTS2100-3 WCDMA UMTS2100-4	(UL1710-1785 / DL1805-1880)	UMTS2100-1~4 LTE2600-1~4	(UL1920-1980 / DL2110-2170) (UL1920-1980 / DL2110-2170)
Isolation Between Same Systems	≥ 30dB			
Isolation Between Different Systems	≥ 90dB			
Insertion Loss	Typical ≤ 7dB, Max 7.8dB			
VSWR	≤ 1.25			
Power Rating	200W / Input port		200W / Input port	
PIM(IM3)	≤ -155dBc @ 2x20W		≤ -155dBc @ 2x20W	
Impedance	50Ω			

Environmental Specifications

Operating Temperature	-20℃to +60℃ 5%
Environment Humidity	to 97%
Application	Indoor type

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3- 10 Female	
Input Port	8 Ports, N-Female	16 Ports, DIN-Female
Output Port (To DAS)	4 Ports, N-Female	4 Ports, DIN-Female
Size	398×352×164mm	452×502×165mm
Weight	18 Kg	30 Kg

Directional Coupler

Main Features

- Wide Frequency Range
- Low Insertion Loss
- Low VSWR, Low PIM(IM3)
- High Power Handing, High Reliability

DC-X-0738-NFi

DC-X-0738-DFi

DC-X-0738-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	DC-X-0738-NFi	DC-X-0738-DFi	DC-X-0738-43Fi

Electrical Specifications

Frequency Range	698-3800MHz			698-3800MHz		698-3800MHz		
Coupling(dB)	5	6	7	10	15	20	30	40
Insertion Loss(dB)	≤2.1	≤1.7	≤1.5	≤0.8	≤0.5	≤0.3	≤0.3	≤0.3
In-band Ripple(dB)	±1.0	±1.0	±1.0	±1.2	±1.2	±1.5	±1.6	±1.8

VSWR	≤ 1.25
Directivity	≥ 20dB
Power Rating	300W
PIM (IM3)	< -155dBc @ 2x20W
Impedance	50Ω

Environmental Specifications

Operating Temperature	-25℃to +70℃
Storage temperature	-40°C to +85°C
Environment Humidity	5% to 95%
Application	IP65

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3-10 Female		
Material	Cavity: Aluminum; Connector: Copper		
Processing	Silver plated cavity and inner conductor		
Size	124x43x20mm	170x68.5x23.5mm	164.5x64.5x28mm
Weight	0.35Kg	0.35Kg	0.35Kg

Cavity Power Splitter / Divider

Main Features

- Multiple-Band Frequency Ranges
- High Quality Cavity Type
- High Power Handing, High Reliability
- Low Insertion Loss, Low VSWR, Low PIM(IM3)

PS2-0738-NFi

PS3-0738-DFi

PS4-0738-43Fi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Product Type	2-way Splitter	3-way Splitter	4-way Splitter
Model Number	PS2-0738-NFi PS2-0738-DFi PS2-0738-43Fi	PS3-0738-NFi PS3-0738-DFi PS3-0738-43Fi	PS4-0738-NFi PS4-0738-DFi PS4-0738-43Fi

Electrical Specifications

Frequency Range	698 - 3800MHz		
Insertion Loss	≤3.3dB	≤5.1dB	≤6.3dB
VSWR	≤ 1.25		
PIM (IM3)	≤ -155dBc @ 2×20W		
Power Rating	300W		
Impedance	50Ω		

Environmental Specifications

Operating Temperature	-25℃to +70℃ 5%
Environment Humidity	to 95%
Application	IP65

Mechanical Specifications

Connectors	DIN-Female, N-Female, 4.3- 10 Female
Material	Cavity: Aluminum; Connector: Copper
Processing	Silver plated inner conductor

MicroStrip Power Splitter / Divider

Main Features

- Multiple-Band Frequency Ranges
- High Quality MicroStrip Type
- Low Power Handing, High Reliability
- Low Insertion Loss, Low VSWR

MPS2-0727-NF

MPS3-0727-NF

MPS4-0727-NF

PN.

Product Type	2-way Splitter	3-way Splitter	4-way Splitter
Model Number	MPS2-0727-NF	MPS3-0727-NF	MPS4-0727-NF

Electrical Specifications

Frequency Range	698 - 2700MHz		
Insertion Loss	≤ 3.4dB	≤ 5.3dB	≤ 6.5dB
VSWR	≤ 1.25	≤ 1.28	≤ 1.30
Isolation	≥20dB		
Power Rating	50W		
Impedance	50Ω		

Environmental Specifications

Operating Temperature	-25℃to +85℃
Environment Humidity	5% to 95%
Application	IP65

Mechanical Specifications

Connectors	N-Female
Material	Cavity: Aluminum; Connector: Copper

RF Attenuator

Main Features

- Excellent Electrical Performance
- Low VSWR <1.25
- Lowest Attenuation Tolerance
- Totally Maintenance Free

AT-05-4G-NMF

AT-10-4G-NMF

AT-20-4G-NMF

AT-50-4G-NMF

AT-100-4G-NMF

AT-100-4G-NMF

AT-200-4G-43MF

LPAT-200-0760-43MF

Connector type (DIN, N, 4.3-10, SMA can be replaced)

PN.

Model Number	AT-05-4G-NMF	AT-10-4G-NMF	AT-20-4G-NMF	AT-50-4G-NMF	AT-100-4G-NMF	AT-200-4G-43MF	LPAT-100-0760-43MF

Electrical Specifications

Attenuation Value	3dB	6dB	10dB	15dB	20dB	30dB	40dB
Accuracy	±0.4dB	±0.4dB	±0.6dB	±0.6dB	±0.8dB	±0.8dB	±1.0dB
Frequency Range	DC - 3GHz , 698 - 3800MHz , 698-6000MHz						
VSWR	≤ 1.25						
PIM (IM3)	≤ -120 dBc or ≤ -150 dBc						
Impedance	50Ω						

Environmental Specifications

Operating Temperature	-30℃ to +65℃ 5%
Environment Humidity	to 95%
Application	IP54 / IP65

Mechanical Specifications

Connectors	DIN , N , 4.3-10 , SMA						
Size(mm)	58xΦ20	57.2xΦ30	75xΦ60	120xΦ50	164x100x60	245x142x64	224x192x61
Weight	0.07Kg	0.08Kg	0.39Kg	0.285Kg	1.0Kg	2.6Kg	2.2Kg

Termination Load

Main Features

- **Finned Termination**
- **Low VSWR <1.25**
- **Multiple-Band Frequency Ranges**
- **PIM(IM3) < -120dBc**

DL-10-4G-NM

DL-25-4G-NM

DL-50-4G-NM

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	DL-10-4G-NM	DL-25-4G-NM	DL-50-4G-NM

Electrical Specifications

Frequency Range	DC – 3.8GHz		
VSWR	< 1.25		
PIM (IM3)	< -120dBc		
Impedance	50Ω		
Power Rating	10W	25W	50W

Environmental Specifications

Operating Temperature	-25℃to +70℃ 5%
Environment Humidity	to 95%

Mechanical Specifications

Connectors	DIN / N / 4.3-10 - Male / Female		
Material	Cavity: Aluminum; Connector: Copper		
Size	30 x Φ47.9mm	50 x Φ68mm	105 x Φ50 mm
Weight	0.05Kg	0.2Kg	0.275Kg

Termination Load

Main Features

- **Finned Termination**
- **Low VSWR <1.25**
- **Multiple-Band Frequency Ranges**
- **PIM(IM3) < -120dBc or < -155dBc**

DL-100-4G-NM

DL-200-4G-NM

LPDL-100-0738-NFi

Connector type (DIN-Female, N-Female, 4.3-10 Female can be replaced)

PN.

Model Number	DL-100-4G-NM	DL-200-4G-NM	LPDL-100-0738-NFi

Electrical Specifications

Frequency Range	DC – 3.8GHz, 698 - 3800MHz		
VSWR	< 1.25	< 1.25	< 1.25
PIM (IM3)	< -120dBc	< -120dBc	< -155dBc
Impedance	50Ω		
Power Rating	100W	200W	100W

Environmental Specifications

Operating Temperature	-25℃to +70℃ 5%
Environment Humidity	to 95%

Mechanical Specifications

Connectors	DIN / N / 4.3-10 - Male / Female		
Material	Cavity: Aluminum; Connector: Copper		
Size	146.5x100x60mm	200x142x60 mm	200x170x61mm
Weight	0.94Kg	1.3Kg	2.5Kg

Omni Ceiling Antenna

Main Features

- **Excellent Electrical Performance**
- **Wide Frequency Range**
- **Totally Maintenance Free**

FO-0738-H5-N1i

IO-0738-V5-NFi

IMO-0740-C5-NFi

IMO-0738-C5-NFi

Connector type (N Female, 4.3-10 Female, SMA Male can be replaced)

PN.

Model Number	FO-0738-H5-N1i	IO-0738-V5-NFi	IMO-0740-C5-NFi	IMO-0738-C5-NFi

Electrical Specifications

Frequency Range(MHz)	698-806/806-960 1710-2700/3400-4000				698-806/806-960 1710-2700/3300-3800				698-960 1710-2700/3300-4000			698-806/806-960 1710-2700/3300-3800			
Gain(dBi)	2.2	3.5	4.5	5.0	3.0	3.0	5.0	5.5	3.0	3.5	4.5	3.0	4.0	4.5	5.0
VSWR	≤1.8	≤1.8	≤1.5	≤1.5	≤1.8	≤1.5	≤1.5	≤1.5	≤1.8			≤1.8	≤1.5	≤1.5	≤1.8
Polarization Type	Vertical				Vertical				Linear×4			±45°			
Horizontal Beamwidth	360°				360°				360°			360°			
Vertical Beamwidth	\				\				90°	85°	45°	90°	85°	45°	35°

PIM(IM3)	≤ -140dBc @ 2x2W
Max Power	50W
Impedance	50Ω

Environmental Specifications

Operating Temperature	-40℃to +65℃ 5%
Environment Humidity	to 95%
Lightning Protection	DC ground

Mechanical Specifications

Connectors	N-Female, 4.3- 10 Female			
Material	Uv-Protected ABS			
Radome Color	White			
Mounting Type	Ceiling Installation			
Height	85mm	85mm	24mm	40mm
Width	Φ186mm	Φ186mm	Φ360mm	Φ218mm
Weight	0.3Kg	0.275Kg	0.90Kg	0.50Kg

Directional Panel Antenna, Yagi Antenna

Main Features

- Excellent ElectricalPerformance
- Wide Frequency Range
- Totally Maintenance Free

OMP-0738-75V8i

IMP-0740-VH10-NFi

IP-0738-V8-NFi

IMP-0738-VH8-NFi

OY-0738-V11-NFi

Connector type (N Female, 4.3-10 Female, SMA Male can be replaced)

PN.

Model Number	IMP-0740-VH10-NFi	IP-0738-V8-NFi	IMP-0738-VH8-NFi	OY-0738-V11-NFi

Electrical Specifications

Frequency Range(MHz)	698-960/1710-4000	698-960/1710-3800	698-960/1710-3800	698-960/1710-3800
Gain(dBi)	9.0 | 10.0	6.0 | 8.5	6.5 | 8.5	9.5 | 11.5
VSWR	≤ 1.8	≤ 1.8	≤ 1.8	≤ 1.5
Polarization Type	2 x ±45°	Vertical	Linear H / V	Vertical
Horizontal Beamwidth	75±5° | 68±5°	80±5° | 60±5°	80±10° | 60±10°	68±15° | 48±10°
Vertical Beamwidth	70±5° | 60 ±5°	70±5° | 50±5°	70 ±10° | 45 ±10°	95±15° | 59±10°
Front to Back Ratio(dB)	\ | \	≥8 | ≥15	\ | \	≥15 | ≥15
PIM(IM3)	≤ -140dBc @ 2x2W			
Max Power	50W			
Impedance	50Ω			

Environmental Specifications

Operating Temperature	-40℃to +65℃ 5%
Environment Humidity	to 95%
Lightning Protection	DC ground

Mechanical Specifications

Connectors	N Female, 4.3-10 Female			
Material	Uv-Protected ABS			
Radome Color	White			
Mounting Type	Wall Mounting			
Size	450x416x136mm	180x170x60mm	320x210x70mm	440x210x65mm
Weight	6.5Kg	0.4Kg	1.2Kg	0.87Kg

Connector, Adaptor

NM-1/2Li

NF-1/2Li

NMA-1/2Li

NM-7/8Li

NF-7/8Li

DM-1/2Si

DMA-1/2Si

DMA-1/2Si

DM-7/8Li

DF-7/8Li

43M-1/2Li

43M-1/2Si

NM-15/8Li

NM-RG213Li

NM-LMR400Li

NM-NMi

NF- NFi

NM-7/8Li

DM-NFi

DF-DFi

General Specifications

Connector Interface	DIN, N, 4.3-10
Body Style	Straight, Right angle
Interface According To	IEC 61169-16, MIL-PRF-39012, CECC 22210, EN 122190, DIN 47223

Material & Plating

		Material	**Plating**
Connector Parts	**Outer Contact**	Brass	CuSnZn3
	Center Contact	Spring Bronze	Silver, 3-6 µm
	Back Nut	Brass	Nickel, 2.5-5 µm
	Dielectric	TPX & POM	
	Gasket	Silicone & EPDM	

Electrical Specifications

Impedance	50 ohm
Frequency	DC-7.5GHz
VSWR	≤1.10 (DC-2.2GHz); ≤1.15 (2.2-4GHz)
Insertion Loss	≤0.05dB (DC-4GHz)
PIM (900MHz, 1800MHz 2×20W)	≤-160dBc

Mechanical Specifications

Mating Cycles	≥500 times
Coupling Nut Retention	≥450N

Environmental Specifications

Operating Temperature	-40 ℃ to +85℃ IEC
Degree Of Protection (mated pair)	60529, IP67
2002/95/EC (ROHS)	Compliant

1/2" Super-Flexible Jumper Cable

43M-DM-1/2S

NM-NF-1/2S

DM-DM -1/2S

General Specifications

Jumper Length	1m, 2m, 3m, 5m
Connector Interface	DIN, N, 4.3-10
Cable Type	1/2" Super Flexible Coaxial Cable
Interface According To	IEC 60169, VG 95250, EN 122190, DIN 47223, GJB681-89, GJB360A-96

Electrical Specifications

Impedance	50 ohm
Frequency	698-3800MHz
VSWR	≤1.15 (0.7-2.2GHz), ≤1.2 (2.2-4.0GHz)
Operating Voltage	1500V
Insulation Voltage	≥2500V
Insulation Resistance	≥5000MΩ
PIM (900MHz, 1800MHz 2×20W)	≤-155dBc@2x20W
Insertion Loss	≤0.075*L+0.10dB (L=Jumper Length) @698-960MHz ≤0.109*L+0.14dB (L=Jumper Length) @1710-1880MHz ≤0.118*L+0.15dB (L=Jumper Length) @1920-2170MHz ≤0.132*L+0.17dB (L=Jumper Length) @2170-2700MHz ≤0.141*L+0.19dB (L=Jumper Length) @3300-3600MHz

Mechanical Specifications

Total Length Of Cable Assemblies	1000mm±10, 2000mm±20, 3000mm±25, 5000mm±40
Max. tensile Strength	750N
Min. bending Radius	3 2 mm

Environmental Specifications

Temperature Range	- 40 ℃ to + 85℃
Degree Of Protection (mated pair)	IEC 60529, IP68
Environmental Standards	RoHS
Mechanical Shock Test Method	MIL-STD-202, Method 213, Test Condition I
Moisture Resistance Test Method	MIL- STD- 202F, Method 106F
Thermal Shock Test Method	MIL-STD-202F, Method 107G, Test Condition A-1

Material & Plating

		Material	Plating	Thickness
Cable Parts	**Inner Conductor**	aluminum wire covered with copper (φ3.60mm)		
	Insulation Dielectric	polyethylene foam (φ8.90mm)		
	Outer Conductor	corrugated copper tube (φ12.20mm)		
	Cable Jacket	PE (φ13.60mm)		
Connector	**Inner Conductor**	Brass	Silver	≥0.003mm
Parts	**Insulation Dielectric**	PTFE	-	
	Outer Conductor	Brass	Ternary Alloy	≥0.002mm
Sealing		Heat shrinking tube or Molding		

Coaxial Cable

HCAAY-50-6 (1/4")

HRCAY-50-9 (1/2"S)

HCAAY-50-12 (1/2")

HCAAY-50-22 (7/8")

HCAAY-50-32 (1-1/4")

HCAAY-50-42 (1-5/8")

PN.

Model Number	HRCAY-50-9 (1/2"S)	HCAAY-50-12 (1/2")	HCAAY-50-22 (7/8")

Mechanical Specifications

Inner Conductor	Copper	Ø 3.6mm	Ø 4.8mm	Ø 9.0mm
Dielectric	Foamed polyethylene (PE)	Ø 9.0mm	Ø 12.2mm	Ø 22.4mm
Outer Conductor	Annularly corrugated copper tube	Ø 12.2mm	Ø 13.8mm	Ø 24.9mm
Jacket	PE, Black, UV resistant,	Ø 13.4mm	Ø 15.9mm	Ø 27.5mm
UV Resistance		GB/T 14049-093; EN 50289-4- 17, Method A		
Cable Weight		≈ 171 kg/km	≈ 200 kg/km	≈ 400 kg/km
Tensile Strength		750 N	1150 N	1450 N
Min. bending Radius (Single)		25 mm	70 mm	120 mm
Min. bending Radius (Repeated)		35 mm	125 mm	250 mm

Electrical Specifications

Impedance		50±1 ohm		
Capacitance		80 pF/m	76 pF/m	76 pF/m
Inductance		0.195 µH/m	0.190 µH/m	0.190 µH/m
Maximum Operating Frequency		10.1 GHz	8.8 GHz	5.0 GHz
Peak Power Rating		16 kW	40 kW	91 kW
Insulation Resistance		≥ 10 GΩ x km		
DC Breakdown Voltage		2500V	6000V	10000V
Jacket Spark Test Voltage		5000 Vrms	8000 Vrms	8000 Vrms
Inner Conductor DC-resistance		≤ 2.75 Ω/km	≤ 1.55 Ω/km	≤ 1.48 Ω/km
Outer Conductor DC-resistance		≤ 3.69 Ω/km	≤ 2.7 Ω/km	≤ 1.45 Ω/km

Environmental Specifications

Operation Temperature	-40°C to +85°C
Storage Temperature	-70°C to +85°C
RoHs	Compliant

Attenuation

Frequency [MHz]		**100**	**300**	**450**	**800**	**900**	**1000**	**1800**	**2000**	**2200**	**2500**	**2700**	**3000**	**3500**	**4000**
Attenuation	**1/2"**	2.16	3.83	4.72	6.36	6.77	7.22	9.92	10.52	11.12	11.96	12.48	13.21	14.65	15.81
typical [dB/100m]	**7/8"**	1. 18	2. 13	2.65	3.65	3.87	4.13	5.78	6.13	6.47	6.97	7.29	7.77	8.06	8.67
Average Power	**1/2"**	3.95	1.98	1.80	1.35	1.26	1.19	0.87	0.82	0.78	0.74	0.68	0.67	0.54	0.49
[KW]	**7/8"**	9. 18	4.52	3.75	2.49	2.35	2.19	1.75	1.65	1.42	1.35	1.26	1.18	1.06	0.98

Low Power Repeater, Digital Pico Repeater

Single Band to Quintuple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc

17/20/23/27dBm (50/100/200/500mW) Customizable

Overview

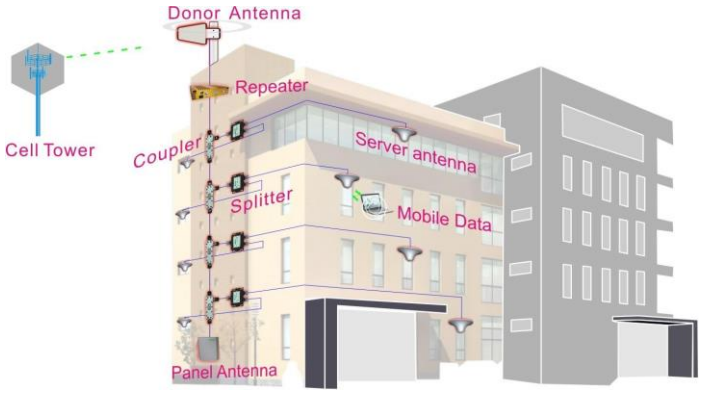
Wireless Pico Repeater is a fast and cost effective solution widely deployed to provide coverage improvement for in-building solution, especially for areas without optical access and emergency coverage, eg. house, apartment or office area 500- 1800sq.m.

Wireless Pico Repeater receives and amplifies signal from donor BTS. It is a bi-directional amplifier transmitting signal to coverage area, bringing coverage to the shadow or blind area in rural and urban buildings where the BTS footprints can't reach.

Features

- Support multi system.
- Support multi sub-bands; the output power for each band is the same as the repeater
- Independent uplink and downlink gain control and on/off for each sub-band
- MGC and AGC function
- Self-oscillation protection
- Built-in USB interface for local control.
- Low Power Consumption

Applications



Single Band, 20dBm (100mW)

17/23/27dBm (50/200/500mW), Dual Band, Triple Band to Quintuple Band Customizable

Electrical Specifications

Parameter		Uplink	Downlink
Frequency Range	900MHz	890–900MHz	935–945MHz
		900–910MHz	945–955MHz
	1800MHz	1710–1730MHz	1805–1825MHz
		1745–1765MHz	1840–1860MHz
	2100MHz	1960–1970MHz	2150–2160MHz
		1970–1980MHz	2160–2170MHz
Band width	900MHz	Supports 2*10MHz from 0.2 to 10MHz within the 900Band	
	1800MHz	Supports 2*20MHz from 0.2 to 20MHz within the 1800Band	
	2100MHz	Supports 2*10MHz from 0.2 to 10MHz within the 2100Band	
Max. Output Power center frequency		15dBm	18dBm
Max. Gain center frequency		65dB	70dB
ATT Adjustable Range		0 - 30dB / 1dB Step	
Gain Flatness		< 3dB (for all frequency bands)	
AGC Range		30 dB	
Min. Input power		≥ -90dBm (for all frequency bands)	
Inter-modulation, IMD3		meet ETSI & 3GPP Standard	
Noise Figure		≤ 8.0	

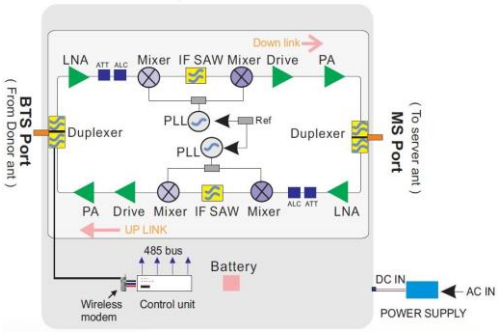
Environmental Specifications

Operating Temperature	-10℃to +40℃
Environment Conditions	IP40

Mechanical Specifications

I /O Port	N Female, 4.3- 10 Female, SMA Female
Dimensions	176x100x43mm
Weight	≤5Kg
Power Consumption	≤20W

Schematic diagram



High Power Repeater, Band Selective Repeater

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc

33/37/40/43dBm (2/5/10/20W) Customizable

33 / 37 dBm (2 / 5 W)

40 / 43 dBm (10 / 20W)

Overview

RF Repeater is a fast and cost effective solution widely deployed to provide coverage improvement for rural villages, in-building solution, especially for areas without optical access and emergency coverage, eg. During large conferences.

The series has the capabilities of being remote monitored and alert reporting. It is able to detect more and less failure itself. While the outside AC power supply is interrupted, the device is able to keep on sending alarm message to monitoring center for half an hour. This functionality facilitates the monitoring, adjustment and maintenance. It can also provide cost effective solution for the area which expanded mobile communication operation covers.

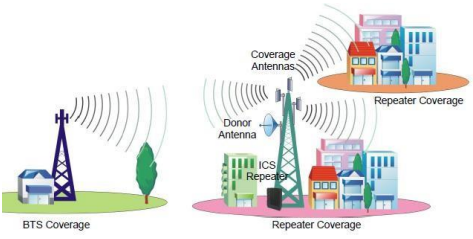
Working Principle

RF Band Selective Repeater is devices to amplify signal bi- directionally, the uplink and downlink circuit is frequency-selective. It is a bi-directional amplifier transmitting signal to coverage area, bringing coverage to the shadow or blind area in rural areas and urban buildings where the BTS footprints can't reach.

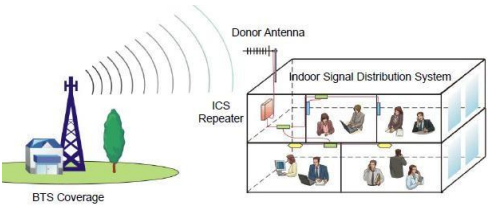
Features

- Ideal for sophisticated urban and rural RF environments, Band Selective Repeater takes selected BTS channel as donor signal source.
- ALC (Auto Level Control) with wide range of input level: -20dBm~-110dBm.
- Output power detection and self-oscillation protection.
- Integrated GSM modem with OMT software. Support optional OMC/NMS.
- IP65 case designed for all kinds of tough outdoor and indoor environments.
- Highest standard industrial standards applied, with MTBF over 60,000hrs.

Applications



OAR Repeater Outdoor Application



OAR Repeater Indoor Application

Band Selective Repeater, Dual Band, 40dBm (10W)

40/43dBm (5/20W) Customizable, Single Band, Triple Band Customizable

Gain 90dB, Output 40dBm

Electrical Specifications

			Uplink	Downlink
Frequency Range	CRF-W-GD-S40	900MHz	890-915MHz	935-960MHz
		1800MHz	1710-1785MHz	1805-1880MHz
	CRF-W-GW-S40	900MHz	890-915MHz	935-960MHz
		2100MHz	1920-1980MHz	2110-2170MHz
	CRF-W-DW-S40	1800MHz	1710-1785MHz	1805-1880MHz
		2100MHz	1920-1980MHz	2110-2170MHz
Max .Gain			80±3dBm	85±3dBm
Max .Output Power			27±2dBm / band	40±2dBm / band
Band width			Wide Band, Customizable	
Gain Attenuation Adjustable			31dB / step 1dB	
Automatic Level Control			≥25dB	
Gain Flatness		900 / 1800	≤4dB(P-P)	
		2100	≤2dB / 3.84MHz	
Noise Figure			≤5dB	
VSWR			≤1.5	
WCDMA / LTE		EVM	≤ 6%	
		PCDE	≤ -35dB@Spreading Factor 256	
		ACPR	≥ 20dBc/30KHz@±5MHz,	
Impedance			50 ohm	
MTBF			100,000 Hrs	

Software

Local Monitoring	RJ45 / USB
Remote Monitoring	GSM900/1800 UMTS2100 wireless Modem
Controlled / Alarm Parameters	Gain, Frequency, Alarm Enable, etc.
NMS/OMC protocol	China Repeater NMS/OMC standard protocol

Environmental Specifications

Operating Temperature	-25℃to +55℃
Environment Conditions	IP65, Indoor/Outdoor

Mechanical Specifications

I /O Port	N-Female, 4.3-10 Female
Dimensions	489x409x186.5mm
Weight	≤35Kg
Power Supply	Input AC176-264V, 45~55Hz
Power Consumption	≤350W

Digital Wireless Repeater, Single Band, Dual Band, Triple Band, 40dBm (10W), 43dBm (20W), Customizable

Overview

With the development of mobile communication technology, more and more new communication technologies (like 4G) will be adopted nowadays. Hence, telecom operators have to handle Tri-system simultaneity and have to face the problem of re-farming spectrum resource for future. For Traditional Tri Band RF Repeaters, most of the manufacturers adopt all-in-one architecture with huge size. Furthermore, it's impossible to be very easily upgraded in case of frequency re-farming or add new technique in the near future, which will waste operator's old investments. For the above mentioned reasons, SimesRF develops and brings out Digital Tri-Band Repeaters to resolve such problem. It provides software-based platform and enables on-the-fly filter to be changed/upgraded by software without expensive hardware upgrading.

Features

- 900MHz band: support multi working mode: GSM/EDGE and WCDMA.
- 1800MHz band: support multi working mode: GSM/DCS/LTE
- 2100MHz band: support 3 WCDMA channels.
- Module structure, high reliable and easy to upgrade and maintain.
- With a spontaneous heat dissipation.
- Local and remote monitoring/Control functionality with access to the NMS

Electrical Specifications

		Uplink	Downlink
Frequency Range	900MHz	890-915MHz	935-960MHz
	1800MHz	1710-1785MHz	1805-1880MHz
	2100MHz	1920-1980MHz	2110-2170MHz
Bandwidth	900MHz	1-3 Sub bands: 0.2- 20MHz	
	1800MHz	1-3 Sub bands: 0.2- 20MHz	
	2100MHz	1-3 Sub bands: 0.2- 20MHz	
Max .Gain		80±3dBm	85±3dBm
Max .Output Power		27±2dBm / band	43±2dBm / band
Gain Attenuation Adjustable		30dB / step 1dB	
Automatic Level Control		≥25dB	
Gain Flatness	900 / 1800	≤4dB(P-P)	
	2100	≤2dB / 3.84MHz	
Noise Figure		≤5dB	
Max. input without damage		-10 dBm	
VSWR		≤1.5	
Group Delay		≤5μs	
Frequency stability		≤0.01ppm	

Out of Band Rejection	±600KHz	≥40dBc	≥40dBc
	±1MHz	≥45dBc	≥45dBc
	±5MHz	≥50dBc	≥50dBc
Intermodulation Products	9KHz~1GHz	≤-36dBm	≤-45dBc
	1GHz~12.75GHz	≤-30dBm	≤-45dBc
Spurious Emission	9KHz~1GHz	≤-36dBm	≤-36dBm
	1GHz~12.75GHz	≤-30dBm	≤-30dBm
WCDMA / LTE	EVM	≤8%	
	PCDE	≤-35dB@Spreading Factor 256	
	ACPR	≥20dBc/30KHz@±5MHz,	
Impedance		50 ohm	
MTBF		100,000 Hrs	

Software

Local Monitoring	RJ45 / USB
Remote Monitoring	GSM900/1800 UMTS2100 wireless Modem
Controlled / Alarm Parameters	Gain, Frequency, Alarm Enable, etc.
Monitoring Parameters	Gain, Frequency, Repeater ON/OFF,
NMS/OMC protocol	China Repeater NMS/OMC standard protocol

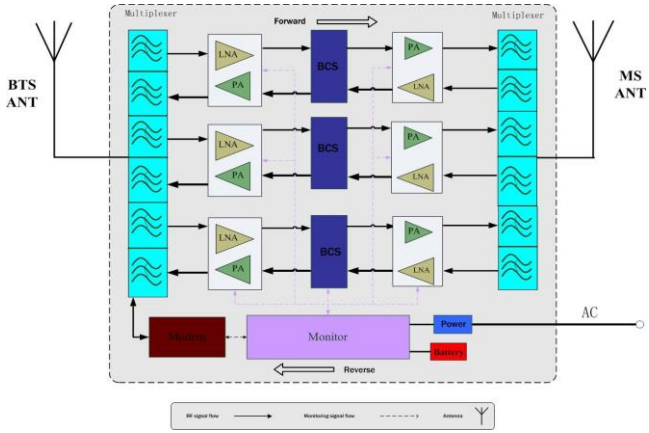
Environmental Specifications

Operating Temperature	-25℃to +55℃
Environment Conditions	IP65, Indoor/Outdoor
Environment Humidity	5% to 95%

Mechanical Specifications

I /O Port	N-Female, 4.3- 10 Female
Dimensions	489x409x186.5mm
Weight	≤25Kg
Power Supply	Input AC100~240V, 50/60Hz
Power Consumption	≤500W

Schematic diagram



High Power Repeater, MCPA Inline Booster

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc.

37/40/43dBm (5/10/20W) Customizable

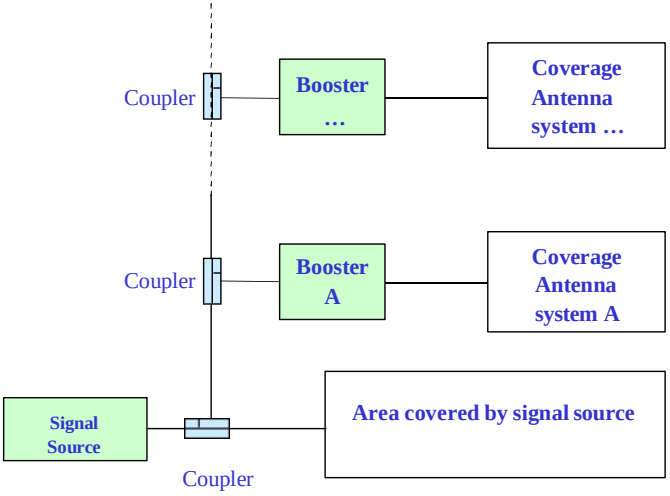
Overview

CenRF FDD-LTE 1800/WCDMA (UMTS2100) MCPA Inline Booster are used in combinations with base stations or Boosters to amplify and distribute the uplink and downlink signals in-buildings. It effectively enhances the signals in shadow areas in urban high rises like hotel, office buildings, shopping centers, apartment complexes as well as basements.

Features

- Support Muti-Carriers, Ideal for Muti-operators In-building solution.
- Use of wideband high linearity and low intermodulation amplifier, to ensure strong signal input of the linear output.
- Very low system noise can be connected multiple inline boosters in parallel.
- Digital intelligent automatic synchronization with donor BTS.
- Integrated FDD-LTE 1800/WCDMA (UMTS2100) modem with OMT software. Support optional OMC remote management system (NMS).
- IP65 Aluminum cast casing designed for all kinds of tough outdoor and indoor environments.
- Optional backup battery and multiple power supply choices available (AC/DC/Solar Power).
- Highest standard industrial standards applied, with MTBF over 60,000hrs.

Applications



MCPA Inline Repeater, Dual Band, 43dBm (20W)

37/40dBm (5/10W), Single Band, Triple Band Customizable

Gain 45dB, Output 43dBm

Electrical Specifications

			Uplink	Downlink
Frequency Range	CRF-M-GD-S43	900MHz	890-915MHz	935-960MHz
		1800MHz	1710-1785MHz	1805-1880MHz
	CRF-M-GW-S43	900MHz	890-915MHz	935-960MHz
		2100MHz	1920-1980MHz	2110-2170MHz
	CRF-M-DW-S43	1800MHz	1710-1785MHz	1805-1880MHz
		2100MHz	1920-1980MHz	2110-2170MHz
Max .Gain			45±3dBm	45±3dBm
Max .Output Power			- 10±2dBm / band	43±2dBm / band
Band width			Wide Band, Customizable	
Gain Attenuation Adjustable			0~20 @ 1 dB step	
Automatic Level Control			0~20dB	
Ripple In Band (P-P) (dB)		900 / 1800	≤6.0	
At +25℃		2100	≤5.0	
Noise Figure			≤7dB	
VSWR			≤1.8	
Group Delay			≤5.0ps	
Frequency stability			≤0.05ppm	
WCDMA / LTE		EVM	≤8%	
		PCDE	≤-35dB @Spreading Factor 256	
Impedance			50 ohm	
MTBF			≥60,000 Hrs	

Software

Local Monitoring	RJ45 / USB
Remote Monitoring	GSM900/1800 UMTS2100 wireless Modem
Controlled / Alarm Parameters	Gain, Frequency, Alarm Enable, etc.
Monitoring Parameters	Gain, Frequency, Repeater ON/OFF,
NMS/OMC protocol	China Repeater NMS/OMC standard protocol

Environmental Specifications

Operating Temperature	-25℃to +55℃
Environment Conditions	IP65, Indoor/Outdoor

Mechanical Specifications

I /O Port	N-Female, 4.3-10 Female
Dimensions	489x409x186.5mm
Weight	≤25Kg
Power Supply	Input AC176-264V, 45~55Hz
Power Consumption	≤350W
Device cooling ways	Cooling with fan

High Power Fiber Optical Repeater

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc.

37/40/43dBm (5/10/20W) Customizable

Overview

Master Unit (MU) **Remote Unit (RU)**

Fiber Optical Repeater system is ideal for applications outdoor installations, like highways, tunnels, subways, as well as large building complexes including exhibition halls and airports.

Cellular telephone systems transmit signals in two directions between base station (BTS) and mobile stations (MS) within the signal coverage area.

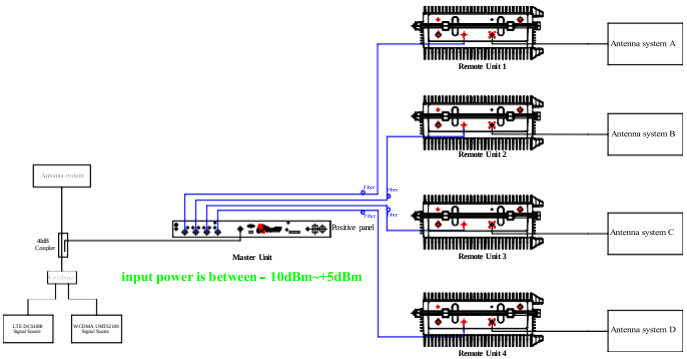
If weak signal transmissions occur within the coverage area because of indoor applications, topological conditions or distance from the transmitter, extension of the transmission range can achieved by means of an optical distribution system.

Such a system contains an optical master unit and several remote units. The number of the remote units depends on the hardware and software configuration. The remote units are connected to the master unit with optical links. The optical loss must be less than 12 dB inclusive optical couplers or splitters.

Features

- Support Muti-Carriers, Ideal for In-building solution.
- Use of wideband high linearity and low intermodulation amplifier, to ensure strong signal input of the linear output.
- Very low system noise can be connected multiple inline Repeaters in parallel.
- ACL, Output power detection and self-oscillation protection.
- Integrated GSM900/1800 modem with OMT software.Support optional OMC remote management system.
- IP65 Aluminum cast casing designed for all kinds of tough outdoor and indoor environments.
- Highest standard industrial standards applied, with MTBF over 60,000hrs.

Application Diagram



Fiber Optical Repeater, Dual Band, 43dBm (20W)

37/40dBm (5/10W) Customizable, Single Band, Triple Band Customizable

Gain 45dB, Output 43dBm

Electrical Specification

			Uplink	Downlink
Frequency Range	CRF-O-GD-S43	900MHz	890-915MHz	935-960MHz
		1800MHz	1710-1785MHz	1805-1880MHz
	CRF-O-GW-S43	900MHz	890-915MHz	935-960MHz
		2100MHz	1920-1980MHz	2110-2170MHz
	CRF-O-DW-S43	1800MHz	1710-1785MHz	1805-1880MHz
		2100MHz	1920-1980MHz	2110-2170MHz
Max .Gain			55±3dBm	55±3dBm
Max .Output Power			-10±2dBm / band	43±2dBm / band
Band width			Wide Band, Customizable	
Gain Attenuation Adjustable			0~30 @ 1 dB step	
Automatic Level Control			0~20 dB	
Ripple In Band (dB) at 25℃		900 / 1800	≤8.0	
		2100	≤6.0	
Noise Figure			≤7dB	
VSWR			≤1.8	
Intermodulation Products		9KHz~1GHz	≤-36/1KHz	≤-36/1KHz
		1GHz~12.75GHz	≤-10dBm@1MHz	≤-10dBm@1MHz
WCDMA / LTE		EVM	≤6%	
		PCDE	≤-35dB @Spreading Factor 256	
		ACPR	≤-40dBc	
Impedance			50 ohm	
MTBF			≥60,000 Hrs	

Optical Specification

Optical Output Power	MU: -2±3 dBm, RU: 4.5±3 dBm
Optical length	(1550nm/1310nm) / (1550nm/1310nm)DWDM
Optical Loss	≤7dB /Includes the loss of the optical splitter
Optical Connector	FC/APC

Environmental Specifications

Operating Temperature	-25℃ to +55℃
Environment Conditions	MU: IP20, Indoor, RU: IP65, Indoor/Outdoor

Mechanical Specifications

I /O Port	N-Female, 4.3-10 Female
Dimensions	MU: 482x300x44mm, RU: 489x409x186.5mm
Weight	MU: ≤8Kg, RU: ≤25Kg
Power Supply	MU: DC-48V, RU: AC220V±20%
Power Consumption	MU: ≤30W, RU: ≤350W
Monitor Interface	Local Monitor: RJ45 / USB Remote Monitor: Wireless Modem

Digital Fiber Optical Repeater

Single Band to Triple Band, 700, 800, 900, 1800, 2100, 2600, 3500 etc.

40/43/46dBm (10/20/40W) Customizable

Overview

Master Unit (MU) **Remote Unit (RU)**

Fiber Optical Repeater system is ideal for applications outdoor installations, like highways, tunnels, subways, as well as large building complexes including exhibition halls and airports.

Cellular telephone systems transmit signals in two directions between base station (BTS) and mobile stations (MS) within the signal coverage area.

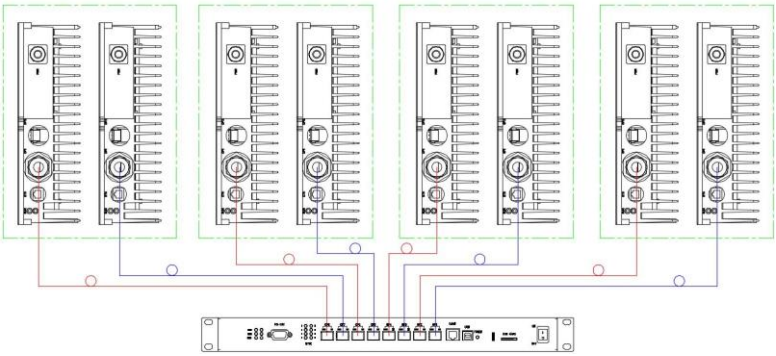
If weak signal transmissions occur within the coverage area because of indoor applications, topological conditions or distance from the transmitter, extension of the transmission range can achieved by means of an optical distribution system.

Such a system contains an optical master unit and several remote units. The number of the remote units depends on the hardware and software configuration. The remote units are connected to the master unit with optical links. The optical loss must be less than 12 dB inclusive optical couplers or splitters.

Features

- Ensures that data is not lost over long distances, making it an ideal choice for large network settings.
- allows users to transfer large amounts of data at a faster speed, making it an efficient and reliable choice for data-intensive applications.
- Digital fiber optic repeaters are compatible with a range of fiber optic systems, making them a versatile and flexible solution suitable for different network environments.
- Built with advanced technology, ensuring seamless connectivity and data transmission between networks.
- The installation process is simple, with low maintenance requirements, making it a cost-effective option that is easy to manage and maintain

RU MU Connection Diagram



Digital Fiber Optical Repeater, Dual Band, 46dBm (40W)

40/43dBm (10/20W) Customizable, Single Band, Triple Band Customizable

Electrical Specifications

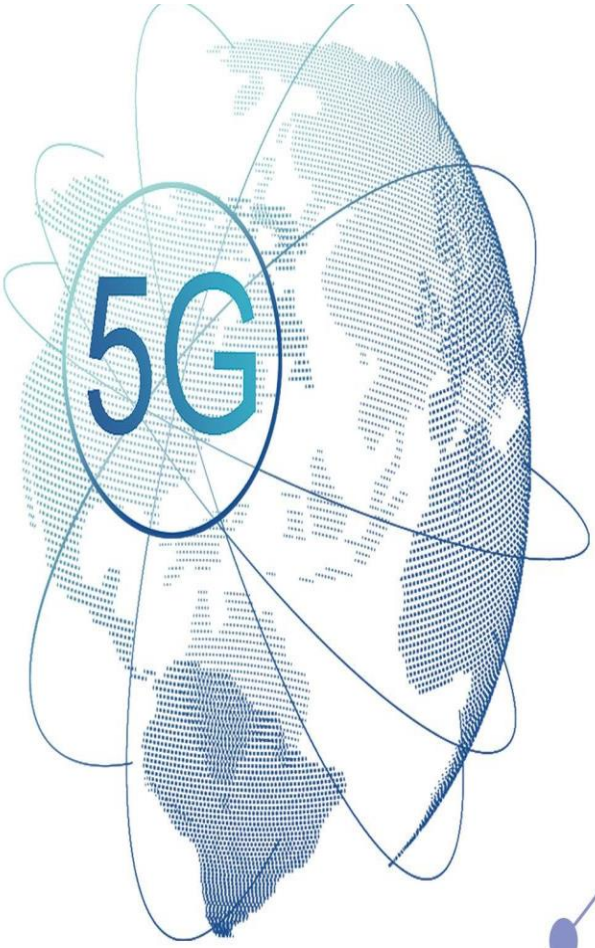
Parameter		Uplink	Downlink
Frequency Range	LTE FDD 1800 Band(optional bandwidth)	1710 - 1785 MHz	1805 - 1880 MHz
	LTE FDD 2100 Band(optional bandwidth)	1920 - 1980 MHz	2110 - 2170 MHz
Max. Output Power		-10dBm	46dBm/band
Max. Gain		50dB	50dB
ATT Adjustable Range		30dB, Step 1dB	30dB, Step 1dB
ATT Adjustable Error	≤ 20dB	≤ |±1|dB	≤ |±1|dB
	≥20dB	≤ |±1.5|dB	≤ |±1.5|dB
ALC Range		10dB	10dB
ALC Accuracy			≤ |±2.0| dB
Max. nondestructive input power		-10dBm	+10dBm
Frequency Error		≤ ±0.05ppm	
Intermodulation		≤-45dBc	
ACLR		≤-50dBc/5MHz; ≤-55dBc/10MHz	
ACPR		≤ -36dBc	
EVM		≤ 6%	
Ripple In Band(p-p)	LTE FDD 1800 Band	≤ 3dB	
	LTE FDD 2100 Band	≤ 3dB	
Spurious Emission(at out of band offset ±10MHz)	9kHz~1GHz	≤ -36dBm	
	1GHz~12.75GHz	≤ -30dBm	
Time Delay		≤ 9us	≤ 9us
VSWR		≤ 1.5	≤ 1.5

Optical Specification

Optical Connector	MU	FC/APC* 8, Independent optical path
	RU	FC/APC* 2
Optical Wavelength	MU	TX: 1550nm / RX: 1310nm, Single Mode
	RU	TX: 1310nm / RX: 1550nm, Single Mode
Optical Output Power	MU	-2dBm ±3
	RU	4dBm ±3
Fiber optic path attenuation range		0 to 7dB, Max 10dB
Fibercorenumber from MU to 1 RU		1 core, Single Mode

Mechanical Specification

Dimension	MU	482.6*295*43.6 mm
	RU	420*261*85 mm
Weight	MU	5Kg
	RU	11Kg
Control Function	MU	Local: RJ45(External)Remote: SMS, full-band LTE modem
	RU	Local: RJ45(External)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