



Rosenberger

5G Passive DAS



Passive solution for 5G IBS

- Rosenberger always follows the latest technology. To support the higher frequency band in coming 5G, Rosenberger researches and develops the IBS components up to 4GHz for the high frequency IBS coverage.

- ✓ Power splitter;
- ✓ Directional coupler and hybrid coupler;
- ✓ Low PIM cable load and attenuator;
- ✓ Modular POI solution for 5G re-farming.



Power Splitter

Specification			
P/N	S-2-9F-64F-05-T	S-3-9F-64F-05-T	S-4-9F-64F-05-T
	S-2-9F-DF-05	S-3-9F-DF-05	S-4-9F-DF-05
	S-2-9F-NF-05	S-3-9F-NF-05	S-4-9F-NF-05
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)		
Power handling	300W		
Connector type	4.3-10 / Din / N female		



Directional Coupler

Specification	
P/N	DC-XX-9F-64F-05-T
	DC-XX-9F-DF-05
	DC-XX-9F-NF-05
Frequency band	698~4000MHz
Coupling value	5dB, 6dB, 7dB, 10dB, 15dB, 20dB, 30dB
VSWR	≤1.25
Directivity	≥20dB
PIM	≤-161dBc@2×20W (For 4.3-10 interface)
	≤-155dBc@2×20W (For Din & N interface)
Power handling	300W
Connector type	4.3-10 / Din / N female



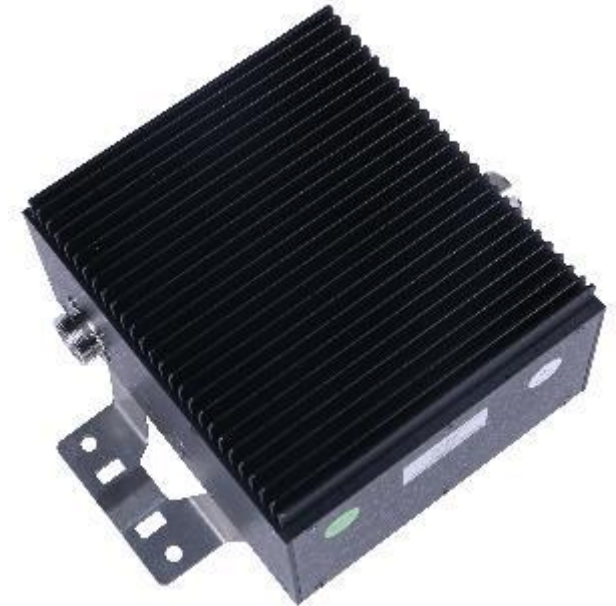
Hybrid Coupler

Specification	
P/N	HM-3-9F-64F-05-T
	HM-3-9F-DF-05
	HM-3-9F-NF-05
Frequency band	698~4000MHz
Coupling value	$3.0 \pm 0.8\text{dB}$
VSWR	≤ 1.25
Isolation	$\geq 22\text{dB}$
PIM	$\leq -161\text{dBc}@2 \times 20\text{W}$ (For 4.3-10 interface)
	$\leq -155\text{dBc}@2 \times 20\text{W}$ (For Din & N interface)
Power handling	300W
Connector type	4.3-10 / Din / N female



Low PIM Load / Attenuator

Specification	
P/N	L-XX-64M(F)-10-T3 / A-XX-XX-64-10-T3
	L-XX-DM(F)-10-T3 / A-XX-XX-D-10-T3
	L-XX-NM(F)-10-T3 / A-XX-XX-N-10-T3
Frequency band	698~4000MHz
VSWR	≤1.25
PIM	≤-161dBc@2 × 20W (For T3 series)
	≤-155dBc@2 × 20W (For T2 series)
	≤-150dBc@2 × 20W (For T1 series)
	≤-120dBc@2 × 20W (For T series)
Power handling	20W~200W
Connector type	4.3-10 / Din / N



IBS Antenna

IBS Antenna	
P/N	S-Wave 0640/0640-65-9D-O1 (Panel MIMO) S-Wave 0640/0640-OD-6-O2 (Omni MIMO) S-Wave 0640-65-9-O1 (Panel SISO) S-Wave 0640-OD-6-O1 (Omni SISO)
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	20dB typical
3 rd PIM	≤-153dBc@2 × 20W
Power handling	50W
Connector type	N / 4.3-10 female



Passive Solution for 5G

Combiners

Model No.	Frequency/MHz															
	LTE700			LTE800			GSM/L		GSM1800		UMTS2100		WLAN		LTE2600/WiMax	
	200	600	1000	1200	1800	2000	2200	2400	2600			3600	3800	4000	4500	5000
Dual-band Combiners																
CB-2-KH03-64F-01																
Triple-band Combiners																
CB-3-E0304-64F-A01																
Quad-band Combiners																
CB-4-E0304-64F-A01																

Modular POI

Rosenberger works on the modular POI to solve the 5G IBS upgrading deployment. It is designed with modular cabinets which is easy to change. Changing the relative modular can solve the upgrading problem, rather than changing the whole POI. The field installation is easy because of the “Plug and Play” design between the modules and the POI frame.

Features

- Easy upgrade
- Support N, 7/16 Din and 4.3-10 interface
- Excellent PIM performance
- PNP (Plug-and-Play) modular inside;
- Customized frequency band
- Better same band isolation
- Higher power handling





Thank you !