



Combiners -Path 1 / TMAs - Band 1
Combiners -Path 2 / TMAs - Band 2
Combiners -Path 3 / TMAs - Band 3
Combiners -Path 4 / TMAs - Band 4
Combiners -Path 5 / TMAs - Band 5

Description	700	800	850	900	1800	2100	2300	2600	Typecode	Comment
<b>X-Band Combiners</b>										
790 – 862MHz / 880 – 960MHz									RD0345	800 / 900 Combiner
1710 – 1880MHz / 1920 – 2170MHz									RD0526	1800 / 2100 Combiner
698 – 960 & 1710 – 1880MHz / 1920 – 2170MHz									RD0381	700 – 1800 / 2100 Combiner
698 – 960 & 1710 – 1880MHz / 1920 – 2170 & 2500 – 2690MHz									RD0481	700 – 900 & 1800 / 2100 & 2600 Combiner
698 – 2170MHz / 2500 – 2690MHz									RD0384	700 – 2100 / 2600 Combiner
790 – 862MHz / 880 – 960MHz / 1710 – 2690MHz									RD0490	800 / 900 / 1800 – 2600 Combiner
698 – 960MHz / 1710 – 1880MHz / 1920 – 2170MHz									RD0253	700 – 900 / 1800 / 2100 Combiner
698 – 960MHz / 1710 – 1880MHz / 2500 – 2690MHz									RD0379	700 – 900 / 1800 / 2600 Combiner
698 – 960MHz / 1710 – 1880MHz / 1920 – 2170 & 2500 – 2690MHz									RD0473	700 – 900 / 1800 / 2100 & 2600 Combiner
698 – 960MHz / 1710 – 1800 & 1920 – 2170MHz / 2500 – 2690MHz									RD0472	700 – 900 / 1800 & 2100 / 2600 Combiner
698 – 960 & 1710 – 1880 MHz / 1920 – 2170MHz / 2500 – 2690MHz									RD0382	700 – 900 & 1800 / 2100 / 2600 Combiner
1710 – 1880MHz / 1920 – 2170MHz / 2500 – 2690MHz									RD0286	1800 / 2100 / 2600 Combiner
1710 – 1880MHz / 1920 – 2170MHz / 2300 – 2400MHz									RD0568	1800 / 2100 / 2300 Combiner
698 – 960MHz / 1710 – 1880MHz / 1920 – 2170MHz / 2500 – 2690MHz									RD0452	900 / 1800 / 2100 / 2600 Combiner
<b>Single Band TMAs</b>										
A = active path										
LTE800 TMA			A						RD0423	800/900 full band MHA, smaller than majority of single band MHAs
Single TMA900 - 25MHz BW				A					RD0366	Single unit ideal for spatial diversity systems
TMA900 - 25MHz BW				A					RD0364	25MHz bandwidth, tunable across the band. Higher BTS voltage operation
TMA900 - 35MHz BW				A					RD0337	35MHz bandwidth covering P-GSM & E-GSM. Higher BTS voltage operation
TMA1800					A				RD0266	Full band 1800MHz dual MHA
<b>Dual Band &amp; Bypassed TMAs</b>										
A = active path, B = bypass path										
TMA800/900 Dual Band, common antenna port for 8 & 9		A		A					RD0423	800/900 full band MHA, common antenna port for 8 & 9
TMA2100 with 1800 RF bypass					B	A			RD0344	2100MHz dual MHA with 1800MHz bypass
TMA1800/2100 Miniaturised dual band, common antenna port					A	A			RD0448	World's smallest dual band 18/21 MHA - common ANT ports for 1800 & 2100
TMA1800/2100 Miniaturised dual band, separate antenna port					A	A			RD0449	World's smallest dual band 18/21 MHA - separate ANT ports for 1800 & 2100
TMA2100/2600 common antenna port						A		A	RD0453	World's smallest dual band 21/26 MHA - common ANT ports for 2100 & 2600
TMA2100/2600 separate antenna port						A		A	RD0454	World's smallest dual band 21/26 MHA - separate ANT ports for 2100 & 2600
<b>Same Band Combiners</b>										
800/800/900 Combiner, Adjacent 800 spectrum									RD0476	Combines adjacent 800 carriers (zero guard band) with 900MHz
900/900 Passive Type 1 Combiner - new, smaller, design									RD0466	All 900 paths full band, single Tx port per BTS, Rx loss ~ 3dB
900/900 Passive Type 1 Combiner, 25MHz BW									RD0277	All paths 25MHz, single Tx port per BTS, Rx loss ~ 4.5dB. RD0466 newer, cheaper
900/900 Active Type 1 Combiner, 25MHz BW									RD0365, RD0292	Rx active, 25MHz BW, single Tx port per BTS. RD0365 pole mount, RD0292 tray mount
900/900 Passive Type 1 Combiner, 35MHz BW									RD0339	All paths full band, single Tx port per BTS, Rx loss ~ 4.5dB. RD0466 newer, cheaper
900/900 Active Type 1 Combiner, 35MHz BW									RD0310	Rx active, full band, single Tx port per BTS. RD0338 is pole mount version
900/900 Passive Type 2 Combiner									RD0282	Tx: BTS1 2 ports, BTS2 1 port. Rx: full band loss ~ 4.5dB. RD0317 is a frequency variant
900/900 Active Type 2 Combiner									RD0389	Rx active. Tx: BTS1 2 ports, BTS2 1 port. RD0287, RD0299 & RD0316 are variants
900/900 Type 4 Combiner									RD0362	Supports a wide range of 900/900 non-adjacent spectrum combining
900/900/1800-2100 Combiner (Type 5)									RD0312	Two low loss 900/900 inputs combined with a wideband 1800-2100 path
900/900/1800/2100 Combiner (Type 6)									RD0318	Two low loss 900/900 inputs combined with separate 1800 and 2100 paths
1800/2100/2100 Combiner									RD0250 / RD0313	Two very low loss 2100/2100 inputs combined with an 1800MHz path
1800/1800 Type 4 Filter Combiner									RD0369	Supports a wide range of low loss non-adjacent 1800/1800 combining
2100/2100 Capacity Upgrade Combiner									RD0295	Very low loss 2100 Rx/Tx combined with a second low loss 2100 Tx path
2100/2100 Type 1 Passive Combiner									RD0361	All paths full band, single Tx port per BTS, Rx loss ~ 4.5dB. RD0469 newer, cheaper
2100/2100 Type 1 Passive Combiner - new, smaller design									RD0469	All 2100 paths full band, single Tx port per BTS, Rx loss ~ 3dB
2100/2100 Type 1 Active Combiner									RD0385	Active, all paths full band, single Tx port per BTS, Rx gain 9dB (high voltage)
2100/2100 Type 4 Combiner									RD0367	Supports a wide range of low loss non-adjacent 2100/2100 combining
2600/2600 Combiner									RD0437	Supports a wide range of 2600/2600 adjacent & non-adjacent combining
<b>Interference Filters</b>										
L800 / DTT interference filter - communal aerial system ch59									RD0479	
L800 / DTT interference filter - communal aerial system ch60									RD0480	
2300 TDD-TDD interference filter									RD0419	
2600 TDD-FDD interference filter									RD0456	2600 LTE-FDD / LTE-TDD interference mitigation filter
<b>Ancillary Devices</b>										
700-2100MHz bias-T (current injector)									RD0305	700-2100MHz Bias Tee
Dual TMA Interface Module (DTIM)									RD0328	DTIM allows two CWA MHAs to share a set of feeders
790-2690MHz Smart bias-T									RD0459 & RD0505	790-2690MHz Smart Bias Tee
E-PDU									RD0460	Ethernet enabled power distribution unit (E-PDU)
PDU									RD0300	Power distribution unit (PDU)
Voltage Adaption Unit									RD0363 & RD0371	Allows 12V MHAs to be used with higher output voltage (30V) BTSs