

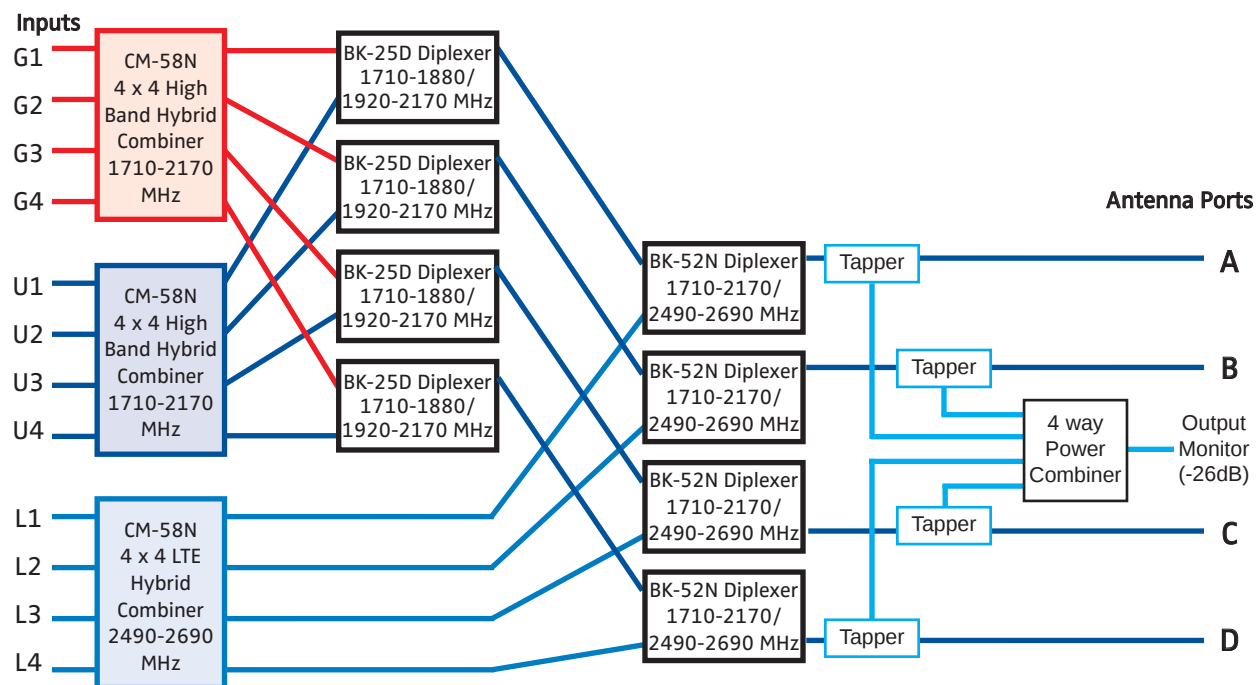
Preliminary Data

- ◆ Input bands for GSM-1800, UMTS & LTE-2600: 1710 to 2700 MHz
- ◆ 12 Inputs to 4 Combined Outputs
- ◆ Guaranteed PIM, and Low Loss
- ◆ High Reliability, RoHS
- ◆ Standard 4RU EIA Rack (7")



These broadband RF Combiner Boxes have been designed to meet the neutral host needs of in-building systems, with low passive intermodulation (PIM). The system combines up to 12 wireless carriers in three operating bands to 4 multiple antenna feeds or distribution cables. Through the use of three 4 x 4 hybrid networks and 8 diplexers, the total loss for each path is less than 1.5 dB, provided all four outputs are utilized.

On this model a test port is provided to measure the combined output of all 4 feeds on a Spectrum Analyzer, avoiding disconnection. Typical isolation between inputs in the same band is 25 dB, between bands 58 dB. (09/10)



Inputs G1 to G4:	1710 - 1880 MHz, GSM Band
Inputs M1 to M4:	1710 - 2170 MHz, UMTS Band
Inputs L1 to L4:	2490 - 2700 MHz, LTE Band
Input Isolation:	Within Band: >22 dB Between Bands: >55 dB
Input Return Loss:	>19 dB (>23 dB typical)
Outputs A, B, C, D:	1710 - 2700 MHz
Coupling (In-Out):	7 ± 0.5 dB (all paths)
Power per input:	<60W avg., 3 kW peak
Total power in:	<300W average
Impedance:	50Ω nominal
Environment:	-15°C to +65°C, Indoor
PIM (Intermod):	<-142 dBc (+43dBm x2)
Finish: Housing:	RoHS coated aluminum
Connectors:	Triplate, DIN input, N output
Weight:	33 lbs (15 kg) nominal

Standard Combiner Boxes - all provide 4 combined N(f) outputs

Model Number	Total N(f) Inputs	380 - 520 UHF/Tetra	698 - 793 LTE-700	824 - 960 Cellular/GSM	1710-1880 GSM-1800	1920-2170 GSM-1900/UMTS	2400-2700 LTE/WiMAX	Other Features
KM-90N	8	-	xxxxxxx[4]	xxxxxxx	xxxxxxxxxxxxxxxxxxxx[4]	xxxxxxxxxxxxxxxxxxxx		-
KM-91N	12	xx[4]xx	xxxxxxx[4]	xxxxxxx	xxxxxxxxxxxxxxxxxxxx[4]	xxxxxxxxxxxxxxxxxxxx		-
KM-92N	12	-	xxxxxxx[4]	xxxxxxx	xxxxxxx[4]	xxxxxxx	xx[4]xx	-
KM-93N	16	xx[4]xx	xxxxxxx[4]	xxxxxxx	xxxxxxx[4]	xxxxxxx	xx[4]xx	-
KM-94N	16	-	xx[4]xx	xx[4]xx	xxxxxxx[4]	xxxxxxx	xx[4]xx	-
KM-95N	12	-			xx[4]xx	xx[4]xx	xx[4]xx	-
KM-99N	8	-	xxxxxxx[4]	xxxxxxx	xxxxxxxxxxxxxxxxxxxx[4]	xxxxxxxxxxxxxxxxxxxx		Test Port*

*Provides SMA test port to monitor sum of all outputs (Available on all models to order)

Example Outline
