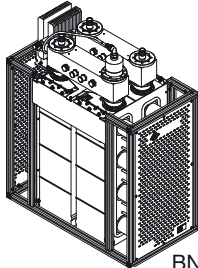
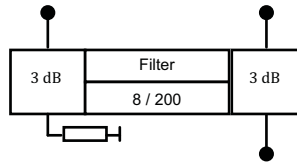
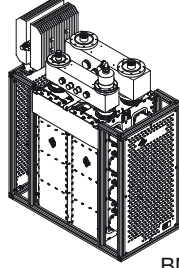


CCS UHF CIB COMBINERS

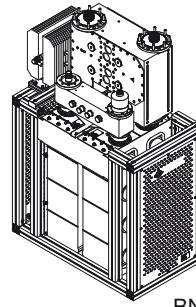
- **CCS** compact design
- integrated mask filters for DTV
- adjacent channel operation
- for 6, 7 and 8 MHz channel bandwidth
- temperature compensated
- tuneable within the whole UHF range
- liquid cooled filter



BN 57 49 64 A0010



BN 57 49 89 A0010



BN 57 49 79 A0020

Part number Cooling	BN 57 49 64 A0010 liquid cooling			BN 57 49 89 A0010 liquid cooling			BN 57 49 79 A0020 liquid cooling		
Frequency range	470 - 860 MHz								
Channel spacing	≥ 0								
Narrow band input	3 1/8" EIA male								
Filter type integrated cavities/size	8/200 ≡ BN 616544								
Temperature stability	≤ 2 kHz / K								
Harmonics attenuation	≥ 50 dB for f ≤ 860 MHz								
DTV Mask filtering	DVB-T @ 8 MHz (Û/U _{rms} =13 dB)			ISDB-T @ 6 MHz (Û/U _{rms} =13 dB)			ATSC @ 6 MHz (Û/U _{rms} =13 dB)		
Average input power	≤ 23 kW @ 0 - 1000 m			≤ 20 kW @ 0 - 500 m			≤ 22 kW @ 0 - 600 m		
The input power of liquid cooled filters must be reduced if installed more than 500 m above sea level.	≤ 20 kW @ 2000 m			≤ 18 kW @ 1200 m			≤ 20 kW @ 1400 m		
	≤ 18 kW @ 2600 m			≤ 16 kW @ 2000 m			≤ 18 kW @ 2000 m		
	≤ 16 kW @ 3200 m			≤ 14 kW @ 2800 m			≤ 16 kW @ 2600 m		
	≤ 14 kW @ 3800 m			≤ 12 kW @ 3400 m			≤ 14 kW @ 3300 m		
	≤ 12 kW @ 4400 m			≤ 10 kW @ 4200 m			≤ 12 kW @ 4000 m		
Tuning instruction	AS8067			AS8074			AS8066		
Insertion loss & Mask filtering (alternative tuning on request)	470 MHz	860 MHz		470 MHz	803 MHz		470 MHz	820 MHz	
	f ₀	≤ 0.4 dB	≤ 0.5 dB	f ₀	≤ 0.45 dB	≤ 0.5 dB	f ₀	≤ 0.5 dB	≤ 0.55 dB
	f ₀ ± 3.805	≤ 1.0 dB	≤ 1.4 dB	f ₀ ± 2.79	≤ 1.20 dB	≤ 1.5 dB	f ₀ ± 2.69	≤ 1.0 dB	≤ 1.30 dB
	f ₀ ± 3.885	≤ 1.5 dB	≤ 1.7 dB	f ₀ ± 3.15	≥ 15 dB		f ₀ ± 3.0	≥ 4 dB	
	f ₀ ± 4.2	≥ 15 dB		f ₀ ± 4.5	≥ 30 dB		f ₀ ± 3.25	≥ 18 dB	
	f ₀ ± 6	≥ 40 dB		f ₀ ± 9	≥ 55 dB		f ₀ ± 9	≥ 64 dB	
	f ₀ ± 12	≥ 55 dB							
Group delay variation	Δτ ≤ 700 ns			Δτ ≤ 500 ns			Δτ ≤ 400 ns		
Wide band input	3 1/8" EIA male			4 1/2" EIA male			52-120 BT male		
Average input power	≤ 17.5 kW			≤ 33 kW			≤ 60 kW		
	Attention: The power at the wide band input must be reduced by 50 % of the power fed into the narrow band input								
DTV Mask filtering	no								
Insertion loss	≤ 0.1 dB (non adjacent)								
Output	3 1/8" EIA male			4 1/2" EIA male			52-120 BT male		
Peak output voltage	≤ 12.5 kV			≤ 15.5 kV			≤ 19.5 kV		
Isolation between inputs	≥ 35 dB								
VSWR (one WB channel)	≤ 1.06								
Dimensions (L x W x H) mm	900 x 480 x 1200			900 x 480 x 1200			900 x 520 x 1400		
Weight	≈ 170 kg			≈ 180 kg			≈ 235 kg		
Environmental conditions	for limitations see „Environmental Conditions for Broadcast Products“								