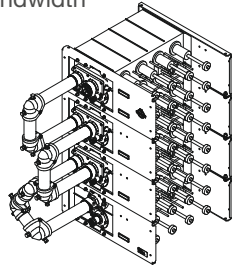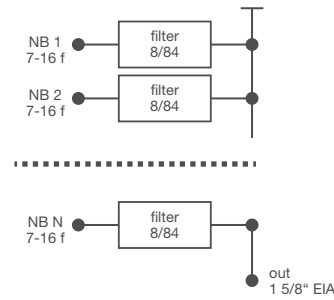# UHF Manifold Combiners

- Compact design as 19" slide-in unit
- Integrated mask filters for DTV
- Applicable within the whole UHF range
- For 6, 7 and 8 MHz channel bandwidth
- Temperature compensated

Typical design

Part Number	BN 574922C0003 2 Inputs	BN 574923C0003 3 Inputs	BN 574924C0003 4 Inputs	BN 574921C0003 5 Inputs	BN 574998C0003 6 Inputs
Frequency range	470 - 860 MHz				
Narrowband input	7-16 female				
Filter type integrated cavities/size	**8/84 ≡ BN 616403**				
Temperature stability	≤ 2 kHz / K				
Harmonics attenuation	≥ 50 dB for f ≤ 950 MHz				
Standard	DVB-T @ 8 MHz, ($\hat{U}/U_{rms}$=13 dB)				
Average input power/channel width	**750 W per input for non-adjacent channels or 600 W for adjacent channels**				
Channel spacing	≥ 0 (pairs of adjacent channels possible)				
Tuning instruction AS8068 Insertion loss for non-adjacent channels	f_0 0.6-0.75 dB / $f_0 \pm 3.805$ 1.8-2.2 dB / $f_0 \pm 3.885$ 2.1-2.6 dB	f_0 0.6-0.9 dB / $f_0 \pm 3.805$ 1.8-2.3 dB / $f_0 \pm 3.885$ 2.1-2.7 dB	f_0 0.6-1.0 dB / $f_0 \pm 3.805$ 1.8-2.4 dB / $f_0 \pm 3.885$ 2.1-2.8 dB	f_0 0.6-1.1 dB / $f_0 \pm 3.805$ 1.8-2.5 dB / $f_0 \pm 3.885$ 2.1-2.9 dB	f_0 0.6-1.2 dB / $f_0 \pm 3.805$ 1.8-2.6 dB / $f_0 \pm 3.885$ 2.1-3.0 dB
Mask filtering			$f_0 \pm 4.2$ ≥ 15 dB / $f_0 \pm 6$ ≥ 40 dB / $f_0 \pm 12$ ≥ 55 dB		
Group delay variation	$\Delta\tau \le 600$ ns (at non-adjacent channel slopes)				
Isolation between inputs	≥ 35 dB (at non-adjacent channel slopes)				
Standard	ISDB-T @ 6 MHz, ($\hat{U}/U_{rms}$=13 dB)				
Average input power/channel width	**600 W per input for non-adjacent channels or 500 W for adjacent channels**				
Channel spacing	≥ 0 (pairs of adjacent channels possible)				
Tuning instruction AS8091 Insertion loss for non-adjacent channels	f_0 0.7-1.3 dB / $f_0 \pm 2.79$ 1.8-3.1 dB	f_0 0.7-1.4 dB / $f_0 \pm 2.79$ 1.8-3.2 dB	f_0 0.7-1.5 dB / $f_0 \pm 2.79$ 1.8-3.3 dB	f_0 0.7-1.6 dB / $f_0 \pm 2.79$ 1.8-3.4 dB	f_0 0.7-1.7 dB / $f_0 \pm 2.79$ 1.8-3.5 dB
Mask filtering			$f_0 \pm 3.15$ ≥ 15 dB / $f_0 \pm 4.5$ ≥ 30 dB / $f_0 \pm 9$ ≥ 55 dB		
Group delay variation	$\Delta\tau \le 500$ ns (at non-adjacent channel slopes)				
Isolation between inputs	≥ 35 dB (at non-adjacent channel slopes)				
Standard	ATSC 1.0 @ 6 MHz, ($\hat{U}/U_{rms}$=11 dB)				
Average input power/channel width	**600 W per input for non-adjacent channels or 500 W for adjacent channels**				
Channel spacing	≥ 0 (pairs of adjacent channels possible)				
Tuning instruction AS8051 Insertion loss for non-adjacent channels	f_0 0.9-1.3 dB / $f_0 \pm 2.69$ 1.9-2.7 dB	f_0 0.9-1.4 dB / $f_0 \pm 2.69$ 1.9-2.8 dB	f_0 0.9-1.5 dB / $f_0 \pm 2.69$ 1.9-2.9 dB	f_0 0.9-1.6 dB / $f_0 \pm 2.69$ 1.9-3.0 dB	f_0 0.9-1.7 dB / $f_0 \pm 2.69$ 1.9-3.1 dB
Mask filtering			$f_0 \pm 3$ ≥ 3 dB / $f_0 \pm 3.25$ ≥ 18 dB / $f_0 \pm 9$ ≥ 64 dB		
Group delay variation	$\Delta\tau \le 400$ ns (at non-adjacent channel slopes)				
Isolation between inputs	≥ 35 dB (at non-adjacent channel slopes)				
Output	1 5/8" SMS clamp				
VSWR	≤ 1.17				
Dimensions (L x W x H) mm	720 x 483 x 354 (8RU)	720 x 483 x 532 (12RU)	720 x 483 x 809 (16RU)	720 x 483 x 888 (20RU)	720 x 483 x 1066 (24RU)
Weight	≈ 34 kg	≈ 51 kg	≈ 68 kg	≈ 85 kg	≈ 102 kg
Environmental conditions	For limitations see „Environmental Conditions for Broadcast Products".				