

## **CCS** UHF CIB Combiners



- Integrated mask filters for DTV
- Adjacent channel operation
   Temperature compensated

<ul><li>Temperature compensated</li><li>For 6, 7 and 8 MHz channel ba</li></ul>			
<ul> <li>Tuneable within the whole UHF range</li> <li>Liquid cooled filters and couplers</li> </ul>			
BN 576085A2080	BN 576(	D86A2080	BN 576087A2080
Part Number Cooling	BN 576085A2080 Liquid Cooling	BN 576086A2080 Liquid Cooling	BN 576087A20800 Liquid Cooling
Frequency range		470 - 790 MHz	
Channel spacing		$\geq 0$	
Narrowband input		4 1/2" EIA male	
Filter type integrated cavities/size		8/230 ≡ BN 616670	
Temperature stability		$\leq$ 2 kHz / K	
Harmonics attenuation		$\ge$ 50 dB for f $\le$ 860 MHz	
DTV mask filtering	DVB-T @ 8 MHz (Û/U <sub>rms</sub> =13 dB)	ISDB-T @ 6 MHz (Û/U <sub>ms</sub> =13 dB)	ATSC 1.0 @ 6 MHz (Û/U <sub>rms</sub> =11 dB)
Average input power The input power of liquid cooled filters must be reduced if in- stalled more than 500 m above sea level.	≤ <b>33 kW</b> @ 0 -500 m ≤ <b>28 kW</b> @ 1600 m ≤ <b>24 kW</b> @ 2400 m ≤ <b>20 kW</b> @ 3400 m ≤ <b>16 kW</b> @ 4200 m	<ul> <li>≤ 27 kW @ 0 -500 m</li> <li>≤ 24 kW @ 1200 m</li> <li>≤ 20 kW @ 2400 m</li> <li>≤ 16 kW @ 3400 m</li> <li>≤ 12 kW @ 4600 m</li> </ul>	≤ <b>33 kW</b> @ 0 - 500 m ≤ <b>28 kW</b> @ 1600 m ≤ <b>24 kW</b> @ 2400 m ≤ <b>20 kW</b> @ 3400 m ≤ <b>16 kW</b> @ 4200 m
Tuning instruction	AS8124	AS8128	AS8127
Insertion loss & mask filtering (alternative tuning on request)	$\begin{array}{lll} & 470 \; \text{MHz} & 790 \; \text{MHz} \\ f_0 & \leq 0.4 \; \text{dB} & \leq 0.45 \; \text{dB} \\ f_0 \pm 3.805 & \leq 1.05 \; \text{dB} & \leq 1.10 \; \text{dB} \\ f_0 \pm 3.885 & \leq 1.25 \; \text{dB} & \leq 1.35 \; \text{dB} \\ f_0 \pm 4.2 & \geq 15 \; \text{dB} \\ f_0 \pm 6 & \geq 40 \; \text{dB} \\ f_0 \pm 12 & \geq 55 \; \text{dB} \end{array}$	$\begin{array}{llllllllllllllllllllllllllllllllllll$	$\begin{array}{lll} & 470 \mbox{ MHz} & 790 \mbox{ MHz} \\ f_0 & \leq 0.45 \mbox{ dB} & \leq 0.5 \mbox{ dB} \\ f_0 \pm 2.69 & \leq 1.00 \mbox{ dB} & \leq 1.1 \mbox{ dB} \\ f_0 \pm 3.0 & \geq 4 \mbox{ dB} \\ f_0 \pm 3.25 & \geq 18 \mbox{ dB} \\ f_0 \pm 9 & \geq 64 \mbox{ dB} \end{array}$
Group delay variation	$\Delta \tau \leq 700 \text{ ns}$	$\Delta \tau \leq 550 \text{ ns}$	$\Delta \tau \leq 450 \text{ ns}$
Wideband input	4 1/2" EIA male	52-120 BT male	6 1/8" EIA male
Average input power	≤ <b>33 kW</b>	≤ 60 kW	≤ 80 kW
	Attention: The power at the	e wideband input must be reduced into the narrowband input.	d by 50 % of the power fed
DTV mask filtering		No	
Insertion loss		$\leq$ 0.1 dB (non adjacent)	
Output	4 1/2" EIA male	52-120 BT male	6 1/8" EIA male
Peak output voltage	≤ 15.5 kV	≤ 19.5 kV	$\leq$ 24 kV
Average output power	-	≤ 60 kW	≤ 78 kW
Isolation between inputs		≥ 35 dB	
VSWR (one WB channel)		≤ 1.06	
Dimensions (L x W x H) mm	900 x 570 x 1400	900 x 570 x 1600	900 x 570 x 1650
Weight	≈ 210 kg	≈ 260 kg	≈ 285 kg

filter

8/230

3 dB

3 dB

Environmental conditions

spinner-group.com | Data subject to change without notice | Edition N