

UHF 6-Pole 170 mm Balanced Combiner

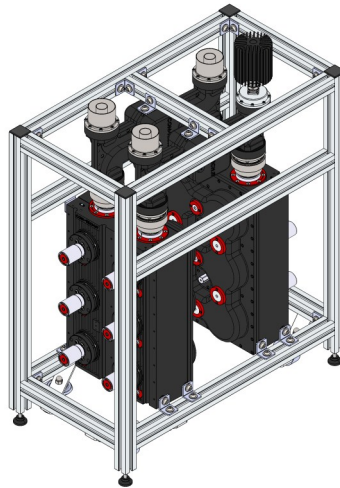
DF6D170RC

FEATURES

- *DualCross*: Double Cross Coupling
- *NDR*
- *MultiStep*: Ultra-Flat Freq. Response Hybrid Couplers
- Adjacent-Channel Combination
- Full-Band Tunability
- Temperature Stabilization
- DC-Short
- Modular Connector System
- Modular Frame System
- 10-Year Warranty

OPTIONS

- Heat Sinks


DVB-T2
 TERRESTRIAL

ATSC
 ADVANCED TELEVISION
 SYSTEMS COMMITTEE

ISDB-T

SPECIFICATIONS

Code / Revision	B-DF6D170RC/n / A <i>n</i> : Number of Filtered Inputs		
No. of Poles / Cavity Size	6-Pole DualCross / 170 mm		
Frequency Range / Bandwidth	470-862 MHz / 6-8 MHz		
Temperature Stability	< 2 kHz/K		
Max Operating Temperature (Body)	65°C (149°F)		
Environmental Conditions	-5 to +55°C (+23 to +131°F), IP60		
Dimensions / Weight ⁽¹⁾	n=1: 900x475x1025 mm / 111 kg n≥2: 900x(483·n)x1025 mm / 111·n kg		
Links	3+1/8" Rigid Line		
Connectors (NB Inputs) ⁽²⁾	1x 100 mm D-PC100M 3+1/8" FastLine Socket (Default) D-PC100N 3+1/8" FastLine Flange D-PC100P 4+1/2" FastLine Socket D-PC100Q 4+1/2" FastLine Flange		
Connectors (WB Input; Output) ⁽²⁾	2x 100 mm D-PC100M 3+1/8" FastLine Socket (Default) D-PC100N 3+1/8" FastLine Flange D-PC100P 4+1/2" FastLine Socket D-PC100Q 4+1/2" FastLine Flange		
Options ⁽²⁾	O-HTF.03 Heat Sinks		
	DVB-T2 / DVB T (8 MHz)	ATSC 3.0 / ATSC 1.0 (6 MHz)	ISDB-T (6 MHz)
Mask	Non Critical	Full Service	Non Critical, Sub Critical ⁽¹⁸⁾
Tuning Code	T-6D.13 / T-6D.01	T-6D.16 / T-6D.05	T-6D.14
Max RMS NB Input Power ^(3,4)	Default (700 MHz) 6.3 kW Heat Sinks 8.8 kW	Default (700 MHz) 5.4 kW Heat Sinks 7.5 kW	Default (700 MHz) 5.0 kW Heat Sinks 6.9 kW
Max RMS Output Power ⁽³⁾	22.0 kW	22.0 kW	22.0 kW
NB Insertion Loss ⁽⁴⁾	(470 MHz) (700 MHz) C.F. < 0.27 dB < 0.33 dB ±3.885 MHz < 0.95 dB < 1.14 dB ±3.805 MHz < 0.78 dB < 0.94 dB + 0.06·n dB	(470 MHz) (700 MHz) C.F. < 0.36 dB < 0.47 dB ±2.916 MHz < 0.62 dB < 0.75 dB ±2.69 MHz < 0.49 dB < 0.59 dB + 0.06·n dB	(470 MHz) (700 MHz) C.F. < 0.37 dB < 0.45 dB ±2.79 MHz < 0.84 dB < 1.01 dB + 0.06·n dB
WB Insertion Loss ⁽⁴⁾	< 0.06·n dB	< 0.06·n dB	< 0.06·n dB
Selectivity	C.F. ± 4.2 MHz > 4 dB C.F. ± 6.0 MHz > 20 dB C.F. ± 12.0 MHz > 41 dB	C.F. ± 3.5 MHz > 6 dB / > 10 dB C.F. ± 6.0 MHz > 29 dB C.F. ± 9.0 MHz > 63 dB	C.F. ± 3.15 MHz > 7 dB C.F. ± 4.5 MHz > 22 dB C.F. ± 9.0 MHz > 47 dB
Harmonic Attenuation ⁽⁶⁾	> 40 dB up to 1 GHz	> 40 dB up to 1 GHz	> 40 dB up to 1 GHz
NB Return Loss (VSWR) ⁽⁴⁾	> 26 dB (1.11)	> 26 dB (1.11)	> 26 dB (1.11)
WB Return Loss (VSWR) ⁽⁴⁾	Single Ch. > 30 dB (1.07) All band > 26 dB (1.11)	Single Ch. > 30 dB (1.07) All band > 26 dB (1.11)	Single Ch. > 30 dB (1.07) All band > 26 dB (1.11)
Isolation Between Inputs ⁽⁴⁾	> 30 dB	> 30 dB	> 30 dB
Group Delay Variation ⁽⁴⁾	< 360 ns / < 330 ns	< 320 ns / < 240 ns	< 360 ns

⁽¹⁾ Approximate, default configuration ⁽²⁾ Other Other Connectors, Options, Tunings available ⁽³⁾ Altitude < 1500 m (4,900 ft.), Free air, Ambient temp. < 30 °C (86 °F) ⁽⁴⁾ Non-adjacent channels ⁽⁵⁾ Glycol 30%, Liquid temp. 45 °C (113 °F), Liquid flow 6 l/min (1.6 gal/min) ⁽⁶⁾ Up to 3rd harmonic atten. with LP/LC Series Lowpass Filter ⁽¹⁸⁾ Can be achieved with a suitable TX spec-trum