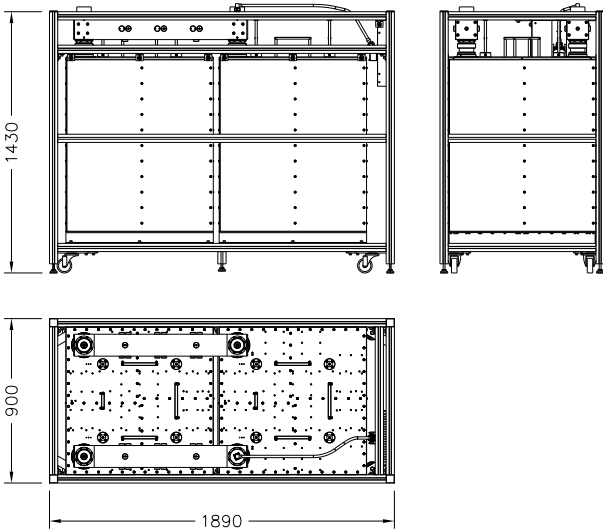
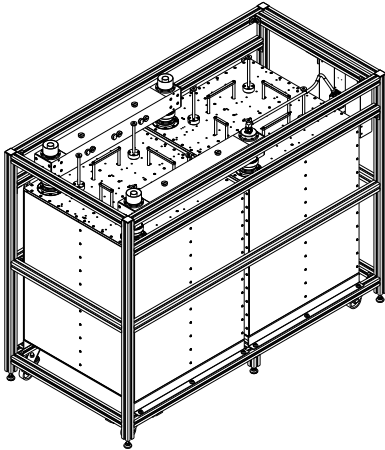


FM 4-Pole 400 mm Balanced Combiner

DF4E400RF



FEATURES

- Cross Coupling
- 0.4 MHz Minimum Channel Spacing
- Full-Band Tunability
- Temperature Stabilization
- DC-Short
- Modular Connector System
- Modular Frame System
- 10-Year Warranty

OPTIONS

- Heat Sinks

SPECIFICATIONS

Code / Revision	B-DF4E400RF/n / A <i>n: Number of Filtered Inputs</i>
No. of Poles / Cavity Size	4-Pole / 400 mm
Frequency Range	87.5-108 MHz
Frequency Spacing	≥ 0.4 MHz
Temperature Stability	< 400 Hz/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: 1890x900x1430 mm / 265 kg n≥2: 1890x(908·n)x1430 mm / 265·n kg
Operating Position	As shown in drawing only
Links	1+5/8" Rigid Line
Connectors ⁽²⁾	3x 100 mm NB Input; WB Input; Output 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-HTC.15 Heat Sinks O-MTS.01 70 °C (158 °F) N.C. Thermoswitch

TUNING DATA ⁽²⁾

	1.2		1.0		0.8	
Frequency Spacing (Bandwidth)	0.8 MHz (1.2 MHz)		0.6 MHz (1.0 MHz)		0.4 MHz (0.8 MHz)	
Tuning Code	T-4F.01		T-4F.02		T-4F.04	
Max RMS NB Input Power ⁽³⁾		(108 MHz)		(108 MHz)		(108 MHz)
	Default	13.7 kW	Default	10.6 kW	Default	7.6 kW
	Heat Sinks	16.4 kW	Heat Sinks	12.8 kW	Heat Sinks	9.1 kW
Max RMS Output Power ⁽³⁾	65.0 kW		65.0 kW		65.0 kW	
NB Insertion Loss		(87.5 MHz) (108 MHz)		(87.5 MHz) (108 MHz)		(87.5 MHz) (108 MHz)
	C.F.	< 0.18 dB < 0.19 dB	C.F.	< 0.23 dB < 0.24 dB	C.F.	< 0.33 dB < 0.34 dB
	±150 kHz	< 0.23 dB < 0.24 dB + 0.05·n dB	±150 kHz	< 0.33 dB < 0.34 dB + 0.05·n dB	±150 kHz	< 0.89 dB < 0.93 dB + 0.05·n dB
WB Insertion Loss	< 0.06·n dB		< 0.06·n dB		< 0.06·n dB	
Selectivity	C.F. ± 1.2 MHz > 25 dB		C.F. ± 1.0 MHz > 25 dB		C.F. ± 0.8 MHz > 25 dB	
Harmonic Attenuation	> 40 dB up to 324 MHz		> 40 dB up to 324 MHz		> 40 dB up to 324 MHz	
NB Return Loss (VSWR)	> 26 dB (1.11)		> 26 dB (1.11)		> 26 dB (1.11)	
WB Return Loss (VSWR)	Single Ch.	> 30 dB (1.07)	Single Ch.	> 30 dB (1.07)	Single Ch.	> 30 dB (1.07)
	All band	> 24 dB (1.14)	All band	> 24 dB (1.14)	All band	> 24 dB (1.14)
Isolation Between Inputs	> 35 dB		> 35 dB		> 35 dB	
Group Delay Variation	< 100 ns		< 250 ns		< 1500 ns	

⁽¹⁾ Approximate, default configuration ⁽²⁾ Other Connectors, Options, Tunings available ⁽³⁾ Altitude < 1500 m (4.900 ft.), Free air, Ambient temp. < 30 °C (86 °F)