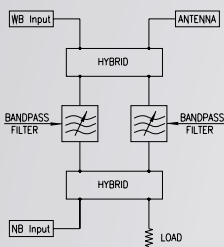


UC/FM/LB2-20

FM DIRECTIONAL FILTER TYPE COMBINER

FEATURES

- FM double bridge channel combiner
- 2 pole / 500 mm (19.7 in)
- adjustable selectivity
- temperature compensated



ELECTRICAL AND MECHANICAL DATA

COMBINER TYPE	UC/FM/LB2-20/A		UC/FM/LB2-20/B		UC/FM/LB2-20/C	
FREQUENCY RANGE	87.5 ÷ 108 MHz		87.5 ÷ 108 MHz		87.5 ÷ 108 MHz	
- wideband input	Tunable over entire FM range		Tunable over entire FM range		Tunable over entire FM range	
- narrowband input	Tunable over entire FM range		Tunable over entire FM range		Tunable over entire FM range	
INPUTS AND OUTPUT IMPEDANCE	50 ohm		50 ohm		50 ohm	
RETURN LOSS	≥ 26 dB		≥ 26 dB		≥ 26 dB	
- wideband input	≥ 32 dB		≥ 32 dB		≥ 32 dB	
- narrowband input (at carrier fo)	≥ 32 dB		≥ 32 dB		≥ 32 dB	
INSERTION LOSS (at carrier fo)	≤ 0.18 dB		≤ 0.18 dB		≤ 0.18 dB	
NB input with freq. spacing ±2.0 MHz	≤ 0.20 dB		≤ 0.20 dB		≤ 0.20 dB	
NB input with freq. spacing ±1.6 MHz	≤ 0.10 dB		≤ 0.10 dB		≤ 0.10 dB	
WB input	≤ 0.10 dB		≤ 0.10 dB		≤ 0.10 dB	
ISOLATION (at carrier fo)	≥ 35 dB (typical)		≥ 35 dB (typical)		≥ 35 dB (typical)	
- Narrowband input to wideband input	≥ 50 dB		≥ 50 dB		≥ 50 dB	
- Wideband input to narrowband input	≥ 50 dB		≥ 50 dB		≥ 50 dB	
GROUP DELAY	≤ 25 ns at fo ±100 kHz		≤ 25 ns at fo ±100 kHz		≤ 25 ns at fo ±100 kHz	
(With 1.6 MHz frequency spacing)	≤ 50 ns at fo ±150 kHz		≤ 50 ns at fo ±150 kHz		≤ 50 ns at fo ±150 kHz	
MAX POWER RATINGS / freq. spacing (MHz)	±2.0	±1.6	±2.0	±1.6	±2.0	±1.6
- Narrowband input	24 kW	20 kW	24 kW	20 kW	24 kW	20 kW
- Wideband input	45 kW	45 kW	70 kW	70 kW	120 kW	120 kW
- Total output	45 kW	45 kW	70 kW	70 kW	120 kW	120 kW
OPERATING TEMPERATURE RANGE	-10 to + 45°C (+14 to +113°F)		-10 to + 45°C (+14 to +113°F)		-10 to + 45°C (+14 to +113°F)	
OVER TEMPERATURE*	typical 30 K at max NB input power		typical 30 K at max NB input power		typical 30 K at max NB input power	
INPUT PORTS	3-1/8" Unfl.		3-1/8" Unfl.		3-1/8" Unfl.	
- Narrowband input	3-1/8" Unfl.		4-1/2" Unfl.		6-1/8" Unfl.	
- Wideband input	3-1/8" Unfl.		4-1/2" Unfl.		6-1/8" Unfl.	
OUTPUT PORT	3-1/8" Unfl.		4-1/2" Unfl.		6-1/8" Unfl.	
WEIGHT (approx)	215 kg (474 lb)		230 kg (507 lb)		250 kg (551 lb)	

* referred to ambient temperature. Recommended: [AmbientTemp. + OverTemp.] ≤ 70°C (158°F)

UC/FM/LB2-20

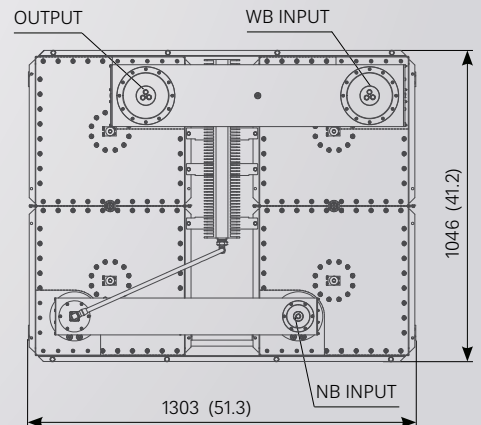
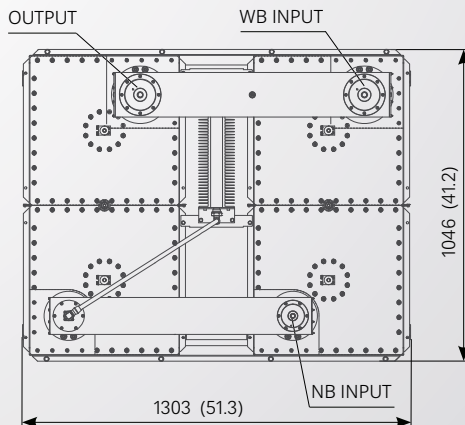
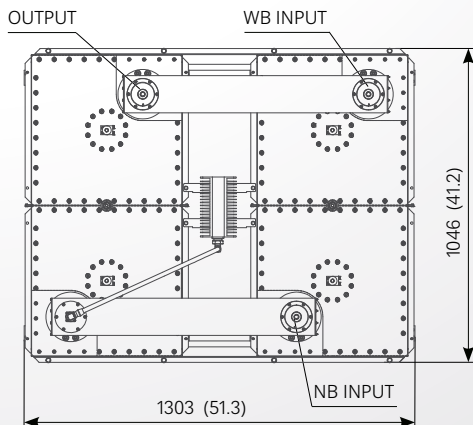
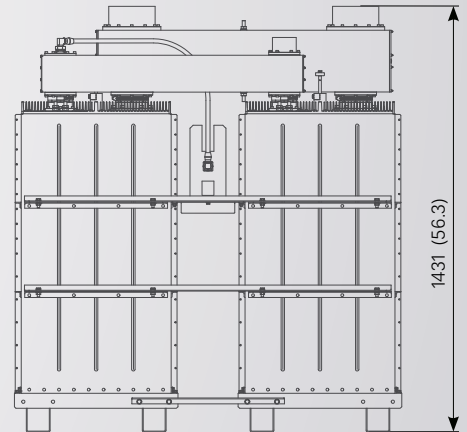
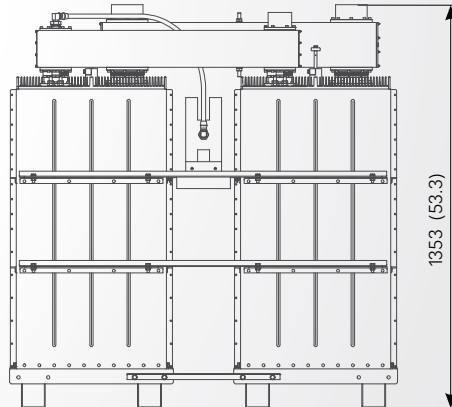
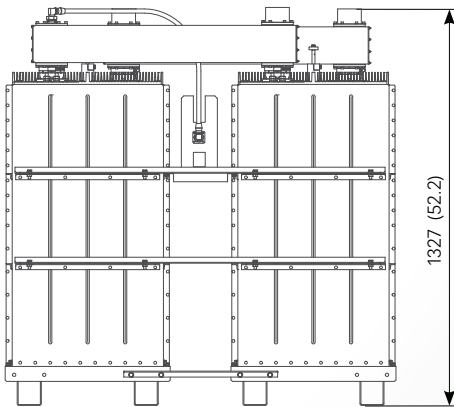
FM DIRECTIONAL FILTER TYPE COMBINER

MECHANICAL LAYOUT

UC/FM/LB2-20/A

UC/FM/LB2-20/B

UC/FM/LB2-20/C



All dimensions are in millimeters (inches)