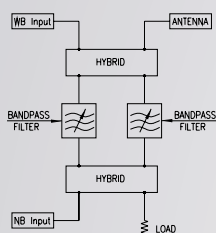


UC/FM/LB3-20

FM DIRECTIONAL FILTER TYPE COMBINER

FEATURES

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



ELECTRICAL AND MECHANICAL DATA

COMBINER TYPE	UC/FM/LB3-20/A			UC/FM/LB3-20/B			UC/FM/LB3-20/C		
FREQUENCY RANGE									
- wideband input	87.5 ÷ 108 MHz			87.5 ÷ 108 MHz			87.5 ÷ 108 MHz		
- 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									
- wideband input	≥ 26 dB			≥ 26 dB			≥ 26 dB		
- narrowband input (at carrier fo)	≥ 32 dB			≥ 32 dB			≥ 32 dB		
INSERTION LOSS (at carrier fo)									
NB input with freq. spacing ±1.6 MHz	≤ 0.21 dB			≤ 0.21 dB			≤ 0.21 dB		
NB input with freq. spacing ±1.2 MHz	≤ 0.26 dB			≤ 0.26 dB			≤ 0.26 dB		
NB input with freq. spacing ±0.8 MHz	≤ 0.32 dB			≤ 0.32 dB			≤ 0.32 dB		
WB input	≤ 0.10 dB			≤ 0.10 dB			≤ 0.10 dB		
WB input (0.8MHz freq. spacing)	≤ 0.15 dB			≤ 0.15 dB			≤ 0.15 dB		
ISOLATION (at carrier fo)									
- Narrowband input to wideband input	≥ 35 dB (typical)			≥ 35 dB (typical)			≥ 35 dB (typical)		
- Wideband input to narrowband input	≥ 50 dB			≥ 50 dB			≥ 50 dB		
GROUP DELAY									
(With 0.8 MHz frequency spacing)	≤ 40 ns at fo ±100 kHz			≤ 40 ns at fo ±100 kHz			≤ 40 ns at fo ±100 kHz		
	≤ 80 ns at fo ±150 kHz			≤ 80 ns at fo ±150 kHz			≤ 80 ns at fo ±150 kHz		
MAX POWER RATINGS / freq. spacing (MHz)									
±1.6	±1.2	±0.8	±1.6	±1.2	±0.8	±1.6	±1.2	±0.8	
- Narrowband input **	25 kW	25 kW	20 kW	25 kW	25 kW	20 kW	25 kW	25 kW	20 kW
- Wideband input	45 kW	45 kW	45 kW	70 kW	70 kW	70 kW	120 kW	120 kW	120 kW
- Total output	45 kW	45 kW	45 kW	70 kW	70 kW	70 kW	120 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									
- Narrowband input	3-1/8" Unfl.			3-1/8" Unfl.			3-1/8" 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)									
	285 kg (628 lb)			300 kg (661 lb)			320 kg (705 lb)		

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

** increased power on request

UC/FM/LB3-20

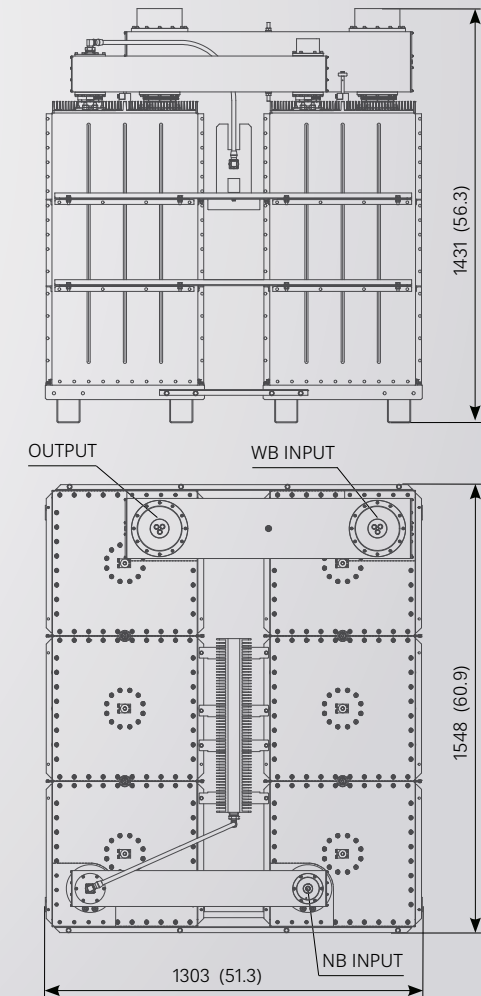
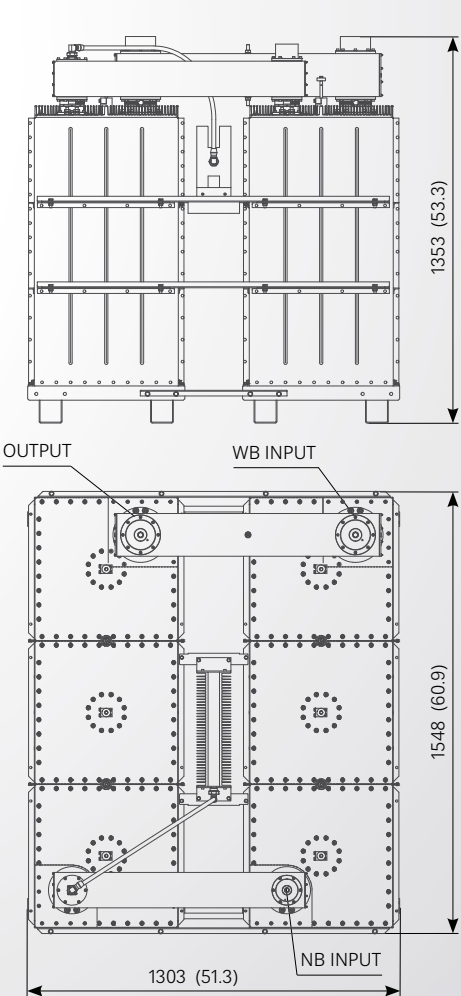
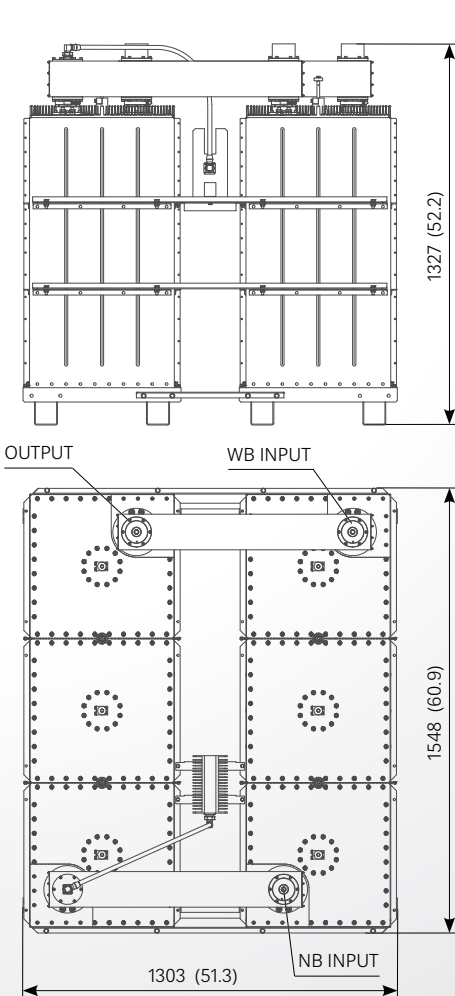
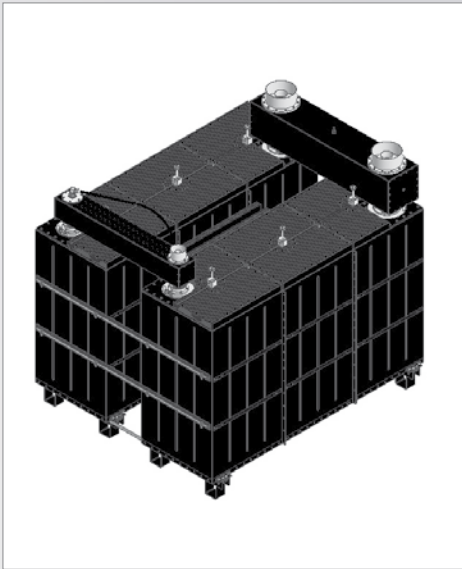
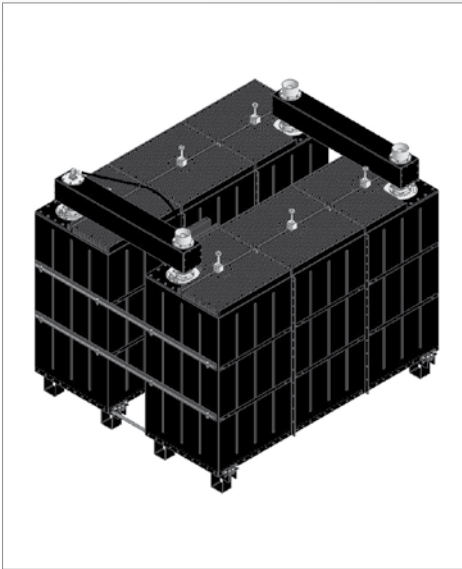
FM DIRECTIONAL FILTER TYPE COMBINER

MECHANICAL LAYOUT

UC/FM/LB3-20/A

UC/FM/LB3-20/B

UC/FM/LB3-20/C



All dimensions are in millimeters (inches)