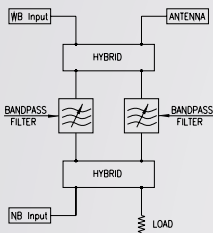


UC/FM/LB4-10

FM DIRECTIONAL FILTER TYPE COMBINER

FEATURES

- FM double bridge channel combiner
- 4 pole / 350 or 500 mm (13.8 or 19.7 in)
- adjustable selectivity
- temperature compensated



ELECTRICAL AND MECHANICAL DATA

COMBINER TYPE	UC/FM/LB4-10/A			UC/FM/LB4-10/C		
FREQUENCY RANGE	87.5 ÷ 108 MHz			87.5 ÷ 108 MHz		
- wideband input	87.5 ÷ 108 MHz			87.5 ÷ 108 MHz		
- narrowband input	Tunable over entire FM range			Tunable over entire FM range		
INPUTS AND OUTPUT IMPEDANCE	50 ohm			50 ohm		
RETURN LOSS	≥ 26 dB			≥ 26 dB		
- wideband input	≥ 26 dB			≥ 26 dB		
- narrowband input (at carrier fo)	≥ 32 dB			≥ 32 dB		
INSERTION LOSS (at carrier fo)	≤ 0.43 dB			≤ 0.32 dB		
NB input with freq. spacing ±1.0 MHz	≤ 0.43 dB			≤ 0.32 dB		
NB input with freq. spacing ±0.8 MHz	≤ 0.47 dB			≤ 0.38 dB		
NB input with freq. spacing ±0.6 MHz	≤ 0.55 dB			≤ 0.46 dB		
WB input	≤ 0.10 dB			≤ 0.10 dB		
WB input (0.6MHz freq. spacing)	≤ 0.20 dB			≤ 0.20 dB		
ISOLATION (at carrier fo)	≥ 35 dB (typical)			≥ 35 dB (typical)		
- Narrowband input to wideband input	≥ 35 dB (typical)			≥ 35 dB (typical)		
- Wideband input to narrowband input	≥ 50 dB			≥ 50 dB		
GROUP DELAY	≤ 50 ns at fo ±100 kHz			≤ 50 ns at fo ±100 kHz		
(With 0.6 MHz frequency spacing)	≤ 100 ns at fo ±150 kHz			≤ 100 ns at fo ±150 kHz		
MAX POWER RATINGS / freq. spacing (MHz)	±1.0	±0.8	±0.6	±1.0	±0.8	±0.6
- Narrowband input**	12 kW	12 kW	10 kW	15 kW	15 kW	15 kW
- Wideband input	15 / 30 kW	15 / 30 kW	15 / 30 kW	45 kW	45 kW	45 kW
- Total output	15 / 30 kW	15 / 30 kW	15 / 30 kW	45 kW	45 kW	45 kW
OPERATING TEMPERATURE RANGE	-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		
INPUT PORTS	1-5/8" Unfl.			1-5/8" Unfl.		
- Narrowband input	1-5/8" Unfl.			1-5/8" Unfl.		
- Wideband input	1-5/8" Unfl. / 3-1/8" Unfl.			3-1/8" Unfl.		
OUTPUT PORT	1-5/8" Unfl. / 3-1/8" Unfl.			3-1/8" Unfl.		
WEIGHT (approx)	220 kg (485 lb)			355 kg (783)		

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

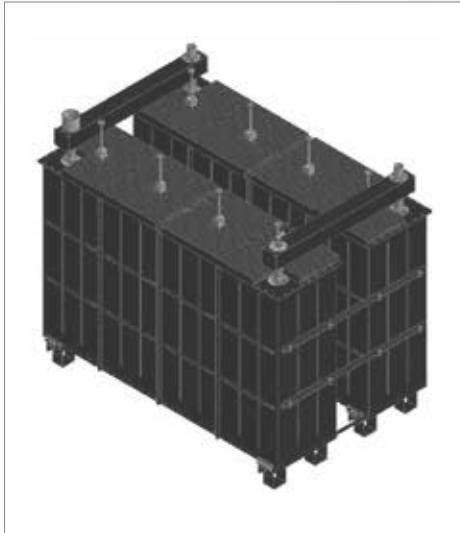
** increased power on request

UC/FM/LB4-10

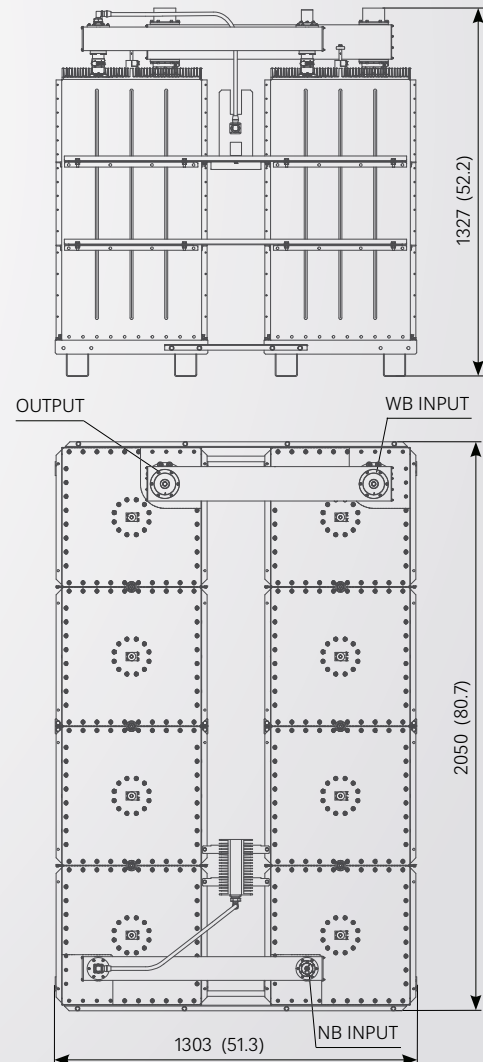
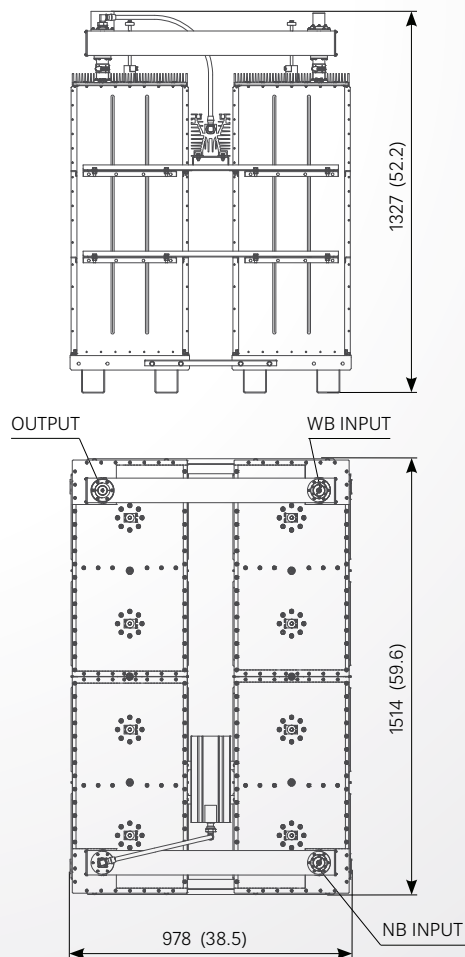
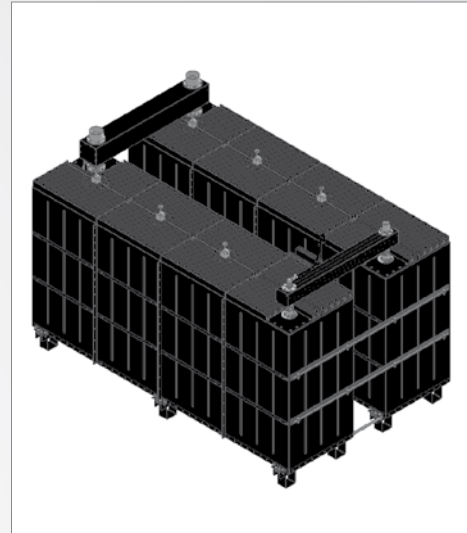
FM DIRECTIONAL FILTER TYPE COMBINER

MECHANICAL LAYOUT

UC/FM/LB4-10/A



UC/FM/LB4-10/C



All dimensions are in millimeters (inches)