

UHF TRANSMITTER COMBINERS

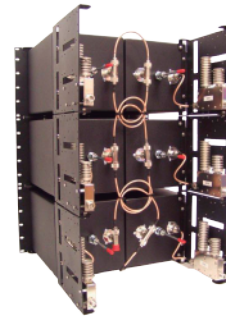
Cavity and Hybrid • 380 - 512 MHz

TC Series
THW Series

Product Features

TC series uses ¼ wavelength high Q resonant cavities with INVAR control rods to ensure long term thermal stability. This series allows 200KHz minimum Tx to Tx separation. Broadband dual junction isolators are employed. Starting from 2 channels, TC series are easily expandable. Maximum input power is 100W per port.

THW series uses hybrid technology to provide Zero Spacing combining. Broadband dual junction isolators are employed. Available in 2, 4, 6 and 8 channel configurations. Maximum input power is 100W per port.



UHF Transmitter Combiner



Applications

- For TETRA, LTR, MPT1327, among others

Specification

TC38-xB1N

Frequency band	380 – 430 MHz									
Number of channels (replace "x")	2	3	4	5	6	7	8	9	10	
Min Tx to Tx separation	200 KHz									
Insertion loss at min sep Max	3.4dB	3.5dB	3.6dB	3.7dB	3.8dB	3.9dB	4.0dB	4.1dB	4.2dB	
Return loss, min, all ports	20dB									
Tx to Tx isolation, min	70dB									
Antenna to Tx isolation, min	55dB									
Power per channel, max	150W									
Reflected power per ch, max	60W									
Isolator type	Dual junction									
Connectors input	N(f)									
Connector output	N(f)									
Temperature range	5° to 140° F • -15° to +60° C									
Mounting	Brackets for 19" rack									
Rack units requirement	5.5RU		11 RU		16.5 RU		22 RU		27.5 RU	
Height	9.6 inches		19.2 inches		28.8 inches		38.4 inches		48.1 inches	
	244 mm		488 mm		732 mm		976 mm		1220 mm	
Width	19.0 inches • 482 mm									
Depth	17.8 inches • 450 mm									
Weight	16.5 lbs	24.2 lbs	33 lbs	40.8 lbs	49.6 lbs	57.3 lbs	66.1 lbs	73.8 lbs	82.7 lbs	
	7.5 kg	11 kg	15 kg	18.5 kg	22.5 kg	26 kg	30 kg	33.5 kg	37.5 kg	
MTBF	>1,000,000 hours									

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TC Series
THW Series

Specification	TC45-xB1N									
Frequency band	450 – 512 MHz									
Number of channels (replace "x")	2	3	4	5	6	7	8	9	10	
Min Tx to Tx separation	200 KHz									
Insertion loss at min sep Max	3.4dB	3.5dB	3.6dB	3.7dB	3.8dB	3.9dB	4.0dB	4.1dB	4.2dB	
Return loss, min, all ports	20dB									
Tx to Tx isolation, min	70dB									
Antenna to Tx isolation, min	60dB									
Power per channel, max	150W									
Reflected power per ch, max	60W									
Isolator type	Dual junction									
Connectors input	N(f)									
Connector output	N(f)									
Temperature range	5° to 140° F • -15° to +60° C									
Mounting	Brackets for 19" rack									
Rack units requirement	5.5RU		11 RU		16.5 RU		22 RU		27.5 RU	
Height	9.6 in • 244 mm		19.2 in • 488 mm		28.8 in • 732 mm		38.4 in • 976 mm		48.1 in • 1220 mm	
Width	19.0 in • 482 mm									
Depth	17.8 in • 450 mm									
Weight	16.5 lbs	24.2 lbs	33 lbs	40.8 lbs	49.6 lbs	57.3 lbs	66.1 lbs	73.8 lbs	82.7 lbs	
	7.5 kg	11 kg	15 kg	18.5 kg	22.5 kg	26 kg	30 kg	33.5 kg	37.5 kg	
MTBF	>1,000,000 hours									

Specification	THW38-xB1				
Frequency band	380 – 430 MHz				
Number of channels (replace "x")	2		4	6	8
Min Tx to Tx separation	Zero spacing				
Insertion loss at min sep Max	3.8dB		7.3dB	10.8dB	10.8dB
Return loss, min, all ports	20dB				
Tx to Tx isolation, min	75dB				
Antenna to Tx isolation, min	60dB				
Power per channel, max	150W				
Reflected power per ch, max	100W				
Isolator type	Dual junction				
Connectors input	N(f)				
Connector output	N(f)				
Temperature range	5° to 140° F • -15° to +60° C				
Mounting	Brackets for 19" rack				
Rack units requirement	2RU		4 RU	8RU	10RU
Height	3.5 inches		7 inches	14 inches	17.5 inches
	88 mm		177mm	356 mm	445 mm
Width	19.0 in • 483 mm				
Depth	15.3 in • 389 mm				
Weight	19.8 lbs		24.2 lbs	63.9 lbs	68.3 lbs
	9 kg		11 kg	29 kg	31 kg
MTBF	>1,000,000 hours				

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Cavity and Hybrid • 380 - 512 MHz

TC Series
THW Series

Specification	THW45-xB1			
Frequency band	450 – 512 MHz			
Number of channels (replace "x")	2	4	6	8
Min Tx to Tx separation	Zero spacing			
Insertion loss at min sep Max	3.8dB	7.3dB	10.8dB	10.8dB
Return loss, min, all ports	20dB			
Tx to Tx isolation, min	75dB			
Antenna to Tx isolation, min	60dB			
Power per channel, max	150W			
Reflected power per ch, max	100W			
Isolator type	Dual junction			
Connectors input	N(f)			
Connector output	N(f)			
Temperature range	5° to 140° F • -15° to +60° C			
Mounting	Brackets for 19" rack			
Rack units requirement	2RU	4 RU	8RU	10RU
Height	3.5 in • 88 mm	7 in • 177mm	14 in • 356 mm	17.5 in • 445 mm
Width	19.0 inches • 483 mm			
Depth	15.3 inches • 389 mm			
Weight	19.8 lbs 9 kg	24.2 lbs 11 kg	63.9 lbs 29 kg	68.3 lbs 31 kg
MTBF	>1,000,000 hours			