

UHF TRANSMITTER COMBINERS

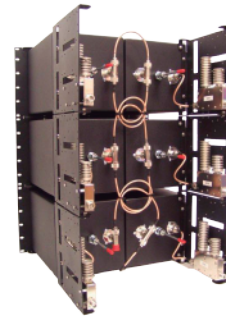
Cavity and Hybrid • 380 - 520 MHz

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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Cavity and Hybrid • 380 - 520 MHz

TC Series
THW Series

Specification

TC45-xB1N-y

Frequency band	430 – 500 MHz in 4 subranges: 430-450 / 450-480 / 480-500 / 500-520								
Number of channels (replace "x")	2	3	4	5	6	7	8	9	10
Subranges (replace "y" by subrange code)	430-450 ("2") 450-480 ("3") 480-500 ("4") 500-520 ("5")								
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 7.5 kg	24.2 lbs 11 kg	33 lbs 15 kg	40.8 lbs 18.5 kg	49.6 lbs 22.5 kg	57.3 lbs 26 kg	66.1 lbs 30 kg	73.8 lbs 33.5 kg	82.7 lbs 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 88 mm	7 inches 177mm	14 inches 356 mm	17.5 inches 445 mm

DOC TK021.08 - 04112015
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UHF TRANSMITTER COMBINERS

Cavity and Hybrid • 380 - 520 MHz

TC Series
THW Series

Width	19.0 in • 483 mm			
Depth	15.3 in • 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			

Specification

THW45-xB1-y

Frequency band	430 – 500 MHz in 4 subranges: 430-450 / 450-480 / 480-500 / 500-520			
Number of channels (replace "x")	2	4	6	8
Subranges (replace "y" by subrange code)	430-450 ("2") 450-480 ("3") 480-500 ("4") 500-520 ("5")			
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			

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