

Transmitter Combiners
UHF and Tetra Transmitter Combiners
TN3 Series

TN3213 Cavity-ferrite combiner, 3 channel, dual stage isolators, 8.5" Cavities, 406-512 MHz

- 3 channel combiner utilizing 8.5" cavities tuneable over the 406-512 MHz frequency range
- Includes low loss dual stage isolator (one per channel)
- · Very high Q bandpass cavity filter fits horizontally in 19" rack

Sinclair's 'TJ and TN' series cavity ferrite transmitter combiners are available in 2- to 5-channel configurations for use in systems from 132-960 MHz. Each channel on these combiners includes a low-loss single or dual-stage isolator and Sinclair-developed High 'Q' bandpass cavity filter. The 806-960 MHz 'TJ' series utilizes very high 'Q' three-quarter wavelength cavities, and is especially suitable for close channel separations, typically 250 kHz. All models are 19-inch rack mountable and can be retuned in the field with simple test equipment. The 'TJ' series combiner is easily expanded to 20 channels, and is the building block used in many Sinclair combining systems. Common electrical specifications are shown below. To select the combiner ideally suited to your application, please consult your Sinclair representative.



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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Product Specification Sheet		TN3213	Issue: 3	Dated: 15-03-18

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Product Specification Sheet EPR 017940 Customer Tech Manual 006663

Dated: 11-11-11

Shipping dimensions



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Electrical Specifications			
Frequency Range	MHz	406 to 512	
Number of channels		3	
Input Connectors		N-Female	
Output Connectors		N-Female	
Input VSWR (max)		1.25:1	
Output VSWR		2:1	
Power (Per Channel)	W	125	*1
Peak total combined CW input power (max)	W	1100	
Frequency separation (min)	MHz	0.1	
Isolation Tx to Tx	dB	70	
Isolation antenna to Tx	dB	60	

Notes

- *1:80 Watts at 100KHz spacing 125 Watts at >= 150KHz spacing
- *2:2 packages

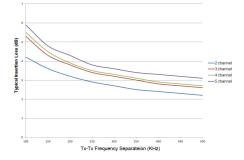
Mechanical Specifications					
Width	in (mm)	19 (483)			
Depth	in (mm)	21.5 (546)			
Length/ Height	in (mm)	17.5 (445)			
Finish		Black			
Weight	lbs (kg)	37 (16.8)			

Environmental Specifications Temperature range °F (°C) -22 to +140 (-30 to +60)

in (mm)

Ordering Information

For 100 kHz separation, the power is limited to 80W per channel



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20x10x18 (508x254x457)