

# **Transmitter Combiners UHF and Tetra Transmitter Combiners** TN321x-R-y Series

A Norsat Company in Norsat

#### TN3214-R-4 Cavity-ferrite Transmitter Combiner, 8.5" Cavities, 430-470 MHz

- Minimum Tx-Tx separation of 0.1 MHz
- · Low loss broad band dual stage isolators
- · Uses high 'Q' 1/4 wave bandpass cavity filters that are horizontally mounted
- · Expandable for more channels

Sinclair's 'TN321x-R-y' series cavity ferrite transmitter combiners are available in 2 to 5 channel configurations for use in systems from 406-512 MHz. Each channel on these combiners includes a low-loss, broad band single or dual-stage isolator and High 'Q' 1/4 wave bandpass cavity filter suitable for close channel separations, typically 100 KHz.

The 'TN321x-R-y' series combiners can be expanded to 20 channels. For expansion please contact the Sinclair Systems group.

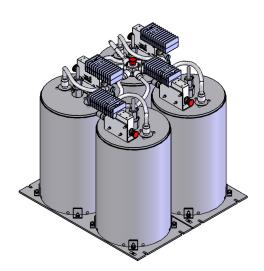
The model naming convention is described below:

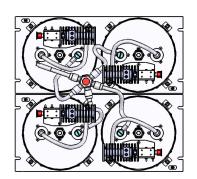
#### x= Number of channels:

x=2	2 channels
x=3	3 channels
x=4	4 channels
x=5	5 channels
x=6	6 channels

### y= Sub-Band:

y=3	406-440 MHz
y=4	430-470 MHz
v=5	459-512 MHz





Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specificatio	n Sheet	TN3214-R-4	Issue: 3	Dated: 15-03-18

Temperature range

Customer Tech Manual 006272



# **Transmitter Combiners UHF and Tetra Transmitter Combiners** TN321x-R-y Series

A Norsat Company Norsat

Frequency Range	MHz 430 to 470		
Number of channels		4	
Input Connectors		N-Female	
Output Connectors		N-Female	
Input VSWR (max)		1.25:1	
Output VSWR		2:1	
Maximum Input Power (per channel)	W	125	*-
Frequency separation (min)	MHz	0.1	
Isolation Tx to Tx	dB	60	
looldtion 1X to 1X			
Isolation antenna to Tx	dB	50	
	dB	50 1/4	
Isolation antenna to Tx	dB in (mm)		
Isolation antenna to Tx Cavity electrical length  Mechanical Specifications  Width	·	1/4	
Isolation antenna to Tx Cavity electrical length  Mechanical Specifications  Width Depth	in (mm)	1/4 19 (483)	
Isolation antenna to Tx Cavity electrical length  Mechanical Specifications	in (mm) in (mm)	1/4 19 (483) 21.5 (546)	
Isolation antenna to Tx Cavity electrical length  Mechanical Specifications  Width Depth Length/ Height	in (mm) in (mm)	1/4 19 (483) 21.5 (546) 17.5 (445)	

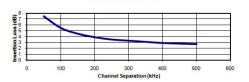
°F (°C)

### Notes

\*1:80 Watts at 100KHz spacing 125 Watts at >= 150KHz spacing

## **Ordering Information**

Specify one Tx frequency per channel.



Insertion Loss Tx to Antenna

Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
Telephone	USA: 1 800 263 3275	International: +44 (0) 1487 84 28 19	International: +1 905 726 7676	Canada: 1 800 263 3275 International: +1 905 727 0165
E-mail	salesusa@sinctech.com	salesuk@sinctech.com	salesla@sinctech.com	salescan@sinctech.com
Product Specificatio	n Sheet	TN3214-R-4	Issue: 3	Dated: 15-03-18

-22 to +140 (-30 to +60)