

# Transmitter Combiners 700 -1000 MHz Transmitter Combiners RTC5800R Series

## RTC5800RC-1 Combiner, trunking, compact, 5 channels, 0.25 MHz separation, 806-824 MHz

Also referred as: RTC5800RCLL-1

- Supports frequency spacings down to 250 KHz
- 125 watts continuous power per channel 200 watt high power versions available
- Fits easily into 19 inch rack only 49 inches vertical height in 20 channel configuration

These compact transmitter combiners utilize Res-Lok construction and highperformance dual isolators in a configuration that assures easy expandability and field tuning utilizing the test ports provided. Developed for operation in the 851-869 trunking frequency band, these highly versatile combiners are available in expandable 5- and 10-channel models, and a fully expanded 20-channel version. Different versions are available which optimize performance at frequency spacings of 1 MHz (RA series), 500 kHz (RB series) and 250 kHz (RC series). Insertion loss varies with frequency spacing; factory settings are specified. In addition, the new 'HP' versions can handle up to 200 Watts per channel at the spacings shown below. LC or 7/8-inch EIA connectors are required for 10- and 20-channel HP1 and HP2 antenna outputs. All models are easily mounted in a standard 19-inch rack utilizing only 49 inches of vertical space in the fully expanded 20-channel configuration



### **Application Notes**

• For 100% duty cycle operation order the RTC "HP" version

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Product Specification Sheet		RTC5800RC-1	Issue: 100	Dated: 08-10-13



Frequency Range	MHz	806 to 824	
Input VSWR (max)		1.25:1	
Input Connectors		N-Female	
Output Connectors		N-Female	
Power (Per Channel)	W	125	
Insertion loss Tx to antenna (typ)	dB	4	
Isolation Tx to Tx	dB	70	
Isolation antenna to Tx	dB	60	
Minimum Channel Spacing	MHz	0.25	
Output VSWR		2:1	
Number of channels	5		

#### **Mechanical Specifications**

Depth	in (mm)	15 (381)		
Length/ Height	in (mm)	12.25 (311)		
Width	in (mm)	19 (483)		
Weight	lbs (kg)	50 (22.7)		
Actual Shipping weight	lbs (kg)	55 (24.97)		
Shipping dimensions	in (mm)	22x15x19 (559x381x483)		

°F (°C)

#### Ordering Information

RA = 1 MHz separation with insertion loss of 2.6 dB

RB = 0.5 MHz separation with insertion loss of 2.8 dB

RC = 0.25 MHz separation with insertion loss of 3.5 dB

#### **Environmental Specifications**

Temperature range

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

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