

**CT3450F** Cavity-ferrite combiner, 3 channel, High 'Q' 10" 1/4 wave cavities, 406-512 MHz

- High performance Tx combiner for the 406-512 MHz frequency band
- Dual isolators and 10 inch high Q 1/4 wave bandpass cavity for each channel
- Series available with 3/4 wavelength cavities for spacings to 75 KHz

This series of open-cabinet cavity-ferrite transmitter combiners is available in 2 or more channel configurations in both VHF and UHF frequencies. Each channel includes a dual, low-loss, Sinclair-manufactured isolator and a 10-inch, high Q bandpass cavity filter.

A unique low-loss junction is provided to combine channels to one antenna. Double shielded cable is used throughout the combiner to ensure high isolation between channels. These transmitter combiners are housed in painted steel 21 x 21 x 38 inch open-frame cabinets on castors for mobility. Two cabinets may be stacked vertically to conserve space.

The CTx450F series consists of two or more cavities with companion isolators mounted in open frames for use in the 406-512 MHz frequency range. CTx450F series combiners provide excellent performance with minimal insertion losses for frequency separation of 100 kHz or more. By incorporating a hybrid to couple two 4-channel units, 8 channels with 50 kHz spacing can be combined with a typical insertion loss of 8 dB, a significant improvement over a conventional hybrid-ferrite combiner. Other special frequency groupings can be made depending on the customer's application.

The CTx450 series combines the mechanical features of open-frame construction with UHF cavities to provide a high performance transmitter combiner for the 406-512 MHz frequency band. This series is also available using three-quarter wavelength cavities to permit spacing as close as 75 kHz.



Region	United States	Europe, Middle East and Africa	Caribbean and Latin America	Canada and rest of the world
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### Electrical Specifications

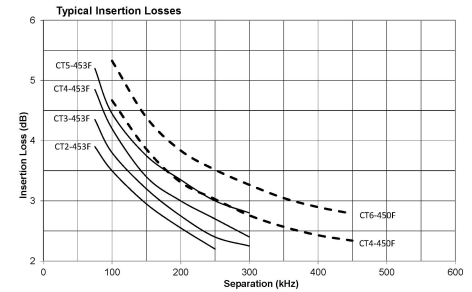
Frequency Range	MHz	406 to 512
Number of channels		3
Input Connectors		N-Female
Output Connectors		N-Female
Input VSWR (max)		1.25:1
Output VSWR		1.5:1
Insertion Loss (max) Tx to Ant	dB	4.2
Power (Per Channel)	W	125
Frequency separation (min)	MHz	0.1
Isolation Tx to Tx	dB	70
Isolation antenna to Tx	dB	60

### Mechanical Specifications

Width	in (mm)	21 (533)
Depth	in (mm)	21 (533)
Length/ Height	in (mm)	38 (965)
Finish		chemical conversion
Weight	lbs (kg)	75 (34.05)
Actual shipping weight	lbs (kg)	80 (36.32)
Shipping dimensions	in (mm)	22x22x43 (559x559x1092)

### Environmental Specifications

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