

CT4450F Cavity-ferrite combiner, 4 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 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 |
|-----------------------------|-----------------------|--------------------------------------|--------------------------------|----------------------------------------------------------|
| 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 Specification Sheet | | CT4450F | Issue: 2 | Dated: 08-10-13 |

Electrical Specifications

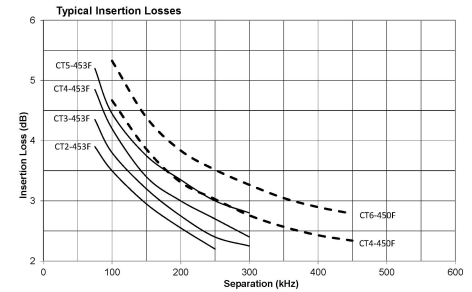
| | | |
|--------------------------------|-----|------------|
| Frequency Range | MHz | 406 to 512 |
| Input VSWR (max) | | 1.25:1 |
| Input Connectors | | N-Female |
| Output Connectors | | N-Female |
| Power (Per Channel) | W | 125 |
| Frequency separation (min) | MHz | 0.1 |
| Insertion loss (max) Tx to Ant | dB | 4.4 |
| Isolation Tx to Tx | dB | 70 |
| Isolation antenna to Tx | dB | 60 |
| Output VSWR | | 1.5:1 |
| Number of channels | | 4 |

Mechanical Specifications

| | | |
|------------------------|----------|-------------------------|
| Depth | in (mm) | 21 (533) |
| Length/ Height | in (mm) | 38 (965) |
| Width | in (mm) | 21 (533) |
| Weight | lbs (kg) | 90 (40.86) |
| Finish | | chemical conversion |
| Actual Shipping weight | lbs (kg) | 95 (43.13) |
| Shipping dimensions | in (mm) | 22x22x43 (559x559x1092) |

Environmental Specifications

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



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