

A Norsat Company in Norsat

Transmitter Combiners Low Band, Aviation, and VHF Transmitter Combiners CS2 Series

CS2213 VHF cavity-ferrite, 8.5", 3-channel, No rack, N-Female, load, 132-174 MHz

- Three channel, 132-174 MHz configuration no rack
- Each System configured for optimum performance.
- Utilizing the 8.5" cavity, this is ideal for applications with minimal Tx-Rx spacings.

Sinclair's CS series of transmitter combiners incorporates expandability, close frequency spacing, and performance that is equivalent to a 10" cavity from an 8.5" cavity. Using the 8.5" cavity, the CS series easily support Tx-Tx spacings as close as 50 KHz at VHF and 80 KHz at UHF. Each cavity has a black finish, silver plated loops, and temperature compensated for operation between -30 to +60 degrees C. Every cavity is equipped with a coarse tuning rod and fine tuning nut for quick and easy field or lab re-tuning.

The CS series of combiners can combine 2 to 6 channels with single channel expansions available. All combiners include dual stage isolators with 30 watt loads on the primary stage, and 125 watt loads on the secondary. The combiner can be ordered with Sinclair's newest open frame rack for horizontally mounting of the cavities, or can be ordered without the rack if an existing rack is already present.

The CS Series of combiners are field expandable up to 10 channels.



| Region    | <b>United States</b>  | Europe, Middle East and Africa       | Caribbean and Latin America    | Canada and rest of the world                             |
|-----------|-----------------------|--------------------------------------|--------------------------------|--|
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Product Specification Sheet EPR 018113

CS2213

Issue: 1

Dated: 08-10-13

Dated: 29-08-07

Cavity width or diameter

Temperature range

**Environmental Specifications** 



## **Transmitter Combiners** Low Band, Aviation, and VHF Transmitter Combiners **CS2 Series**

Notes

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| Electrical Specifications          |          |            |    |
|------------------------------------|----------|------------|----|
| Frequency Range                    | MHz      | 132 to 174 |    |
| Input VSWR (max)                   |          | 1.25:1     |    |
| Number of Cavities                 |          | 3          |    |
| Average Power Input (max)          | W        | 125        |    |
| Input Connectors                   |          | N-Female   |    |
| Output Connectors                  |          | N-Female   |    |
| Frequency separation (min)         | MHz      | 0.05       |    |
| Insertion loss Tx to antenna (typ) | dB       | 4.8        | *1 |
| Isolation Tx to Tx                 | dB       | 70         |    |
| Isolation antenna to Tx            | dB       | 60         |    |
| Number of channels                 |          | 3          |    |
| Mechanical Specifications          |          |            |    |
| Depth                              | in (mm)  | 36 (914)   |    |
| Length/ Height                     | in (mm)  | 17 (432)   |    |
| Width                              | in (mm)  | 18 (457)   |    |
| Outer Conductor Material           |          | aluminum   |    |
| Weight                             | lbs (kg) | 60 (27.24) |    |
| Finish                             |          | Black      |    |

in (mm)

°F (°C)

\*1 : I.L. @ min T/T spacing

**Ordering Information** 

Consult with Sinclair Systems Engineer before purchase.

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|           |                       |                                      |                                |  |

8.5 (216)

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

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