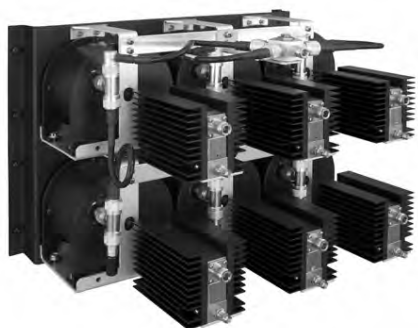


DSCC-Series Transmit Cavity Combiner (763-940 MHz)

Compact Ceramic Resonator Technology, 2 to 12 Channels

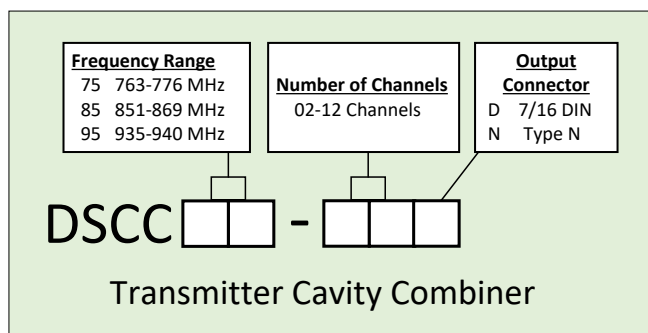


Rear view of DSCC-Series Combiner with Dual Isolators (6-Channel Model DSCC85-06D Shown)

Features and Benefits

- ❖ Five-inch cavities with special ceramic resonators enable close channel spacing, low insertion loss, and high performance in a compact package.
- ❖ Dual junction transmitter isolators provide high TX-TX isolation.
- ❖ Factory optimized to customers specific frequencies for lower loss.
- ❖ Designed for easy field tuning and expansion for channels with 250 kHz or more of TX to TX spacing.

Ordering Information



Height and Weight Table

No. of Ch.	Combiner Height	Weight lbs. (kg)	Shipping Wt. lbs. (kg)
2	7 in. (178 mm)	18 (8)	28 (13)
3	4 RU	25 (11)	35 (16)
4	14 in. (356 mm) 8 RU	36 (16)	46 (21)
5		43 (20)	53 (24)
6		50 (23)	70 (32)
7	21 in. (533 mm) 12 RU	61 (28)	81 (37)
8		68 (31)	88 (40)
9		75 (34)	95 (43)
10	28 in. (711 mm) 16 RU	89 (40)	109 (49)
11		96 (44)	116 (53)
12		103 (47)	123 (56)

Specifications

Electrical Specifications	
Channel Power Maximum	110 W
Peak Instantaneous Output Power	23,500 W, based on P25 system -- 12 channels
Frequency Range	See Ordering Information
TX Frequency Separation	150 kHz Minimum
Isolation	
TX to TX	>65 dB
ANT to TX	>50 dB
Isolation at Transmit Frequencies	>45 dB at 30 MHz RX Channel Offset
Insertion Loss	See Insertion Loss Table
Input Return Loss	>19 dB

Mechanical Specifications

Construction/Finish	Aluminum with protective finishes
Connectors	
TX input	N-female
Combiner Output	N-female or 7/16 DIN-female
Mounting	EIA 19-inch rack
Temperature Range	-10 to +60° C **

Dimensions and Weight

Width	19.0 in. (483 mm)
Depth	12.5 in. (318 mm)
Height / Weight / Shipping Weight	See Height and Weight Table

** For operation below 0° C, tune cavities under power.

Insertion Loss Table

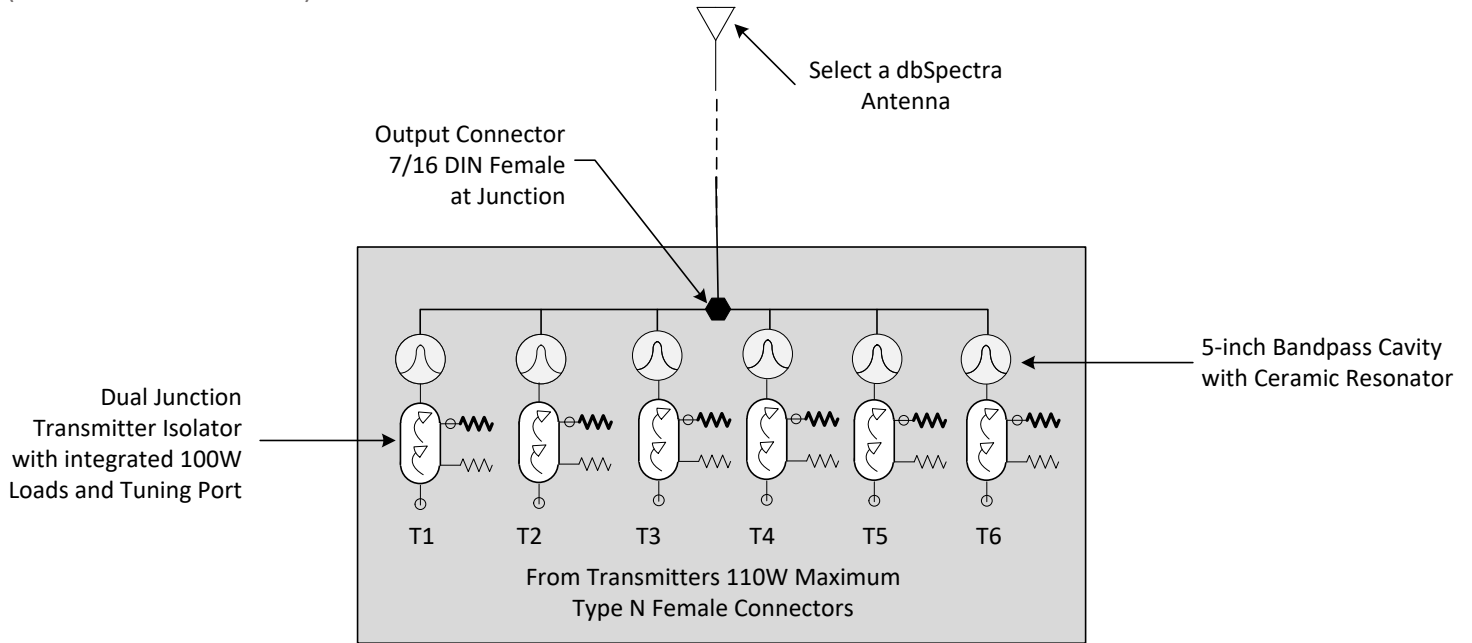
No. of Channels	Frequency Separation -- kHz Loss -- dB		
	150-250	250-500	>500
2	3.7	3.2	3.0
3	4.1	3.3	3.0
4	4.4	3.5	3.1
5	4.7	3.5	3.2
6	4.8	3.7	3.2
7	4.8	3.7	3.2
8	5.1	3.8	3.3
9	5.1	3.9	3.3
10	5.2	3.9	3.4
11	5.3	4.0	3.5
12	5.5	4.2	3.6

DSCC-Series Transmit Cavity Combiner (763-940 MHz) Compact Ceramic Resonator Technology, 2 to 12 Channels



Block Diagram

(6-Channel model shown)



Combiner Channel Expansion Kits

DSCC-series combiners can be modified in the field to add channels. Contact dbSpectra if combiner expansion is with transmitter to transmitter frequency spacings of less than 250 kHz. Expansion to a maximum of twelve RF channels is recommended. Two types of expansion kits are available for field installation:

Note: replace "xx" in part numbers below with "75", "85", or "95" to indicate band for 700 MHz, 800 MHz, or 900 MHz.

DSCCxx-01WOB

Single channel cavity, isolator, RF jumpers, and mounting hardware without chassis or mounting brackets. This kit will fit to an existing DSCC combiner that has one or more un-populated cavity position(s).

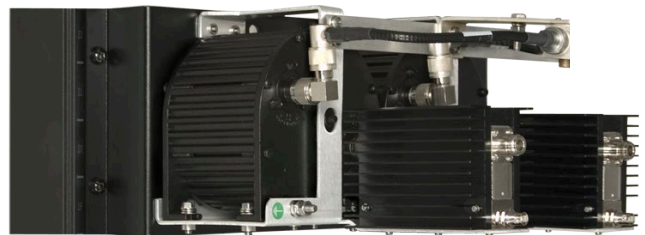


DSCCxx-01WB One Channel

DSCCxx-02WB Two Channel

DSCCxx-03WB Three Channel

One, two or three-channel cavity and isolator assembly with 4RU chassis, mounting brackets, and mounting hardware.



(Rear view of Two Channel DSCCxx-02WB)