

700, 800 or 900 MHz Control Station Combiners (746-960 MHz)

6, 8, 12, 16, 18, 24 or 32 Channels

ELECTRICAL SPECIFICATIONS

Frequency Range, MHz	See Ordering Information
Frequency Separation, kHz	No limitations
Number of Channels	6, 8, 12, 16, 18, 24 or 32
Isolation, dB	
TX to TX	60 min / 70 typ
TX to RX	60 min / 70 typ
ANT to TX	45 min / 55 typ
RX to RX	60
Transmitter Loss, dB	See Ordering Information
Receiver Loss, dB	See Ordering Information
Receiver Gain, dB	See Ordering Information
Transmitter Return Loss, dB	14
Receiver Return Loss, dB	10
Power/Channel, Watts	50
Power Source VAC/VDC	110 to 240 VAC 50/60 Hz or 12 VDC (nominal)
Power Consumption, Watts	AC 30 / DC 18

MECHANICAL SPECIFICATIONS

Construction/Finish	Aluminum/Black
Input Connector	N(F)
Mounting	EIA 19-inch Rack
Temperature Range, degrees	-30 to +60 C

DIMENSIONS

Width, in/mm	19 (482.6)
Height, in/mm	See Ordering Information
Depth, in/mm	17 (431.8)
Net Weight, lb/kg	See Ordering Information
Shipping Weight, lb/kg	See Ordering Information

FEATURES AND BENEFITS

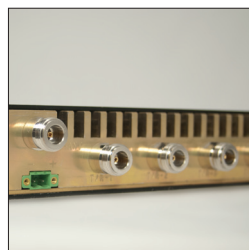
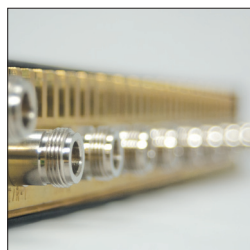
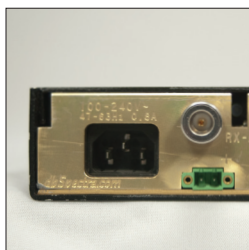
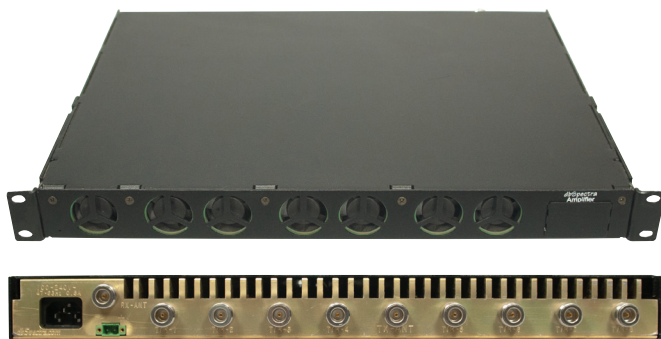
- Separate transmit and receive antennas.
- Low profile building block modules.
- Transmit and receive on each radio port.
- Enables combining of control stations.
- 50 Watts input per channel (continuous).
- Enhances system port-to-port isolation.
- Amplifier for receive signals.
- Analog or digital radio compatible.

The dbSpectra Control Station Combiner reduces the number of antennas needed. This combiner functions as both a combiner and multicoupler for either trunked or conventional mobile radio systems. Connect eight mobile radios with our 8-port model and reduce antenna requirements from eight to two. Your overall system port-to-port isolation can be increased using this combiner for applications where individual radio antennas do not provide enough spatial RF isolation, thus removing all the guesswork.

Models are available for 6, 8, 12, 16, 18, 24 or 32 control stations. This combiner incorporates SMART thermally switched fans which operate only when needed. This unit is also designed to automatically switch the receive path to bypass mode if the amplifier is removed.

For optimum performance, it is recommended that unused ports be terminated with a 1 Watt N-type 50 Ohm load (model #DB8926).

Supplied with front panel EIA mounting brackets and adjustable EIA brackets for rear support or center mounting on a two-post rack.



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ORDERING INFORMATION

Model Number	Frequency (MHz)	Number of Channels	Transmitter Loss, typ (dB)	Receiver Gain with Amp, typ (dB)	Receiver Loss w/o Amp, typ (dB)	Height (RU)	Height in(mm)	Net Weight lb(kg)	Shipping Weight lb(kg)
HC111W1-06F	746-806	6	9.2	1.5	10.5	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC111W1-08F	746-806	8	11	0	12	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC111W1-12F	746-806	12	13.5	-3	15	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC111W1-16F	746-806	16	15	-4	16	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC111W1-18F	746-806	18	16.5	-6	18	4RU	7 (177.8)	52 (23.6)	62 (28.1)
HC111W1-24F	746-806	24	19.5	-8	20	4RU	7 (177.8)	52 (23.6)	62 (28.1)
HC111W1-32F	746-806	32	19.5	-8	20	5RU	8.75 (222.3)	65 (29.5)	75 (31)
HC110T1-06F	764-869	6	10	1.5	10.5	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC110T1-08F	764-869	8	11	0	12	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC110T1-12F	764-869	12	13.5	-3	15	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC110T1-16F	764-869	16	15	-4	16	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC110T1-18F	764-869	18	16.5	-6	18	4RU	7 (177.8)	52 (23.6)	62 (28.1)
HC110T1-24F	764-869	24	19.5	-8	20	4RU	7 (177.8)	52 (23.6)	62 (28.1)
HC110T1-32F	764-869	32	19.5	-8	20	5RU	8.75 (222.3)	65 (29.5)	75 (31)
HC113T1-06F	806-869	6	10	1.5	10.5	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC113T1-08F	806-869	8	11	0	12	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC113T1-12F	806-869	12	13.5	-3	15	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC113T1-16F	806-869	16	15	-4	16	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC113T1-24F	806-869	24	19.5	-8	20	4RU	7 (177.8)	52 (23.6)	62 (28.1)
HC113T1-32F	806-869	32	19.5	-8	20	5RU	8.75 (222.3)	65 (29.5)	75 (31)
HC112U1-06F	896-960	6	9.5	1.5	10.5	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC112U1-08F	896-960	8	11	0	12	1RU	1.75 (44.5)	13 (5.9)	23 (10.4)
HC112U1-12F	896-960	12	13.5	-3	15	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC112U1-16F	896-960	16	15	-4	16	3RU	5.25 (133.4)	39 (17.7)	49 (22.2)
HC112U1-24F	896-960	24	19.5	-8	20	4RU	7 (177.8)	52 (23.6)	62 (28.1)
HC112U1-32F	896-960	32	19.5	-8	20	5RU	8.75 (222.3)	65 (29.5)	75 (31)

Control Station Combiner Accessories

dbSpectra offers additional RF site equipment for Control Station Combiner applications. Please consider the use of transmit/receive filters, duplexers, and/or dual antennas to ensure the same level of isolation in the antenna network meets or exceeds the port to port isolation provided by the dbSpectra Control Station Combiner unit.

