

DSCC-DS Series Combiner and SMART Power Monitor Bundle (763-940 MHz) 2 to 12 Channels



The DSCC/DS-Series bundle consists of one DSCC-series combiner, one DSXPM5-series SMART Transmit Power Monitor, and one 3-ft DIN-male jumper cable , dbSpectra part number DSJ12F03DMDM.



The combiner and power monitor are described below. See *Bundle Ordering Information*.

DSCC-Series Combiner



Rear view DSCC-Series Combiner (6-Channel Shown)

Combiner Specifications

Electrical Specifications	
<u>Frequency Range</u>	763-940 MHz See ordering information for Models
TX Frequency Separation	150 kHz Minimum
Number of TX Channels	2-12
Channel Power Maximum	125 W
<u>Isolation</u> TX to TX ANT to TX	>65 dB >50 dB
Isolation at Transmit Frequencies	>45 dB
Insertion Loss	See Combiner Insertion Loss Table
Return Loss	>19 dB
Mechanical Specifications	
Construction/Finish	5" Ceramic Cavities, AL finish Chem Film/Paint
Mounting Chassis & brackets	AL Clear Chem Film
Mounting Chassis Front Panel	AL panel, black powdercoat
Connectors	TX Input N- Female Combiner Output 7/16 DINF
Mounting	EIA 19-inch rack
Temperature Range	-10° C to +60° C

Features and Benefits of Combiner

- ❖ Broadband performance
- ❖ Five-inch cavities with special ceramic resonators enable high performance in compact package.
- ❖ Close 150 kHz channel spacing with low insertion loss.
- ❖ Dual junction transmitter isolators provide high TX-TX isolation.
- ❖ Easy field tuning and expansion

Combiner Dimensions and Weight

No. of Channels	Height inches (& RU)	Net Weight - lbs	Shipping Weight - lbs
2	7.0" (4RU)	18.0	28.0
3		25.0	35.0
4		36.0	46.0
5	14.0" (8RU)	43.0	53.0
6		50.0	70.0
7	21.0" (12RU)	61.0	81.0
8		68.0	88.0
9		75.0	95.0
10	28" (16RU)	89.0	109.0
11		96.0	116.0
12		103.0	123.0

Combiner Insertion Loss Table (Including Jumper Cable to Power Monitor)

No. of Channels	Frequency Separation -- KHz		
	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

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DSXPM5C-DF SMART Power Monitor



DSXPM Power Monitor with 7/16 DIN connectors shown

Power Monitor Features and Benefits

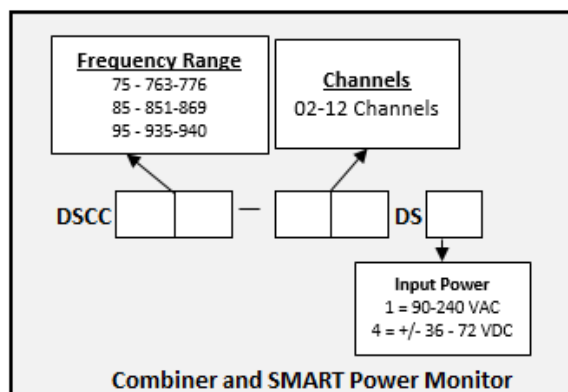
- ❖ SMART Transmit Power Monitor continuously measures forward and reflected RF power of a simplex system using a duplexer, or composite power of a transmit combiner system
- ❖ User-defined alarm points indicated by alarm relay closure and front panel indicator or by SNMP protocol on network
- ❖ Front panel 4.3" touchscreen LCD display for local configuration and monitoring

Power Monitor Specifications

Electrical Specifications	
Frequency Range, MHz	70
Maximum Power Input	500 Watts
Impedance	50 Ohm
Measurement Units	Watts, dBm, VSWR, Return Loss
Insertion Loss, dB	< 0.1
PIM Rating (7/16 DIN model)	-150 dBc
Output Alarm Relay	Form "C"
Temperature Range	-30 to +60 °C
Power Requirements	AC model 90-240 VAC 15W, or DC model \pm 36-72 VDC, 15 W
IP Interface	IPV4, with TLS security layer, SNMP V2C/V3 alarm protocol
User Interface	Web Browser, front panel display, or IP System Manager
Mechanical Specifications	
Front Panel Display	4.3" Touchscreen Color LCD
Mounting	19" 2 RU panel, 6" Deep
Construction / Finish	Aluminum / Chem Film / Black Panel
RF Connectors	7/16 DIN Female
Network Ethernet Connector	RJ-45
Power Connector	AC: IEC 320C13 AC inlet & cord DC: 2 position Terminal Block
PTT input and Alarm output	8 position terminal block

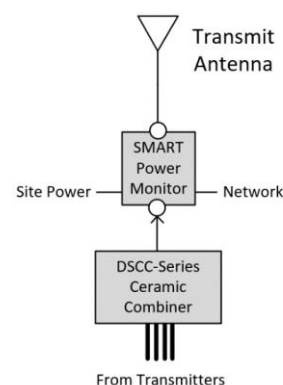
- ❖ Can be used to locally tune cavity combiners with no test equipment

DSCC-DS Bundle Ordering Information and Bundle Heights and Weights



Combiner Channels	Bundle Height	Bundle Weight	Shipping Weight
2	10.5"	22.0	32.0
3	(6 RU)	29.0	39.0
4	17.5"	40.0	50.0
5	(10 RU)	47.0	57.0
6	54.0	74.0	
7	24.5"	65.0	85.0
8	(14RU)	72.0	92.0
9	79.0	99.0	
10	31.5"	93.0	113.0
11	(18 RU)	100.0	120.0
12	107.0	127.0	

Typical Application



Combiner must be factory-tuned; provide frequency list at time of order