



FM STARPOINT COMBINER

Jampro FM Starpoint branched combiner provides an inexpensive method to combine two or more low power signals. RCCS combiners employ bandpass filters and various lengths of transmission line configured to make these filters mutually invisible.

RCCS bandpass technology offers intermodulation suppression of both the combined frequencies and any other frequencies in the local environment.

Passband insertion loss is minimized by the use of 4" aluminum cavities. Temperature stability is maintained through the use of invar tuning rods on copper center conductors.



Pictured Above: 2-Section 11.5" Filters

RCCS-X0X-FM 4" (10.1 cm) Typical Specifications based on 2 Frequencies						
Power	1 kW	1 kW	1 kW	2 kW	2 kW	2 kW
Cavities/Filters	4	3	2	4	3	2
Bandwidth	$F_c \pm 0.75$	$F_c \pm 0.75$	$F_c \pm 0.75$	$F_c \pm 0.75$	$F_c \pm 0.75$	$F_c \pm 0.75$
Insertion Loss	1.10 dB	0.70 dB	0.50 dB	1.10 dB	0.70 dB	0.50 dB
Efficiency	77.6%	85.1%	89.1%	77.6%	85.1%	89.1%
VSWR	1.10:1	1.10:1	1.10:1	1.10:1	1.10:1	1.10:1
Output Connectors (EIA)	7/8"	7/8"	7/8"	7/8"	7/8"	7/8"

RCCS-X9X-FM 8" (20.3 cm) Typical Specifications based on 2 Frequencies			
Power	2 kW		2 kW
Cavities/Filters	4		3
Bandwidth	$F_c \pm .150$		$F_c \pm .150$
Insertion Loss	0.65 dB		0.50 dB
Efficiency	86.1%		89.1%
VSWR	1.10:1		1.10:1
Output Connectors (EIA)	7/8"		7/8"



RCCS-X1X-FM 11.5" (29.2 cm) Typical Specifications based on 2 Frequencies

Power	5 kW	5 kW	5 kW	10 kW	10 kW	10 kW
Cavities/Filters	4	3	2	4	3	2
Bandwidth	Fc± .150	Fc± .150	Fc± .150	Fc± .150	Fc± .150	Fc± .150
Insertion Loss	0.48 dB	0.30 dB	0.18 dB	0.48 dB	0.30 dB	0.18 dB
Efficiency	89.5%	93.3%	95.9%	89.5%	93.3%	95.5%
VSWR	1.08:1	1.08:1	1.08:1	1.08:1	1.08:1	1.08:1
Connectors	1-5/8"	1-5/8"	1-5/8"	1-5/8"	1-5/8"	1-5/8"

RCCS-X2X-FM 18" (45.7 cm) Typical Specifications based on 2 Frequencies

Power	15 kW	15 kW	15 kW	20 kW	20 kW	20 kW
Cavities/Filters	4	3	2	4	3	2
Bandwidth	Fc± .150	Fc± .150	Fc± .150	Fc± .150	Fc± .150	Fc± .150
Insertion Loss	0.25 dB	0.20 dB	0.10 dB	0.25 dB	0.20 dB	0.10 dB
Efficiency	94.4%	95.5%	97.7%	94.4%	95.5%	97.7%
VSWR	1.08:1	1.08:1	1.08:1	1.08:1	1.08:1	1.08:1
Connectors	3-1/8"	3-1/8"	3-1/8"	3-1/8"	3-1/8"	3-1/8"

RCCS-X3X-FM 24" (60.9 cm) Typical Specifications based on 2 Frequencies

Power	30 kW	30 kW	30 kW	40 kW	40 kW	40 kW
Cavities/Filters	3	2	4	2	3	4
Bandwidth	Fc± .150	Fc± .150	Fc± .150	Fc± .150	Fc± .150	Fc± .150
Insertion Loss	0.20 dB	0.13 dB	0.28 dB	0.13 dB	0.20 dB	0.28 dB
Efficiency	95.5%	97.1%	93.8%	95.5%	97.1%	93.8%
VSWR	1.08:1	1.08:1	1.08:1	1.08:1	1.08:1	1.08:1
Connectors	4-1/16"	4-1/16"	4-1/16"	6-1/8"	6-1/8"	6-1/8"

Note:

1. 3, 4 & 5 frequency combiners available
2. Specifications are typical. Modifications may be possible upon request—contact factory
3. Specifications are subject to change without further notice.
4. Power levels assume installation below 5000'. Power handling will vary with installation elevation.