Micro Communications, Inc.
A MICROWAVE TECHNIQUES COMPANY

SERIES 45200

FM CONSTANT IMPEDANCE COMBINER MODULE

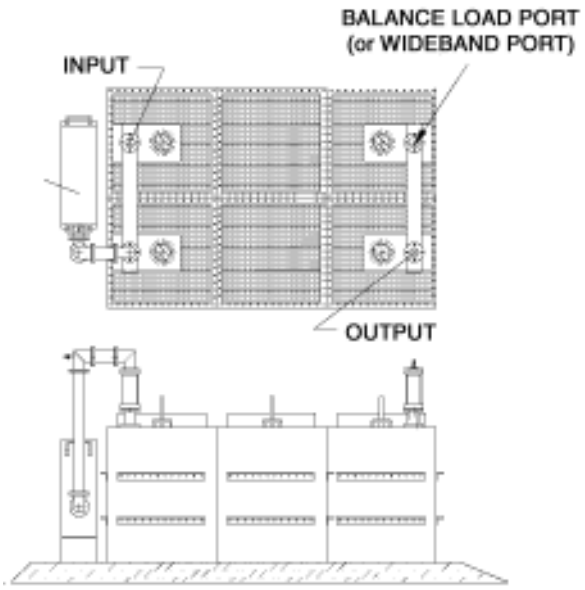
- Low Loss
- Low VSWR
- Constant Impedance Design
- High Isolation
- High Power Handling
- Stand Alone Filter

Micro Communications, Inc. offers a full range of FM channel combiners in a variety of constant impedance configurations.

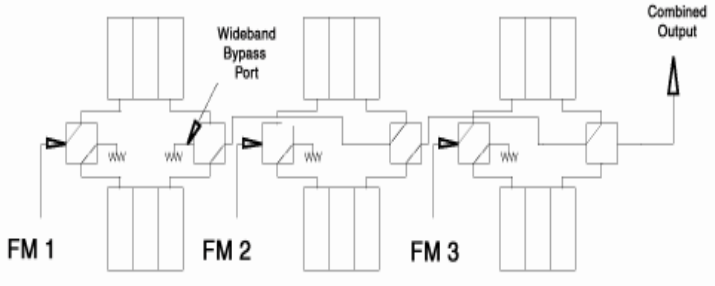
The number of cavities in these combiners is determined by the spacing between the channels being combined. The cavities are constructed using temperature compensated materials to ensure good stability.

The combiner module consists of a number of precision bandpass cavities and coaxial hybrids that ensure excellent performance. In a multi-channel combining system one module is dedicated to each channel.

Optional equipment may include provisions such as patch panels or switches, input test load ports, custom framing systems, N+1 systems, etc.



FM HIGH POWER
CONTANT IMPEDANCE
MODULE
(for spacing >0.80 MHz)



SCHEMATIC
TYPICAL FM 3 CHANNEL SYSTEM

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PERFORMANCE COMPARISON FOR FM COMBINERS

TYPE NUMBER	UC/FM /LB -10	UC/FM/LB -10/3	UC/FM /LB -20	UC/FM/LB –20/3	UC/FM /LB -40	UC/FM/LB –40/3
INPUT VSWR	1.05	1.05				
CHANNEL SPACING (Minimum)	>1.6 MHz	> 0.8 MHz	>1.6 MHz	>0.8 MHz	> 1.6 MHz	> 0.8 MHz
INSERTION LOSS (dB)						
Narrow Input @ F_{Center}	0.2	0.3	0.2	0.3	0.2	0.3
Wideband Input @F_{Center}	0.1	0.1	0.1	0.1	0.1	0.1
GROUP DELAY (ns)						
Narrow Input @ F_{Center}						
F_C +/- 100 KHz	30	40	30	40	30	40
F_C +/- 150 KHz	50	90	50	90	50	90
OUT OF BAND REJECTION (dB)						
F_C +/- 150 KHz	0.25	0.35	0.25	0.35	0.25	0.35
F_C +/- 0.80 MHz	8	20	8	20	8	20
F_C +/- 1.6 MHz	20	36	20	36	20	36
F_C +/- 2.4 MHz	26	48	26	48	26	48

			LB-10	LB-30	LB-40	LB-60
MODEL	**45222**	**45223**	**45224**	**45225**	**45225a**	**45226**
CHANNEL SPACING	> 1.6 MHz	> 1.6 MHz	> 1.6 MHz	> 1.6 MHz	> 1.6 MHz	> 1.6 MHz
Input Power (kW)						
Narrow	1	5	10	20	30	40
Wide	1	5	25	50	70	140
Input Connector	7/8	1 5/8	1 5/8	3 1/8	3 1/18	4 1/16
Output Connector	7/8	1 5/8	3 1/8	4 1/16	4 1/16	6 1/8
Size (LxWxH) in	25.6x25.6x57.1	27.6x27.6x57.9	52.8x42.1x57.9	52.8x42.1x61.0	52.8x42.1x65	66.9x57.5x65.4
(cm)	(65x65x145)	(70x70x147)	(134x107x147)	(134x107x155)	(134x107x165)	(170x146x163.5)
Weight lbs	375	419	507	639	662	1125
(kg)	(170)	(190)	(230)	(290)	(300)	(510)

			LB-10/3	LB-30/3	LB-40/3	LB-60/3
MODEL	**45232**	**45233**	**45234**	**45235**	**45235a**	**45236**
CHANNEL SPACING	> 0.8 MHz	> 0.8 MHz	> 0.8 MHz	> 0.8 MHz	> 0.8 MHz	> 0.8 MHz
Input Power (kW)						
Narrow	1	5	10	20	30	40
Wide	1	5	25	50	70	140
Input Connector	7/8	1 5/8	1 5/8	3 1/8	3 1/18	4 1/16
Output Connector	7/8	1 5/8	3 1/8	4 1/16	4 1/16	6 1/8
Size (LxWxH) in	25.6x39.4x57.1	27.6x41.3x57.9	52.8x61.8x57.9	52.8x61.8x61.0	52.8x61.8x65.0	66.9x85.0x64.4
(cm)	(65x100x145)	(70x105x147)	(134x157x147)	(134x157x155)	(134x157x165)	(170x216x163.5)
Weight lbs	507	551	684	772	805	1323
(kg)	(230)	(250)	(310)	(350)	(365)	(600)

All specifications subject to change without notice.

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