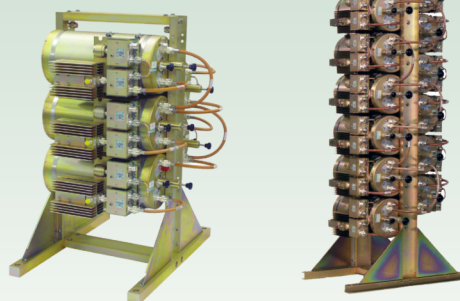


T-Pass Combiner

73-90-11 Series



Combiners and Multicouplers provide design security for any multichannel radio system.

PROBLEMS/SOLUTIONS

Need to combine several transmitters on antenna

- Maximize site potential through combiner system.

Need optimal site capability

- Broadband architecture of the T-Pass® circuit and coaxial cavities mitigates equipment obsolescence and facilitates ease of system re-configuration when re-banding is necessary.
- RoHS compliant for sale in European Union.
- Each system configured with minimal guard band between transmit and receive frequencies.

Need expansion capability

- Electrically and mechanically designed for easy expansion.

APPLICATIONS

From the most complex multi-site Homeland Security system to simplest 2-channel private system, our products enables unsurpassed flexibility to accommodate the most challenging frequency plans, as well as future expandability.

The same architecture used for transmitter combining can also be used as a preselector in complex receive systems where there is not sufficient guardband to use combine bandpass filters.

TX RX Systems Inc.

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716.549.4700 | Sales@txrx.com | www.txrx.com

T-Pass Combiner

73-90-11 Series

SPECIFICATION TABLE

Frequency Range	806-960 MHz
Cavity Type and Diameter	3/4 wave, 6.625" (168 mm)
Maximum Continuous Transmit Power	150 W @ 450 kHz 125 W @ 250 kHz
Isolator Load Power (continuous)	See Chart
Minimum Tx-Tx Separation at	450 kHz @ -1.25 dB
Cavity Loss	250 kHz @ -1.8 dB
Typical Tx-Tx Isolation at Minimum Separation (dB)	80 dB
Typical Antenna - Tx Isolation (dB)	70 dB
Nominal Impedance (Ω)	50
Maximum Input Return Loss (VSWR)	-20 dB (1.22:1)
Temperature Range ($^{\circ}\text{C}$)	-30 to +60
Connectors, Input and Antenna	N
Mounting	Peg Racks [®]
Mounting Options	MA: 14" x 19" rackmount adapter plates LR: System supplied without Peg Rack [®]
Maximum Channels/Rack	15
Dimensions (HxWxD)	65.25" x 24" x 20.7" (1659 x 610 x 526 mm)
Weight - Basic Single Channel [lb (Kg)]	See Chart below
Weight - Expansion Channel Assy [lb (Kg)]	See Chart below

Model Numbers	Isolator Load Power	Weight, Single Channel	Weight, Expansion Channel
73-90-11-2C-NN	5W/90W	31 (14.0)	12 (5.4)
73-90-11-2D-NN	5W/100W	32 (14.5)	13 (5.9)

73-90-11 SERIES SYSTEMS (6.625" CAVITY DIAMETER)

TX-TX Separations	Cavity Loss	Loss (dB) vs. No. of Channels					
		2	3	4	5	8	10
1 MHz	-1.25 dB	-2.1	-2.3	-2.4	-2.5	-2.8	-3.0
500 kHz	-1.25 dB	-2.3	-2.8	-3.0	-3.2	-3.6	-3.9
450 kHz	-1.25 dB	-2.4	-2.9	-3.2	-3.4	-3.9	-4.1
250 kHz	-1.80dB	-3.1	-3.8	-4.1	-4.4	-4.9	-5.2



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