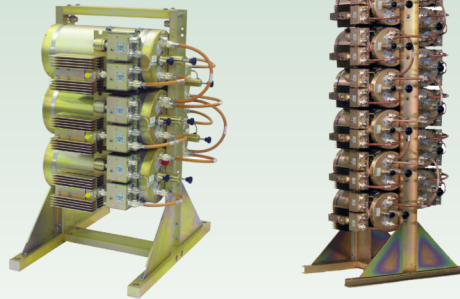


T-Pass Combiner

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.

8625 Industrial Pkwy, Angola, NY 14006
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 ($^{\circ}$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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