

FM TRANSMITTER COMBINER STAR POINT DESIGN

TCFM-A Series

- **Low Cost**
- **Star Point design**
- **High Isolation**
- **Low Insertion Loss**
- **Good Return Loss**

Fiplex' broadcast line of "FM Transmitter Combiners" are Star Point branching devices used to combine two or more FM channel on a single antenna port.

TCFM-A Series uses high Q band pass cavities, that shows a very good thermal stability and low Insertion Loss.

Dual cavity models are available for minimum channel separation of 3.00 MHz, while Triple cavity models are available for minimum channel separation of 2.1 MHz Mounting Frame is provided with thermal converted paint.

Standard color is Raal 7032. Other colors are available upon request.



ELECTRICAL SPECIFICATION		
Specification	Dual cavity	Triple Cavity
Minimum channel separation	2.1 MHz	3.0MHz
Frequency range	88-108 MHz	88-108 MHz
Maximum power	See table	See table
Insertion loss	0.35dB max	0.35dB max
Pass bandwidth	Fo +/- 100KHz	Fo +/- 100KHz
Channel to channel isolation	Better than 40dB	Better than 40dB
Return loss	20dB min all ports	20dB min all ports
Impedance	50 ohms	50 ohms
Connectors	See table	See table
Mounting	Self supported structure	Self supported structure

FM COMBIENRS, STAR POINT			
Frequency range Model Designation Number of Channels Channel Separation Cavity Type Input Power per Channel Connectors, Input Connector, Antenna	88 – 108 TCFM2AD-A 2 3.0 MHz Dual 250 W N(f) ; DIN 71/6 N(f) ; DIN 71/6	88 – 108 TCFM3AD-A 3 3.0 MHz Dual 250 W N(f) ; DIN 71/6 DIN 71/6	88 – 108 TCFM4AD-A 4 3.0 MHz Dual 250 W N(f) ; DIN 71/6 EIA 7/8
Frequency range Model Designation Number of Channels Channel Separation Cavity Type Input Power per Channel Connectors, Input Connector, Antenna	88 – 108 TCFM2AT-A 2 2.1 MHz Triple 250 W N(f) ; DIN 71/6 N(f) ; DIN 71/6	88 – 108 TCFM3AT-A 3 2.1 MHz Triple 250 W N(f) ; DIN 71/6 DIN 71/6	88 – 108 TCFM4AT-A 4 2.1 MHz Triple 250 W N(f) ; DIN 71/6 EIA 7/8
Frequency range Model Designation Number of Channels Channel Separation Cavity Type Input Power per Channel Connectors, Input Connector, Antenna	88 – 108 TCFM2BD-A 2 3.0 MHz Dual 500 W N(f) ; DIN 71/6 EIA 7/8	88 – 108 TCFM3BD-A 3 3.0 MHz Dual 500 W N(f) ; DIN 71/6 EIA 7/8	88 – 108 TCFM4BD-A 4 3.0 MHz Dual 500 W N(f) ; DIN 71/6 EIA 7/8
Frequency range Model Designation Number of Channels Channel Separation Cavity Type Input Power per Channel Connectors, Input Connector, Antenna	88 – 108 TCFM2BT-A 2 2.1 MHz Triple 500 W N(f) ; DIN 71/6 EIA 7/8	88 – 108 TCFM3BT-A 3 2.1 MHz Triple 500 W N(f) ; DIN 71/6 EIA 7/8	88 – 108 TCFM4BT-A 4 2.1 MHz Triple 500 W N(f) ; DIN 71/6 EIA 7/8
Frequency range Model Designation Number of Channels Channel Separation Cavity Type Input Power per Channel Connectors, Input Connector, Antenna	88 – 108 TCFM2CD-A 2 3.0 MHz Dual 1 KW EIA 7/8 EIA 7/8	88 – 108 TCFM3CD-A 3 3.0 MHz Dual 1 KW EIA 7/8 EIA 7/8	88 – 108 TCFM4CD-A 4 3.0 MHz Dual 1 KW EIA 7/8 EIA 1 5/8
Frequency range Model Designation Number of Channels Channel Separation Cavity Type Input Power per Channel Connectors, Input Connector, Antenna	88 – 108 TCFM2CT-A 2 2.1 MHz Triple 1 KW EIA 7/8 EIA 7/8	88 – 108 TCFM3CT-A 3 2.1 MHz Triple 1 KW EIA 7/8 EIA 7/8	88 – 108 TCFM4CT-A 4 2.1 MHz Triple 1 KW EIA 7/8 EIA 1 5/8