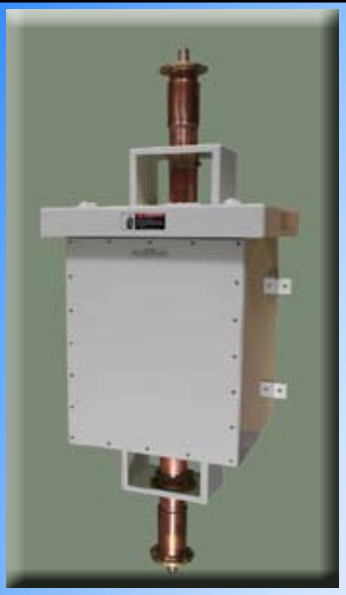
KINTRONIC LABORATORIES INC.

VERSATILE KTL ISOCOUPLERS



FMC-20

FMC-7.5

FMC-1.5

Kintronic Laboratories' lsocouplers provide versatility to existing AM radiating elements by allowing for installation of transmit-receive/FM/TV antennas operating in the frequency range of 30-1000 MHz without disrupting AM antenna characteristics.

Kintronic Laboratories also maintains a stock of accessory items required for isocoupler installation, including transmission line, end fittings and cable grounding clamps.

FEATURES - TRANSMIT/ RECEIVE APPLICATIONS

MODEL FMC-0.5A

- **Install at base of AM tower.**
- **Permits installation of broadcast antenna and connecting transmission line.**
- **Will handle full 1500 W operation at 30 to 87 MHz.**
- **Effect on base input impedance negligible for most single radiators or directional elements {less than 100 uuf shunting capacity).**
- **Transmission line may be fastened to tower for its full**
- **length, permitting tower to operate with normal radiation characteristics.**
- **• Adds 20 db or more attenuation at second harmonic to attain high level reduction of interference to low level TV signals (meets FCC standards}.**
- **Weatherproof enclosure, compact construction.**

MODEL FMC-0.1

- **Install at base of AM tower.**
- **Permits installation of Studio-to-Transmitter (STL) antenna and connecting transmission line.**
- **Will handle full 100 W operation at 700 to 1000 MHz.**
- **Effect on base input impedance negligible for most single radiators or directional elements {less than 100 uuf shunting capacity).**
- **STL transmission line may be fastened to tower for its full**
- **length, permitting tower to operate with normal radiation characteristics.**
- **Adds 20 db or more attenuation at second harmonic to attain high level reduction of interference to low level TV signals (meets FCC standards}.**
- **• Weatherproof enclosure, compact construction.**

FEATURES - TRANSMIT/ RECEIVE APPLICATIONS

MODEL FMC-0.58 (FMC-1.0LPTV)

- **Install at base of AM tower.**
- **Permits installation of broadcast antenna and connecting transmission line.**
- **Will handle full 500 W (1000 W) operation at 150 to 699 MHz (174 to 482 MHz, Channels 7-15: Note LPTV Units for higher channels are available with reduced power rating.**
- **Effect on base input impedance negligible for most single radiators or directional elements {less than 100 uuf shunting capacity).**
- **Transmission line may be fastened to tower for its full**
- **length, permitting tower to operate with normal radiation characteristics.**
- **Adds 20 db or more attenuation at second harmonic to**
- **attain high level reduction of interference to low level TV signals (meets FCC standards).**
- **Weatherproof enclosure, compact construction**

MODEL FMC-0.1X (Isocoupler for High Power Paging Transmitters)

- **Install at base of AM tower.**
- **Permits installation of high high power Paging System antenna and associated transmission line.**
- **Will handle full 300 W operation at 700 to 975 MHz.**
- **Total operational bandwidth to yield less than 1.05:1 VSWR is 3 MHz.**
- **Effect on base input impedance negligible for most single radiators or directional elements (less than 100 uuf shunting capacity).**
- **Paging transmission line may be fastened to tower for its full length, permitting tower to operate with normal radiation characteristics.**
- **Adds 20 db or more attenuation at second harmonic to**
- **attain high level reduction of interference to low level TV**
- **signals (meets FCC standards}.**
- **Weatherproof enclosure, compact construction.**

WHEN ORDERING AN ISOCOUPLER PLEASE SPECIFY THE FOLLOWING:

- Tower Type
  - Guyed
  - Self-supported
- Tower Heigh in meters
- AM Transmitter Power (KW)
- Desired bandwidth (+/- MHZ)
- For STL Applications Specify if Isocoupler will be used for Transmit or Receive
- Specify Isocoupler Connector Type Required

SPECIFICATIONS

ELECTRICAL SPECIFICATIONS	MODEL FMC-0.5A	MODEL FMC-1.0LPTV	MODEL FMC-0.58	MODEL FMC-0.1	MODEL FMC-0.1X
Nominal Power Rating	500W	1000W	500W	100W	300W
Tunable Range	30 to 87 MHz	174 to 149 MHz	150 to 699 MHz	700 to 975 MHz	700 to 975 MHz
Bandwidth (MHz)	6	6	6	6	3
Insertion Loss at Fundamental Frequency	Less than 0.8 db	Less than 0.8 db	Less than 0.8 db	Less than 0.8 db	Less than 0.8 db
Insertion Loss at Second Harmonic	20 db or greater	20 db or greater	20 db or greater	20 db or greater	20 db or greater
Input Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Output Impedance	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
Capacity between Input & Output Circuit	Less than 100 uuf	Less than 100 uuf	Less than 100 uuf	Less than 100 uuf	Less than 100 uuf
VSWR within specified bandwidth with a standard load impedance	Less than 1.05 to 1	Less than 1.05 to 1	Less than 1.05 to 1	Less than 1.05 to 1	Less than 1.05 to 1
Input and Output Connections	Type N Female or 7/8" EIA Male Faange	Type N Female or 7/8" EIA Male Faange	Type N Female	Type N Female	Type N Female
Peak Voltage Rating (KV)	18	18	18	12	12

* Higher Frequency Operation Available at Reduced Power Rating

FEATURES - FM APPLICATIONS

MODEL FMC-1.5

- Install at base of AM tower.
- Permits installation of FM antenna and connecting transmission line on hot broadcast towers for simultaneous AM and FM operation on the same tower.
- Will handle full 1500 W operation at 88 to 149 MHz.
- Effect on base input impedance negligible for most single radiators or directional elements (less than 100 uuf shunting capacity).
- FM transmission line may be fastened to tower for its full length, permitting tower to operate with normal radiation characteristics.
- Adds 20 db or more attenuation at second harmonic to attain high level reduction of interference to low level TV signals (meets FCC standards).
- Weatherproof enclosure, compact construction

MODEL FMC-7.5

- Install at base of AM tower.
- Permits installation of FM antenna and connecting transmission line on hot broadcast towers for simultaneous AM and FM operation on the same tower.
- Will handle full 7.5 KW operation at 88 to 108 MHz.
- Effect on base input impedance negligible for most single radiators or directional elements (less than 150 uuf shunting capacity).
- FM transmission line may be fastened to tower for its full length, permitting tower to operate with normal radiation characteristics.
- Adds 20 db or more attenuation at second harmonic to attain high level reduction of interference to low level TV signals (meets FCC standards).
- Units may be pressurized at 5 PSI and pressure will be conducted through unit to the output line.
- Weatherproof enclosure, compact construction.
- Often cheaper to use FMC-7.5 unit than to isolate and tune FM transmission line on the AM tower.

MODEL FMC-20

- Install at base of AM tower.
- Permits installation of FM antenna and connecting transmission line on hot broadcast towers for simultaneous AM and FM operation on the same tower.
- Will handle full 20 KW operation at 88 to 108 MHz.
- Effect on base input impedance negligible for most single radiators or directional elements (less than 150 uuf shunting capacity).
- FM transmission line may be fastened to tower for its full length, permitting tower to operate with normal radiation characteristics.
- Adds 20 db or more attenuation at second harmonic to attain high level reduction of interference to low level TV signals (meets FCC standards).
- Units may be pressurized at 5 PSI and pressure will be conducted through unit to the output line.
- Weatherproof enclosure, compact construction.
- Often cheaper to use FMC-20 unit than to isolate and tune FM transmission line on the AM tower

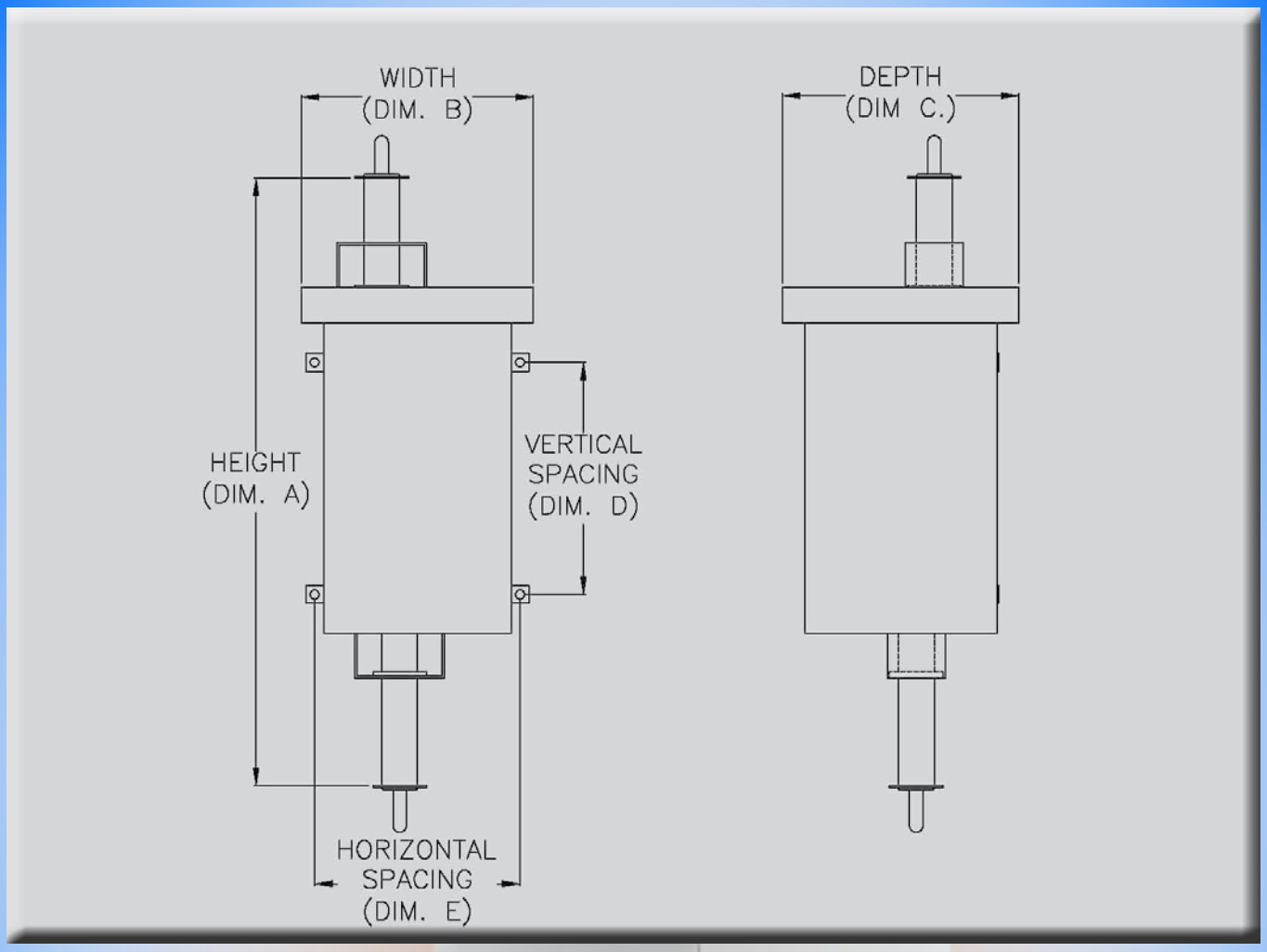
MODEL FMC-30

- Install at base of AM tower.
- Permits installation of FM antenna and connecting transmission line on hot broadcast towers for simultaneous AM and FM operation on the same tower.
- Will handle full 30 KW operation at 88 to 108 MHz.
- Effect on base input impedance negligible for most single radiators or directional elements (less than 150 uuf shunting capacity).
- FM transmission line may be fastened to tower for its full length, permitting tower to operate with normal radiation characteristics.
- Adds 20 db or more attenuation at second harmonic to attain high level reduction of interference to low levelTV signals (meets FCC standards).
- Units may be pressurized at 5 PSI and pressure will beconducted through unit to the output line.
- Weatherproof enclosure, compact construction.
- Often cheaper to use FMC-30 unit than to isolate andtune FM transmission line on the AM tower.

SPECIFICATIONS

ELECTRICAL SPECIFICATIONS	MODEL FMC-0.5	MODEL FMC-7.5	MODEL FMC-20	MODEL FMC-30
Nominal Power Rating	1500W	7.5KW	20KW	30KW
Tunable Range	88 to 149 MHz	88 to 108 MHz	88 to 108 MHz	88 to 108 MHz
Bandwidth (MHz)	6	3	3	3
Insertion Loss at Fundamental Frequency	Less than 0.2 db	Less than 0.2 db	Less than 0.2 db	Less than 0.2 db
Insertion Loss at Second Harmonic	20 db or greater	20 db or greater	20 db or greater	20 db or greater
Input Impedance	50 ohms	50 ohms	50 ohms	50 ohms
Output Impedance	50 ohms	50 ohms	50 ohms	50 ohms
Capacity between Input & Output Circuit	Less than 100 uuf	Less than 150 uuf	Less than 150 uuf	Less than 150 uuf
VSWR within specified bandwidth with a standard load impedance	Less than 1.05 to 1	Less than 1.05 to 1	Less than 1.05 to 1	Less than 1.05 to 1
Input and Output Connections	Type N Female or 7/8" EIA Male Faange	1-5/8" EIA Male Flange	3-1/8" Male Flange	3-1/8" Male Flange
Peak Voltage Rating (KV)	22	30	30	41

DIMENSIONS



MECHANICAL SPECIFICATIONS	MODEL FMC-0.5 A	MODEL FMC-1.5	MODEL FMC-0.5B FMC-1.0L PTV	MODEL FMC-0.1 FMC-0.1X	MODEL FMC-7.5	MODEL FMC-20	MODEL FMC-30
Heigh (DIM.A)	34”	28”	24”	18”	43”	55”	64”
Width (DIM.B)	13”	12”	12”	8”	16”	22”	30”
Depth (DIM.C)	13”	12”	12”	8”	16”	22”	30”
Net Weight (Approx.)	35 lb	25 lb	25 lb	10 lb	70 lb	125 lb	140 lb
Finish	Frost White	Frost White	Frost White	Frost White	Frost White	Frost White	Frost White

MOUNTING DIMENSIONS	MODEL FMC-0.5 A	MODEL FMC-1.5	MODEL FMC-0.5B FMC-1.0L PTV	MODEL FMC-0.1 FMC-0.1X	MODEL FMC-7.5	MODEL FMC-20	MODEL FMC-30
Holes	1/2”	1/2”	1/2”	1/2”	1/2”	1/2”	1/2”
Vertical Spacing (DIM.D)	13”	8-1/2”	4-1/2”	5”	12-1/4”	14”	14-1/2”
Horizontal Spacing (DIM.E)	11-1/2”	9-1/2”	9-1/2”	7-1/2”	13-3/4”	19-1/4”	25-1/2”

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