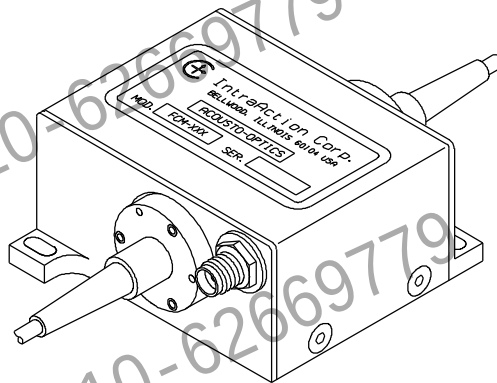




**MODEL FCM SERIES
FIBER PIGTAILED
ACOUSTO-OPTIC MODULATOR / FREQUENCY SHIFTER**

- NEAR IR WAVELENGTH RANGE
- OPTICAL FREQUENCY SHIFTING
- CHOICE OF FREQUENCY SHIFT³
- INTENSITY MODULATION
- LOW RF DRIVE POWER
- HIGH RELIABILITY



SPECIFICATIONS

Acousto-optic Material

AMTIR-1 Chalcogenide Glass

Optical Fiber¹

Singlemode

Fiber Connector¹

FC-PC

Modulation Bandwidth (-3dB)

4.0 MHz

Optical Rise Time

120 nsec

Insertion Loss²

< 2.0 dB

Extinction Ratio (On/Off)

> 55 dB

Optical Polarization

any

Input Impedance / VSWR

50 Ohms / 1.2:1

Size (less connectors)

2.24(5.7)D x 1.10(2.8)H x 2.29(5.82)W inches(cm)

MODEL

FCM-401E6C

FCM-501E6C

FCM-801E6C

FCM-1001E6C

RF Frequency³

40 MHz

50 MHz

80 MHz

100 MHz

Optical Frequency Shift^{3,4}

+ 40 MHz

+ 50 MHz

+ 80 MHz

+100 MHz

Optical Wavelength

1.3 μ m

1.3 μ m

1.3 μ m

1.3 μ m

RF Drive Power⁵

500 mwatts

500 mwatts

700 mwatts

1.0 watt

MODEL

FCM-401E5C

FCM-501E5C

FCM-801E5C

FCM-1001E5C

RF Frequency³

40 MHz

50 MHz

80 MHz

100 MHz

Optical Frequency Shift^{3,4}

+ 40 MHz

+ 50 MHz

+ 80 MHz

+100 MHz

Optical Wavelength

1.55 μ m

1.55 μ m

1.55 μ m

1.55 μ m

RF Drive Power⁵

700 mwatts

700 mwatts

1.0 watt

1.5 watts

¹ Other optical fiber such as polarization maintaining, and other connectors such as FC-APC are also available.

² Does not include connector losses.

³ User defined frequencies available from 40 MHz to 250 MHz. Note: Specifications change with frequency.

⁴ Negative frequency shift available. Specify when ordering.

⁵ Single frequency or phase locked dual frequency, laboratory, or OEM drivers are available. High extinction drivers also available.