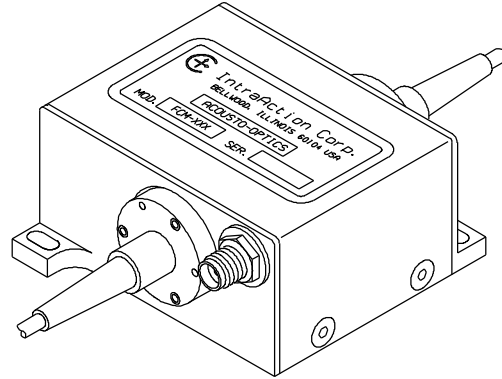


**MODEL FCM SERIES
FIBER PIGTAILED
ACOUSTO-OPTIC MODULATOR / FREQUENCY SHIFTER**

- 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 Fiber ¹	Singlemode
Fiber Connector ¹	FC-PC
Modulation Bandwidth (-3dB)	4.0 MHz
Optical Rise Time	120 nsec
Insertion Loss ²	< 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	<u>FCM-401E6C</u>	<u>FCM-501E6C</u>	<u>FCM-801E6C</u>	<u>FCM-1001E6C</u>
RF Frequency ³	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 μm	1.3 μm	1.3 μm	1.3 μm
RF Drive Power ⁵	500 mwatts	500 mwatts	700 mwatts	1.0 watt

MODEL	<u>FCM-401E5C</u>	<u>FCM-501E5C</u>	<u>FCM-801E5C</u>	<u>FCM-1001E5C</u>
RF Frequency ³	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 μm	1.55 μm	1.55 μm	1.55 μm
RF Drive Power ⁵	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.