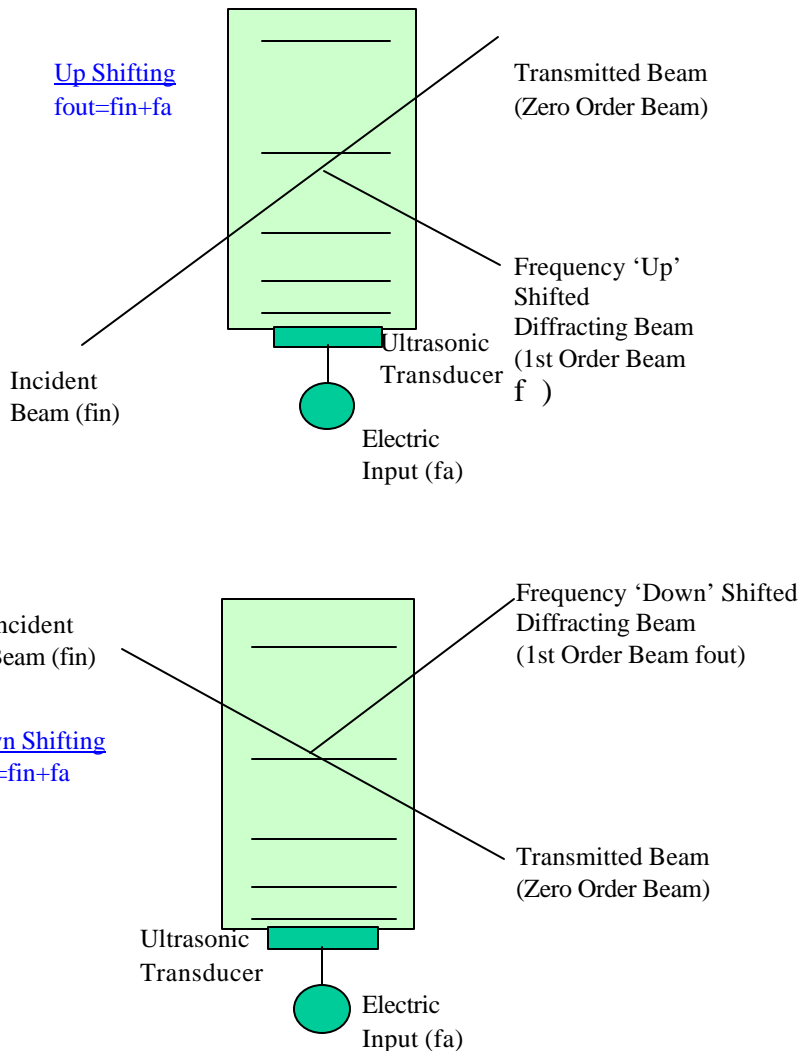




Fiber Pigtailed Acousto-Optic Frequency Shifters

Due to a Doppler shift, the diffracted beam of the Acousto-Optic modulator and frequency shifter is shifted in frequency (wavelength) by the acoustic beam. If the incident acoustic wave is introduced in the direction of the incident optical wave, the laser shifts toward the higher side. If the incident acoustic wave is introduced in the opposite direction of the incident optical wave, the laser shifts toward the lower frequency side. The A-O frequency shifters are powered by precision, fixed frequency, R.F. synthesized drivers. All are quartz crystal controlled and are available in laboratory models including a built-in power supply (110VAC or 220VAC) or in a flange mounted, aluminum, O.E.M. enclosure. The O.E.M. models require only +24 VDC for operation.





Specifications

Fiber Pigtailed Acousto-Optic Frequency Shifters (360-900 nm)				
Model Number	Wavelength [nm]	Frequency Shift [MHz]	Insertion Loss [dB]	Fiber Type
TEF-125-852-2FP	852	±125	2.2-2.5	5.1μ core
TEF-1100-488-2FP	488	±1100	8.7	3.1μ core

Fiber Pigtailed Acousto-Optic Frequency Shifters (980-1600 nm)				
Model Number	Wavelength [nm]	Frequency Shift [MHz]	Insertion Loss [dB]	Fiber Type
IPF-500-1300-3FP	1300	±500	2.3-5.0	9μ core
IPF-500-1550-3FP	1550	±500	2.3-6.0	9μ core
IPF-1000-1300-3FP	1300	±1000	2.3-6.0	9μ core
IPF-1000-1550-3FP	1550	±1000	2.3-11.0	9μ core

Fiber Pigtailed Acousto-Optic Frequency Shifters (980-2900 nm)				
Model Number	Wavelength [nm]	Frequency Shift [MHz]	Insertion Loss [dB]	Fiber Type
AMF-55-1300-2FP	1300	±55	2.0-2.2	9μ core
AMF-55-1550-2FP	1550	±55	2.0-2.2	9μ core
AMF-100-1300-3FP	1300	±100	2.1-3.3	9μ core
AMF-100-1550-3FP	1550	±100	2.1-3.9	9μ core



Fixed Frequency Drivers

Driver Model Number	FFF-500-A-F1	FFF-1000-A-F1
AO Frequency Shifter	IPF-500-3FP	IPF-1000-3FP
Frequency	500 MHz	1000 MHz
Frequency Control	Quartz crystal referenced phase locked loop	
Frequency Accuracy	0.015%	0.015%
Harmonic Content	≤ -10dBc	≤ -10dBc
Stability	0.0015% minimum after 15 minute warm-up	
Modulation	None. (Digital [B2] and Analog Amplitude [B1] modulation optional, must be specified when placing order)	
Output Power	~1 Watt nominal. Power is optimized for peak efficiency with supplied A-O device.	
Output Protection	Power amplifiers used will tolerate an infinite V.S.W.R. without damage. Rated power is available only when a proper RF load is connected.	
Operating Power	90-240 VAC, 50-60 Hz, 55 Watts max.	
Enclosure	The unit will be packaged in a 6.75 inch wide by 2.6 inch high by 8.3 inch deep instrument case. The rear panel heatsink increases depth to 10.5 inch max. Size is exclusive of connectors.	
Environmental	Nominal Laboratory Conditions: Maximum temperature +35° C; the unit is not sealed against moisture or condensing humidity.	

OEM packaging is also available

Driver Model Number	FFF-125-A-F1	FFF-1000-A-F1
AO Frequency Shifter	TEF-125-852-2FP	TEF-1100-488-2FP
Frequency	125 MHz	1100 MHz
Frequency Control	Quartz crystal referenced phase locked loop	
Frequency Accuracy	0.015%	0.015%
Harmonic Content	≤ -10dBc	≤ -10dBc
Stability	0.0015% minimum after 15 minute warm-up	
Modulation	None. (Digital [B2] and Analog Amplitude [B1] modulation optional, must be specified when placing order)	
Output Power	~1 Watt nominal. Power is optimized for peak efficiency with supplied A-O device.	
Output Protection	Power amplifiers used will tolerate an infinite V.S.W.R. without damage. Rated power is available only when a proper RF load is connected.	
Operating Power	90-240 VAC, 50-60 Hz, 55 Watts max.	
Enclosure	The unit will be packaged in a 6.75 inch wide by 2.6 inch high by 8.3 inch deep instrument case. The rear panel heatsink increases depth to 10.5 inch max. Size is exclusive of connectors.	
Environmental	Nominal Laboratory Conditions: Maximum temperature +35° C; the unit is not sealed against moisture or condensing humidity.	

OEM packaging is also available

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 E-Mail: offices@brimrose.com
 Web: <http://www.brimrose.com>

BRIMROSE



Fixed Frequency Drivers

Driver Model Number	FFF-55-A-F1	FFF-100-A-F1
AO Frequency Shifter	AMF-55-2FP	AMF-100-3FP
Frequency	55 MHz	100 MHz
Frequency Control	Quartz crystal referenced phase locked loop	
Frequency Accuracy	0.015%	0.015%
Harmonic Content	≤ -10dBc	≤ -10dBc
Stability	0.0015% minimum after 15 minute warm-up	
Modulation	None. (Digital [B2] and Analog Amplitude [B1] modulation optional, must be specified when placing order)	
Output Power	~1 Watt nominal. Power is optimized for peak efficiency with supplied A-O device.	
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