

FE-3820 18-40 GHz Frequency Extender

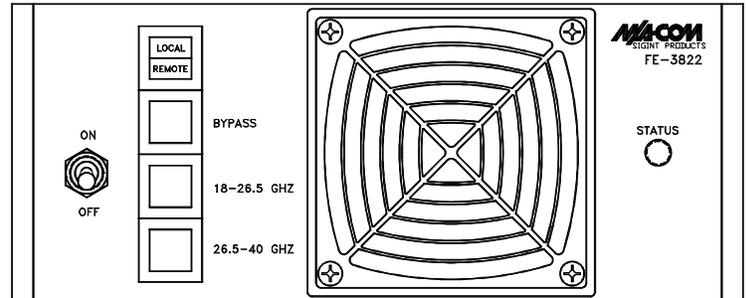


**M/A-COM SIGINT
Products**

Date Revised: 20 JAN 03

VENDOR DESCRIPTION

The FE-3820 Frequency Extender accepts RF inputs in the 0.5-18 GHz range and the 18-40 GHz range, and provides a translated 2-18 GHz output when the tuning frequency is in the range of 18-40 GHz. The correct RF input port (0.5-18 GHz or 18-40 GHz) is selected by switching inside the FE-3820 based on tuning frequency inputs from the associated receiver. The 2-18 GHz translated output is routed to the companion microwave receiver for further down-conversion and demodulation. Although the FE-3820 is designed to work with the M/A-COM SIGINT Products SMR-5550i and SMR-3822 microwave receivers, this unit will function with any receiver that tunes 2-18 GHz. The FE-3820 is a high performance down-converter with a noise figure of 12 dB and integrated phase noise of 0.4° rms, insuring that low level signals will be accurately down-converted. An SMA connector is provided for signals in the range of 0.5-18 GHz and a K connector is used for signals in the range of 18-40 GHz.



**Product Manager
Robotic & Unmanned Sensors**

Telephone: (732) 427-5827 / DSN 987

Fax: (732) 427-5072 / DSN 987

e-mail: SFAE-IEWS-NV-RUS@iew.s.monmouth.army.mil

SIGINT

Hardware

Power: 50 watts	Operating Speed: N/A
Weight: 10 lbs	Operating Temp.: 0°C to 50°C
Dimensions: 89 mm x 216mm x 457 mm	Storage Temp.: -10°C to 70°C
Internal Volume: 0.31 ft ³	Interface: Optional 10Base2 or 10/100BaseT
In-Flight Manipulation of the Sensor: Yes	Bandwidth Required: N/A
Able to Perform in an Environment with Yaw & Pitch Rates: Yes	TCDL Compatibility: N/A
Range: N/A	MTBF: Proprietary
	MTTR: Proprietary
Operating Altitude: N/A	Maintainability: 2-level BIT to LRM level

Performance

Performs 24 hrs continuous on-station mission operations within 24 hrs period

Capable of 24 hr surge for X consecutive days with X days ops being limited to 16 hrs – Contact Factory