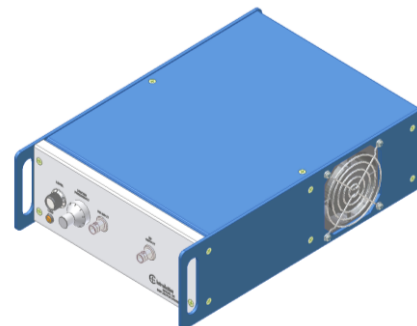


## MODEL DE SERIES DEFLECTOR DRIVER

### DESCRIPTION

The Model DE series Deflector Drivers include a voltage controlled RF oscillator and a broadband RF power amplifier in a housing with power supply, RFI line filter, and line switch. An optional (M) analog amplitude modulation circuit is available. Standard frequency linearity is  $\pm 0.25$  percent. Standard frequency slew rate is 1  $\mu$ sec for total frequency range. RF output power capability can be up to 10 watts for some models. Configuration options include a front panel user accessible connection between the voltage controlled oscillator and level/modulation circuit (N option) so that an external frequency source can be used in place of the internal voltage controlled oscillator. Also available is an optional front panel connection between the level/modulation circuit and the RF power amplifier (H option), to give the Model DE drivers capability to be used as a stand alone RF power amplifier. Drivers with option E provide a cw, +10 dBm, voltage controlled oscillator RF reference output.



### SPECIFICATIONS

Frequency Control Voltage	Analog (1 volt peak-to-peak)
Frequency Slew Rate	1 $\mu$ sec (total frequency range)
RF Amplifier Operation	Class AB
Rise/Fall Time (modulation option)	30 nsec
Harmonics (at full power)	-20 dBc
Output Mismatch Tolerance	100 percent
Input / Output Impedance	50 ohms
Connectors	BNC
Line Voltage (standard)	115/230 Vac, 50-60 Hz
	100 Vac, 50-60 Hz (option J)
Size (inches)	3.5 H x 9.0 W x 13.5 D
(cm)	8.9 H x 22.9 W x 34.3 D

MODEL	<u>DE-402</u>	<u>DE-405</u>	<u>DE-802</u>	<u>DE-1002</u>	<u>DE-2002</u>
Center Frequency <sup>1</sup>	40 MHz	40 MHz	80 MHz	100 MHz	200 MHz
Frequency Range	20 MHz	20 MHz	40 MHz	50 MHz	100 MHz
RF Output Power Capability <sup>2</sup>	2 watts	5 watts	2 watts	2 watts	2 watts

OPTIONS: D...Inverse digital, input<0.8 volts for RF/on, input>2 volts to 5 volts for RF off, 50  $\Omega$  input impedance.  
 E...Low level oscillator RF output, +10 dBm level. e.g., DE-402E  
 H...Front panel access between modulator circuit and RF power amplifier. e.g., DE-402H  
 J...100 Vac line voltage for Japan. e.g., DE-402J  
 M...Amplitude modulation (0-1 volt for 0 to specified RF output) e.g., DE-402M  
 N...Front panel access between oscillator and modulator circuits. e.g., DE-402N  
 T...Digital input, input<0.8 volts for RF/off, input>2 volts to 5 volts for RF/on, 50 ohm input impedance.

<sup>1</sup> Other center frequencies and frequency ranges are available.

<sup>2</sup> Other RF output power capabilities are available.