

## Description

DSM's VF-90 linear piezoelectric amplifier module provides functionality for driving piezoelectric (capacitive) loads in an extremely compact form factor. The single channel module is designed into National Instruments' CompactRIO format for use in a CompactRIO and CompactDAQ chassis or for use outside of the chassis environment. The VF-90 is powered by a 5.5V AC/DC adapter (included).

Electrical connections for power, input signal, and output voltage are made through the module's screw terminals. The VF-90 features over-current, over-temperature, and short-circuit protection as well as protection against over/under voltage conditions on the power line.

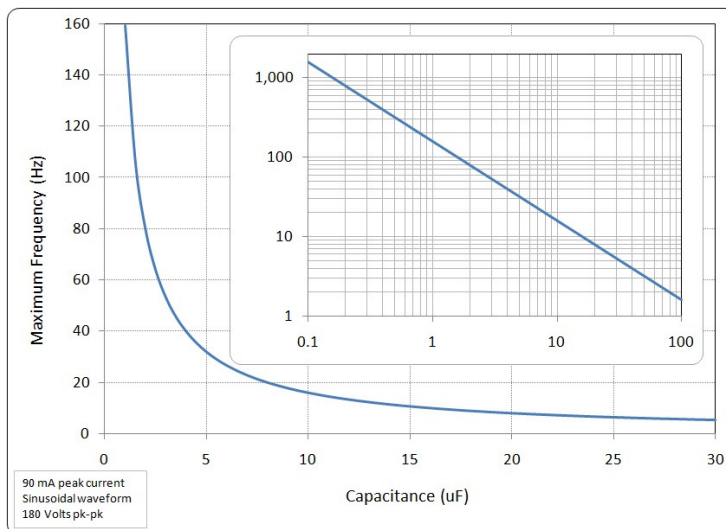


## Features

- Over-current protection
- Over-temperature protection
- Short-circuit protection
- Protection against over/under voltage conditions on the power line
- RoHS compliant
- FCC compliant
- CE Compliant
- National Instruments' CompactRIO format (communication and power is external).
- 5.5V AC/DC adapter included

## Specifications

Output Voltage (V):	-30 to +150
Input Voltage Signal (V):	-0.75 to +3.75
Max Peak Current (mA):	90
Dimensions (in):	3.5 x 0.9 x 4
Dimensions (mm):	89 x 23 x 102
Operating Voltage (VDC):	5.5, 2A
Bandwidth (kHz):	>5 kHz (-3dB)
Noise (mVrms):	<1(0.5 Typical)
Gain (V/V):	40 +/-5%
Recommended Min. Capacitance (nF):	200
Connector:	Screw Terminals



(1) The output voltage range of the VF-90 can exceed the rated voltage limits. Do not allow the input signal to exceed the prescribed input voltage range, or damage to the piezo load can occur. (2) Under certain operating conditions, the VF-90's power capabilities can exceed the maximum heat dissipation allowable by NI's CompactRIO and CompactDAQ specifications.

## Options

- (Contact DSM for current option pricing)
- Output Voltages: -30V to +200V, -100V to +100V
  - Operating Voltage: 24VDC

## Application Examples

- Driving Piezo Actuators/Stages
- Microscopy Devices
- Material Testing Equipment
- R&D/University Projects