

PIEZO SCANNING MODULE (PSM)



Features

- A/B topology voltage amplifier
- 3 independent high voltage output channels
- High bandwidth, low noise outputs
- Over temperature protection
- Current protection
- Status LEDs on front panel
- Fits in Cryo Actuator Base Cabinet (CAB)

Description / Applications

The Piezo Scanning Module (PSM) can drive up to 3 piezo's individually by using 3 separate voltage amplifiers. Required for JPE products with a Scanner option (-S) like the CPSHR or CHPS. A user supplied analog input voltage will be amplified to generate a bipolar high voltage output. The module needs to be installed in the Cryo Actuator Base Cabinet (CAB).

Specifications

specs	unit	PSM
Output channels	-	3 (parallel operation)
Amplifier topology	-	A/B
Input voltage range	V	-10 ... 10
Voltage Gain	V/V	15 ±1%
Output voltage range (nom)	V	-150 ... 150
Output voltage range (max)	V	-180 ... 180
Output noise (DC-50kHz)	mVpp	≤3
Output current	mA	≤100
Capacitive load	μF	≤5
Bandwidth (Vout < 10Vpp, 100nF load)	Hz	5000
Bandwidth (Vout < 300Vpp, 100nF load)	Hz	1000
Dynamic range	dB	≥103.5
Slew rate (100nF load)	V/μs	10
Output offset (static)	mV	≤5
Non-linearity (full scale)	%	≤0.05
Sensitivity (dgain/dVin)	1/V	0.015
Input impedance	kΩ	100
Input connector	-	BNC
Output connector	-	LEMO EPG.1B.303.HLN
Over temperature protection	-	Automatic Off/On
Current protection	-	Fuse 100[mA]
Power supply via	-	CAB-115 or CAB-230
Control (via PC)	-	Flexdrive
Mass	grams	1550
Dimensions	-	3U / 14HP

Mechanical and electrical information

Download 3D-Step files, interface drawings and user manuals from:
www.jpe.nl/cryo-nano-positioning/

Contact

For quotations, orders, customization or specials, please contact us at:
www.jpe.nl/contact

