

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

JENA

Jena NV40

piezosystem jena NV 40/1 CLE Piezo Amplifier The piezosystem jena NV 40/1 CLE (catalog NV40) is a single-channel tabletop piezo voltage amplifier with integrated strain-gauge and capacitive sensor positioning control (ASI). Output is -10 to +150 V at 40 mA continuous with less than 0.3 mV RMS noise at 500 Hz for sub-nanometer tasks. Control is analog modulation (0 to +10 V), RS232, or a front-panel encoder. A 5-digit LED shows volts or micrometers. Article numbers select 230 V, 115 V, or 95 V mains. Single-axis high-resolution piezo positioning in lasers and photonics; microscopy; research actuators with strain-gauge or capacitive sensors. The piezosystem jena NV 40/1 CLE (catalog NV40) is a single-channel tabletop piezo voltage amplifier with integrated strain-gauge and capacitive sensor positioning control (ASI). Output is -10 to +150 V at 40 mA continuous with less than 0.3 mV RMS noise at 500 Hz for sub-nanometer tasks. Control is analog modulation (0 to +10 V), RS232, or a front-panel encoder. A 5-digit LED shows volts or micrometers. Article numbers select 230 V, 115 V, or 95 V mains. Single-axis high-resolution piezo positioning in lasers and photonics; microscopy; research actuators with strain-gauge or capacitive sensors.



MODEL

Jena NV40

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

NV40

LISTING

<https://aumictechlabs.com/products/nv40-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Jena NV40/3 is a compact, 3-channel analog piezo controller that delivers precise nanometer-scale actuator positioning with sub-nanometer resolution and millisecond settling time.

It has -20 V to 130 V output across three independent channels, each rated for 40 mA continuous current, with exceptionally low voltage noise below 0.3 mV RMS at 500 Hz. The device features a dimmable 3.5-inch TFT color display presenting real-time actuator voltage, operating mode, and internal temperature monitoring. Technical Specifications Output voltage: -20 V to 130 V Continuous output current: 40 mA per channel Voltage noise: < 0.3 mV RMS at 500 Hz Position resolution: Sub-nanometer Settling time: Millisecond range Command parameter resolution: 16-bit Operating temperature range: 5°C to 35°C Power supply: 24 VDC / 2.5 A (wide-range input 100–240 V AC) Physical dimensions: 240 mm L × 210 mm W × 88 mm H Weight: 2.1 kg Key Features Dimmable 3.5-inch TFT color display with voltage and temperature readout Analog input: 0 to 10 V modulation control Analog monitor output: 0 to 10 V (fixed ratio to control voltage, 100 Ω typical impedance) USB 2.0 and RS232 digital interfaces for system integration Soft-start activation, spike prevention, overload protection, and short-circuit proof design Integrated temperature monitoring and thermal management D-SUB 15-pin (output voltage) and D-SUB 25-pin (modulation/monitor) connectors Rugged metal housing in compact table-top form factor Compatibility & Integration Two versions serve different application requirements: the standard NV40/3 controls low-voltage piezo elements without integrated measurement systems, while the NV40/3 CLE variant includes automatic sensor identification (ASI) for strain gauge and capacitive sensor actuators, enabling actuator exchange without recalibration on ASI-compatible products. Software support includes LabVIEW drivers, DLL/.Net Framework libraries, and Micromanager compatibility for flexible laboratory and OEM integration.

Features & description

From manufacturer datasheet

Features

- Combined amplifier and closed-loop sensor controller in one box
- ASI automatic sensor identification for strain-gauge and capacitive sensors
- Analog, RS232, or manual encoder control
- Display in volts or microns with memory function
- LabVIEW demo files and DLLs
- Related NV 40/3 is the three-channel USB/RS232 family member

NV40 Characteristics / Specifications

PARAMETER	VALUE
Model	NV 40/1 CLE
Manufacturer	piezosystem jena
Instrument Type	Single-channel piezo amplifier / sensor controller
Alias	NV40; NV 40/1; NV 40/1 CLE
Article 230 V	E-101-73
Article 115 V	E-101-74
Article 95 V	E-101-75
Channels	1
Display	LED, 5 digits
Sensor Controller	strain gauge and capacitive (ASI)
Output Voltage	-10 to +150 V (manual encoder or software)
Output Current Continuous	40 mA
Output Power	6 W
Voltage Noise	<0.3 mV RMS at 500 Hz
Bandwidth	350 Hz (150 V, no load)
Polarity	positive
Output Connector	LEMO 0S.302
Sensor Connector	ODU series L, 4 pin
Modulation Input	0 to +10 V BNC
Input Impedance	10 kohm
Monitor Output	0 to +10 V BNC
Monitor Impedance	100 ohm
Interface	RS232
Command Resolution	16 bit
Software	LabVIEW demo files and DLLs

PARAMETER	VALUE
Mains 230 V	230 V 50 Hz, +/-10 percent, 120 mA max, 2x T200 mA 250 V
Mains 115 V	115 V 60 Hz, +/-10 percent, 160 mA max, 2x T250 mA 250 V
Mains 95 V	95 V 60 Hz, 85 to 115 V, 250 mA max, 2x T315 mA 250 V
Dimensions	200 × 170 × 70 mm (LxWxH); manual also 170 × 200 × 70 mmWxDxHWeight: 1.6 kg
Operating Temperature	5 C to 35 C
Related NV4	NV 40/3 CLE, 40 mA per channel, 3.5 inch TFT, USB 2.0 and RS232, 240 × 210 × 88 mm, 2.1 kg

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	5 C to 35 C
Operating Temperature	5 C to 35 C
Related NV4	NV 40/3 CLE, 40 mA per channel, 3.5 inch TFT, USB 2.0 and RS232, 240 × 210 × 88 mm, 2.1 kg Notes Specs from the piezosystem jena NV 40/1 CLE datasheet and NV40-1 instruction manual (E-101-73/74/75). Confirm mains article number and whether the unit is NV 40/1 CLE versus the three-channel NV 40/3.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	NV 40/1 CLE
Manufacturer	piezosystem jena
Instrument Type	Single-channel piezo amplifier / sensor controller
Alias	NV40; NV 40/1; NV 40/1 CLE
Article 230 V	E-101-73
Article 115 V	E-101-74
Article 95 V	E-101-75
Channels	1
Display	LED, 5 digits
Sensor Controller	strain gauge and capacitive (ASI)
Output Voltage	-10 to +150 V (manual encoder or software)
Output Current Continuous	40 mA
Output Power	6 W
Voltage Noise	<0.3 mV RMS at 500 Hz
Bandwidth	350 Hz (150 V, no load)
Polarity	positive
Output Connector	LEMO 0S.302
Sensor Connector	ODU series L, 4 pin
Modulation Input	0 to +10 V BNC
Input Impedance	10 kohm
Monitor Output	0 to +10 V BNC
Monitor Impedance	100 ohm
Interface	RS232
Command Resolution	16 bit
Software	LabVIEW demo files and DLLs
Mains 230 V	230 V 50 Hz, +/-10 percent, 120 mA max, 2x T200 mA 250 V

PARAMETER	VALUE
Mains 115 V	115 V 60 Hz, +/-10 percent, 160 mA max, 2x T250 mA 250 V
Mains 95 V	95 V 60 Hz, 85 to 115 V, 250 mA max, 2x T315 mA 250 V
Dimensions	200 x 170 x 70 mm (LxWxH); manual also 170 x 200 x 70 mmWxDxHWeight: 1.6 kg
Operating Temperature	5 C to 35 C
Related NV403	NV 40/3 CLE, 40 mA per channel, 3.5 inch TFT, USB 2.0 and RS232, 240 x 210 x 88 mm, 2.1 kg

Notes

Specs from the piezosystem jena NV 40/1 CLE datasheet and NV40-1 instruction manual (E-101-73/74/75). Confirm mains article number and whether the unit is NV 40/1 CLE versus the three-channel NV 40/3.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 13, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.