piezosystem jena
incredibly precise

series ENV 800

voltage amplifier 800mA

- ***800mA permanent***
- ***19'' casing***
- ***excellent price-performance ratio***
- ***low voltage noise (< 0,3 mV_{RMS})***
- ***optional: integrated measuring amplifier and controller electronics***

pic.1: *module ENV800*

applications:

- controlling of piezo actuators
- drift compensated controlling of piezo actuators with resistive measurement systems
- laboratory applications
- industrial applications

The voltage amplifier **ENV 800** was designed for low voltage piezo elements and is produced as a 19" casing version. The actuator's voltage current respectively the motion is monitored on the integrated LC-display. This piezo amplifier also provides the opportunity to operate the piezo element via an analog modulation input. The position of the actuator can be examined via the monitor output. Due to the very low voltage noise of the output current, only 0,3 mVRMS this amplifier system is ideally suited for positioning applications with sub-nm resolution. Special protective circuits prevent voltage spikes when switching the unit on and off and consequently avert any overload caused by overheating or short-circuit. The new soft start ensures an actuator-safe activation of the system.
Optionally the voltage amplifier **ENV 800** can be equipped with measuring amplifiers for capacitive or strain gauge measuring systems and the adequate controller electronics. With the electronic PID controller this system operates without any drift or hysteresis.
To make the amplifier series **ENV 800** useful for any kind of integrated measurement system the series has been complemented with the CLE systems.

technical data:	**ENV 800** E-280-000	**ENV 800 SG** E-280-100	**ENV 800 CAP** E-280-600	**ENV 800 CLE** E-282-000	**ENV 800 nanoX** E-288-000	**ENV 800 nanoX SG** E-288-100	**ENV 800 nanoX CAP** E-288-600	**ENV 800 nanoX CLE** E-288-700
output power	104W							
output voltage	-20 ... +130V							
output current (permanent)	800mA			2 x 400mA				
voltage noise	$0.3mV_{RMS}$@500Hz							
modulation input	0 ... 10V BNC							
input resistance modulation input	10kΩ							
DC-offset	selectable via potentiometer							
monitor	LCD, 3.5-digit							
connector (piezo)	LEMO 0S.250	LEMO 0S.250	LEMO 0S.302	LEMO 0S.302	ODU3pol.	ODU3pol.	ODU3pol.	ODU3pol.
connector (measurment system)	-	LEMO 0S.304	LEMO 0S.650	ODU4pol.	-	LEMO 0S.304	LEMO 0S.650	ODU4pol.
monitor output	0 ... 10V BNC							
inside resistance monitor output	100kΩ							
width	14TE	20TE		14TE		20TE		
special features	soft start, voltage peak protection, temperature rise protection, short circuit proof							
special features closed loop systems	closed loop mode selectable via button, optional: auto-closed-loop-on-functioning (Art.-Nr.: Z-300-70) optional: optimization of system load-dependent							

* In open loop systems the output voltage is displayed in a 10:1 (-2 ... 13V) ratio.
In closed loop systems the edited sensor signal is available. The monitor output voltage is 0 … 10V for 100% motion in closed loop mode.