

12V40 C piezo-amplifier

- ◆ **1-channel-19" slot card**
- ◆ **12 Volt power supply (24 Volt optional)**
- ◆ **manual and external operation**
- ◆ **excellent cost effectiveness**

applications:

- driving piezoelements
- dynamic applications
- OEM-applications



fig.1: 12V40 C

The voltage amplifier **12V40 C** is well suited for low voltage piezo elements. The amplifier requires only 12V DC (optional 24V DC) for supply and has been designed as a 19" slot card. The amplifier can be controlled via MOD input (front or back). The output voltage can be supervised on the monitor output. Special circuits are integrated to protect the piezo element from voltage spikes and excessive voltages. This amplifier is well suited for sub-nm positioning tasks due to a very low voltage noise of only 0,3mV_{RMS}. All sockets are also available on the back so this amplifier can be easily integrated into an OEM-product.

technical data:

**part-no. E-301-21 [12V]
E-446-110 [24V]**

power supply	+12V (1A); +24V (0,5A) DC
output power	6W
output voltage	-10 ... 150V
output current (permanent)	40mA
voltage noise	< 0,3mV _{RMS} @ 500 Hz
modulation input	0 ... 10V SMB* / 0 ... 10V**
input resistance	10 kΩ
DC-Offset	3/4 turn potentiometer
output connector (piezo)	LEMO 0S.250
monitor output	-1 ... 15V SMB* / 0 ... 10V**
output resistance	100kΩ SMB* / 10kΩ**
dimensions (L x W x H)	19" module, 3HE 6TE x 160mm (eurocard)
specials	overdrive protection (UDL/OVL) also available with measuring system and closed-loop

* front ** back