

APPLICATIONS

- > Piezo drive up to 2 channels
- > High accuracy positioning
- > High frequency application

KEY FEATURES

- > 360 mA continuous output
- > 1.1 A optional peak output current
- > [-20 V;150 V] output voltage range
- > Low noise SNR 85 dB and THD 0.1%
- > Push pull configuration in option
- > Fully protected piezo amplifier
- > Building block for multi channel configuration

RELATED PRODUCT

- > Piezo actuators and stages
- > CTEC Powered benchtop case
- > CTEC Powered 19" subrack
- > UC45 / UC55 Controllers
- > SG75 / ECS75 sensors conditioners



NON CONTRACTUAL PICTURE

SPECIFICATIONS

PARAMETER	TYPICAL VALUE	UNIT
> General		
Function	Driver for piezoelectric actuator	
Number of channels	1 ... 2	
> Input		
Control Input voltage	-1 ... +7.5	V
Control Input impedance	10	kΩ
> Output		
Output voltage	-20 ... +150	V
Continuous peak output current ⁽¹⁾	±360	mA
Transient peak output current ⁽²⁾	±1100	mA
Maximum output load	400	μF
> Power amplifier		
Peak output power ⁽³⁾	165	W
> Gain		
Gain	20	V/V
Gain error	±1	%
Gain linearity error	0.01	%

> Dynamic performance

Small signal bandwidth (-3dB) ⁽⁴⁾	30	kHz
Power bandwidth	See chart	Hz
THD	0.1	%
Signal to Noise Ratio ⁽⁵⁾	85	dB

> Protections

Overcurrent,
Overtemperature,
Overvoltage

ANNOTATIONS

Guaranteed in labs environment

⁽¹⁾ Electronically limited

⁽²⁾ With EPC Enhanced Peak Current - During 600µs with a max repetition rate of 20ms - Internally limited - see specific application note

⁽³⁾ Max. instantaneous output power = $\max(p(t)) = \max(u(t) \times i(t))$, with EPC

⁽⁴⁾ Unloaded

⁽⁵⁾ Computed as RMS output signal / RMS output Noise floor. [1; 200]Hz

⁽⁶⁾ Extended temperature under request

⁽⁷⁾ no Dynamic Current Limitation for integrated Push Pull option

MISCELLANEOUS

PARAMETER	TYPICAL VALUE	UNIT
Mass	1	kg
Front face dimension	10F wide, 3U high	
Warm up time	15	min
Cooling	Forced air	
Operating temperature range ⁽⁶⁾	0 ... 40	°C
Storage temperature range	-10 ... 50	°C

INTERFACES

Order input	BNC type	
Piezo actuator Output	LEMO EPL-00-250	
DC Offset	10-turn screw potentiometer	
DC Offset Range	-1 ... +7.5V	
Servo ON/OFF	Selector for control loop	

INCLUDED ACCESSORIES

> Piezo actuator cable

Coax 1.5m - Lemo connector /
2x banana 1mm plug

OPTIONS

> **Push pull** Capability to drive push-pull piezo mechanisms

PARAMETER	TYPICAL VALUE	UNIT
Output DC voltage	130	V
DC error	±0.25	V
Average output current	±360	mA
Continuous peak output current ⁽⁷⁾	±360	mA
Load regulation	0.1	%

> **Output connector** LEMO EPG-00-303

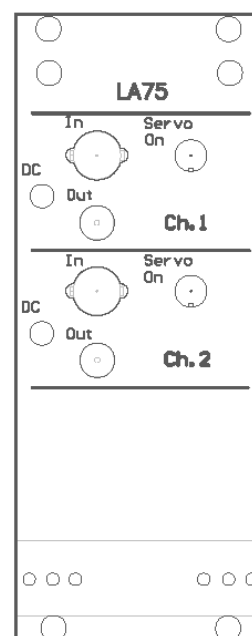
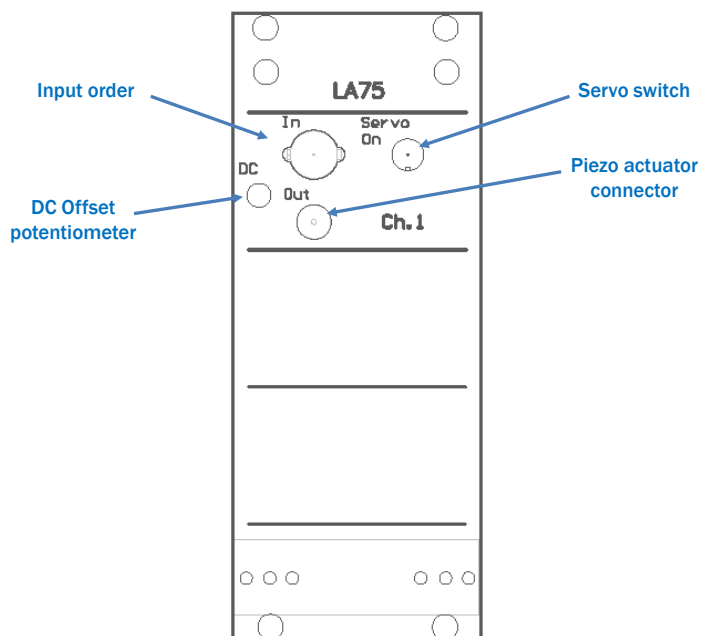
> **UC55/UC65** Controller for position loop
See specific datasheet

> **Piezo cable** Specific length on request
Please contact CTEC for more detail

> **T LEMO** Able to connect 2 CTEC actuators in parallel
Please contact CTEC for more detail

> **LEMO -BNC adapter** Converts LEMO to BNC connector

DRAWINGS



TYPICAL PERFORMANCE CHARACTERISTICS

