

# ANC300

modular piezo motion controller for driving attocube open loop positioners

## Technical Specifications

### Modes of Operation

open loop positioning	depending on ANM module
remote operation	USB2.0, ethernet, RS232
modular design	7 slots for ANM modules
capacitance measurement	50..5500 nF

### Controller Hardware

chassis	19" rack, 3 rack units, 13.5 x 45 x 34.5 cm <sup>3</sup>
weight	7.5 kg
power supply	100/115/230 V, 50..60 Hz
power consumption	max. 100 W
connector	fused IEC inlet
connecting cable (ELE-POS)	1 per axis, length: 2 m

### Software Drivers

Windows, Linux	programming via standard textbased console programmable LUA console (see <a href="http://www.lua.org">www.lua.org</a> ) LabVIEW™
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### Output Signals

depending on ANM module

### Trigger Signals

trigger level definition	LVTTL (3.3 V)
input trigger	16 (trigger inputs freely assignable)
output trigger	4 (trigger outputs freely assignable)
trigger interface	25-Pin SubD connector (female)

### Models and Part Numbers

positioning controller	ANC300 Base (art. no. 1003821)
stepping module	ANM150 (art. no. 1005251)
scanning module	ANM200 (art. no. 1005252)
stepping & scanning module	ANM300 (art. no. 1003822)

### Options & Upgrades

19" rack mounting kit	handles (art. no. 1001606)
vacuum feedthrough for HV	VFT/HV cabling set (KF flange)
vacuum feedthrough for UHV	VFT/UHV cabling set (CF flange)
vacuum feedthrough for LT	VFT/LT cabling set

### Output Signals: ANM150 & ANM300

stepping - voltage range	0..150 V
stepping - frequency range	0..10 kHz
stepping - maximum current	100 mA, 4.5 A peak (max. 1 ms)

### Output Signals: ANM200 & ANM300

scanning - output voltage range	0..150 V
scanning - gain	15
scanning - maximum current	100 mA, 4.5 A peak (max. 1 ms)
scanning - offset	programmable offset
scanning - power bandwidth	DC..50 kHz (1 µF load)
scanning - small signal bandwidth	DC..100 kHz (1 µF load) via DC input, up to 500 kHz via AC input
scanning - slew rate	800 V/ms (1 µF load)

### Output Signals: All ANM Modules

output noise	< 5 mVpp (20 MHz bandwidth)
output filter	additional switchable output filter (1.6, 16, 160, 1600 Hz)
maximum capacitive load	5.5 µF
zero voltage output in GND mode	connected to chassis ground directly
output connectors	BNC, 50 Ohm

### Input Signals: ANM200 & ANM300

DC in voltage range	-10..10 V
AC in voltage range	max +/- 5V AC
coupling	DC, programmable offset
input resistance	10 kOhm
input connectors	BNC, 50 Ohm

## Photos

