attoCONTROL
Electronic & Software Control Units

AMC100

motion controller for driving up to 3 attocube Industrial Line positioners
in open- or closed-loop mode in vacuum or ambient conditions

Technical Specifications

Modes of Operation	
open loop positioning	stepping signals for slip-stick positioners fine positioning mode for positioners
closed loop positioning	closed loop control for ECS/NUM positioners
remote operation	Ethernet WLAN (optional, planned) USB for hand-held controller (optional, planned)
multi device operation	control of multiple AMC100 via one PC

Interfaces	
protocols (diff. & single ended)	AquadB
trigger	Directions Step & Direction
signal levels	LVDS, LVTTL
communication speed - AquadB	up to 25 MHz

Software Drivers	
all platforms	integrated Webserver (TCP/IP) JSON
Windows 7, 8, 10 (1607)	DLL LabVIEW™
communication speed - LabVIEW™	up to 300 Hz

Controller Hardware	
size	220 x 220 x 45 mm³
weight	n.n.
power supply	12 V_{DC}, included
power consumption	max. 30 W
connector for positioner	3 x D-Sub H/D 26pin
temperature range	0 - 40°C, non condensing

Output Signals - stepping mode	
stepping - voltage range	0..45 V
stepping - frequency range	0..5 kHz (1 axis), 0..2 kHz (3 axes simultaneously)
stepping - maximum current	> 16 A
stepping - output noise	< 5 mVpp (500 kHz bandwidth)
stepping - maximum capacitive load	2 µF

Output Signals - fine-positioning mode	
fine positioning - voltage range	0..45 VDC
fine positioning - output noise	< 1.3 mVpp (500 kHz bandwidth)
fine positioning - setpoint bandwidth	1 kHz

All specifications are subject to be changed without notice

Drawings

attocube
pioneers of precision