ECC100

3 axis piezo motion controller for driving attocube ECS positioners

Technical Specifications

Modes of Operation

versions	ECC100/STD, /PRO, /SYNC, /SYNC/PRO
open loop positioning	stepping signals for ECS positioners
closed loop positioning	closed loop control for ECS/NUM positioners
remote operation	USB2.0

Controller Hardware

chassis	approx. 21 x 21 x 5 cm³
weight	1.9 kg
power supply	100/115/230 V, 50..60 Hz
power consumption	max. 100 W
connector	IEC inlet
connecting cable (ELE-POS)	1 per axis, length: 2 m

Software Drivers

Windows, Linux	Stand-alone application for Windows XP™, Vista™, 7™, 8™
	DLL
	LabVIEW™

Output Signals

stepping - voltage range	0..45 V
stepping - frequency range	0..5 kHz (1 axis),
	0..2 kHz (3 axes simultaneously)
stepping - maximum current	> 5 A peak
resolution of signal generation	680 µV (16 bit)
output noise	< 5 mVpp (500 kHz bandwidth)
maximum capacitive load	2 µF
output connectors	15-Pin SubD connector
setpoint bandwidth	20 Hz

Trigger Signals

trigger level definition	TTL
input trigger	1 per axis
trigger interface	GPIO-port

/PRO Upgrade Features

multi device operation	control of multiple ECC100 units with one computer via USB
open loop positioning	fine positioning mode for positioners
trigger level definition	TTL, AquadB
input trigger	1 per axis (TTL or AquadB)
output trigger	1 per axis (AquadB)
setpoint bandwidth	1 kHz

/SYNC Upgrade Features

remote operation	Ethernet
multi device operation	control of multiple ECC100 units with one computer via ethernet
software drivers	Epics

Models and Part Numbers

positioning controller	ECC100/STD/RT (art. no. 1005701)
	ECC100/STD/Vac (art. no. 1008447)
	ECC100/PRO/RT (art. no. 1008255)
	ECC100/PRO/Vac (art. no. 1008445)
	ECC100/SYNC/RT (art. no. 1008254)
	ECC100/SYNC/Vac (art. no. 1008444)
	ECC100/SYNC/PRO/RT (art. no. 1008279)
	ECC100/SYNC/PRO/Vac (art. no. 1008446)

Options & Upgrades

/PRO package	activation code (art. no. 1007995)
/SYNC package	activation code (art. no. 1007438)
vacuum feedthrough for HV	EVFT/HV cabling set (KF flange)
vacuum feedthrough for UHV	EVFT/UHV cabling set (CF flange)

Photos

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