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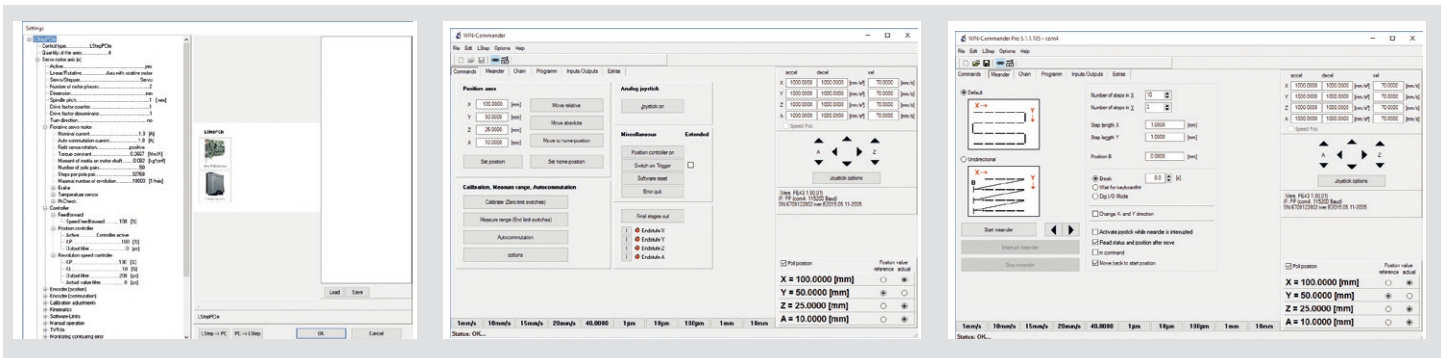
POSITIONING SYSTEM

# LSTEP *express* LSTEP PCI *express*



2 and 3 phase stepping servo motor,  
linear and DC servo motor  
with one controller





## LSTEP *express*

### One controller - Many possibilities!

Controllers of the LSTEP *express* product family make it possible to control 2 and 3 phase stepping, servo and linear motors as well as DC servo motors with one (motion) controller. In servo operation a user-friendly automatic controller dimensioning is possible with only a few parameters. Up to 4 axes can be driven. For all axes motor currents from 0,2 to 20 A are possible. Our software WIN-Commander also allows user-specific configuration of LSTEP*express*. Thus all your different requirements can be realized flexibly according to your individual needs with one single positioning system.

Depending on the application area the controller is available as stand-alone or cabinet housing, PCI express plug-in module and completely assembled in IPC. A wide range of equipment options provide more flexibility, allowing you to adapt the system to meet your individual needs. The free LANG API allows the integration into your own software environment. Controllers from LANG are also available as OEM device with your own company logo.

We also offer complete axes and handling systems – everything from one source!



### Application areas:

- Microscopy
- Imaging systems / Surface inspection systems
- Waferinspection and waferhandling
- Test and analyzer systems
- Laboratory automation
- Medical technology
- Microsystems technology
- Clean room applications
- Micro assembling
- Mechanical engineering
- and many more . . . .

## TECHNICAL DATA

Axes:	3 axes (standard) on board, expandable up to 4 axes
Resolution:	max. 1.638.400 microsteps per motor revolution for a 200-step motor
Power supply:	logic voltage supply and reset via the internal PCI express bus or separate 4-pole motor power supply: 12 V from PC-power pack, alternatively: 11.4 V – 48 V from an external power pack
Motor rotation speed:	max. 70 s <sup>-1</sup> (depending on the type of motor and motor voltage)
Motor current:	max. 20 A per axis max. 10 A per motor phase (4 <sup>th</sup> axis)
User interface:	WIN-Commander high-performance instruction set, compatible with the positioning systems of the LSTEP series
API:	DLL-interface for Delphi, Visual C++, Visual-Basic and LAB-View

## OPTIONS

Joystick:	Joystick for 3 axes
Motor - cable::	Motor cable for different motor types available (Plug & Play)
Encoder analysis:	up to 8-fold encoder analysis sin/cos 8.000-fold interpolated TTL/RS422 encoder inputs 4 TTL encoder inputs for position control
Digital I / Os:	16 inputs and 16 outputs
Analog inputs:	up to 4 analog inputs
Multifunctionport:	2 path synchronous trigger outputs, Snapshot input, Stop input (shut down of amplifiers), Pulse direction outputs for 2 further axis, 10 analog inputs, 2 analog outputs, 2 PT 100-Interface



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