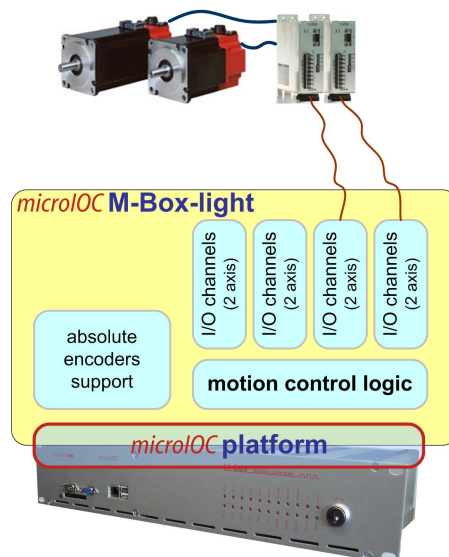


what is it? microIOC M-Box-light is a **plug & play motion control solution** for stepper motors.

Drive **up to 8 axes**, connect various **limit switches**, handle stepper-motor **brakes**, define **velocity** and **acceleration**, and interface **position read-back** devices.

Different types of stepper motors are supported through rich set of motor-driver power modules. DIN-rail mountable or in-case integrated drivers are provided.

microIOC platform provides flexible **control system integration** and speeds up installation by offering local keyboard-control over all low level parameters.



For more advanced motion control and control for other type of motors please check microIOC M-Box-PMAC. microIOC M-Box-PMAC is an advanced version of motion controller based on a powerful DSP platform, offering closed loop control, reverse kinematics control, synchronous multi axis motion-control, independent and real-time coordinate system transformation and much more.



The following features are provided as standard: industrial-grade components; standard x86 architecture; dual Ethernet, 2xUSB, RS232, and VGA interfaces; complete SW support: Linux Debian or RTEMS, control system integration.

Please check microIOC baseline for the details of the microIOC family.

benefits

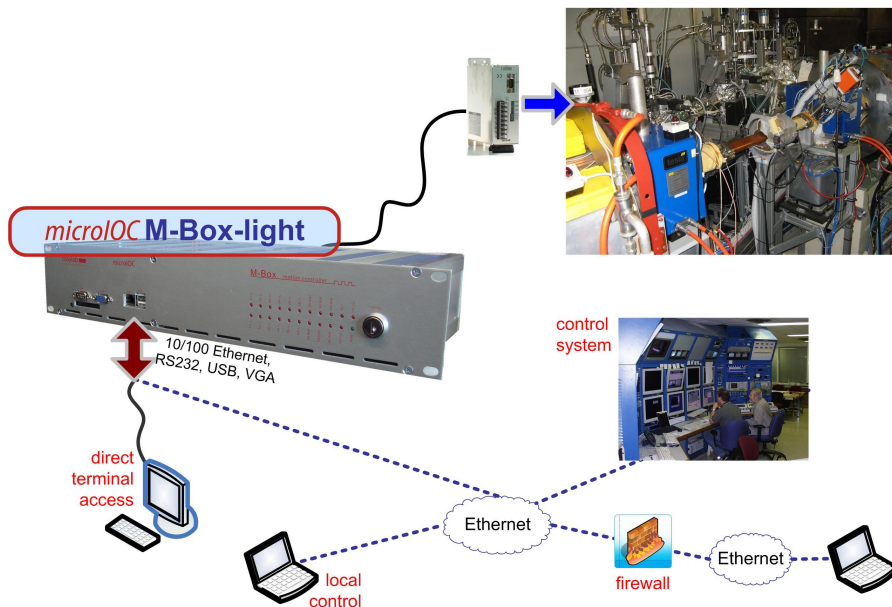
- turnkey control-system support for motion control and position feedback
- modular: match the number of channels to your application; 2,4,6 or 8
- drive different stepper motors
- easy installation and configuration
- customized back-panel connections, directly suited for your equipment

key features

- absolute position feedback: EnDat, linear potentiometer...
- configurable position switches: positive/negative limit and home
- configurable and user defined additional per-axis signals: interlock, brake, inclination...
- set acceleration/deceleration time and maximum speed
- robust and noise-immune interface to stepper drive with optical isolation
- programmable front panel LEDs and LCD for quick status signaling



use case  control simple insertion devices: slits, profile monitor screens, etc...



technical specification

microIOC M-Box-light	
microIOC control unit	
CPU	Embedded Intel® Ultra Low Voltage Celeron 400MHz
interfaces	10/100 Ethernet , 2xUSB, RS232, VGA
SW	Linux Debian, full control system integration (EPICS, ACS and Tango)
power supply	110/220 V (50/60 Hz), 150 W, industrial grade, current protection
casing	rack-mount 19" 2U (440 x 88 x 200)
motion control logic and I/O channels	
logic platform	Xilinx, Spartan 3 FPGA
position regulation	open loop
motion control parameters	per axis: acceleration, deceleration, counts register
I/O channels	standard signals for stepper-drives additional per axis signals for custom use (brake, interlock) optical isolation and protection 5 V interface – shorter distance to stepper drive 24 V interface – improved distance and noise immunity
encoder support	absolute encoders supported only EnDat, linear potentiometers
motor-drive power modules	
mounting	in-case integrated stand-alone module
control interface	pulse-and-direction

