

# ABB motion control drives MotiFlex e100

The MotiFlex e100 servo drives combine real-time Ethernet POWERLINK technology, high performance motor control and three-phase operation in a compact package.

The MotiFlex e100 can operate from a wide voltage range from 180 to 528 V AC three-phase, with DC bus energy sharing capability.

Ethernet and motor encoder feedback interfaces are fully integrated and optimized for demanding motion applications.



## Integrated Ethernet technology

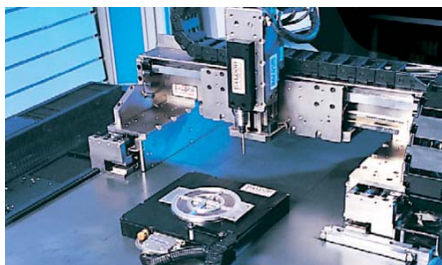
The MotiFlex e100 servo drive is designed to control a wide range of motion applications from simple point-to-point motion to more complex applications. POWERLINK offers real-time control of many axes and Modbus TCP and Ethernet RAW offer a wide variety of control possibilities with PLCs, industrial PCs and other controllers.

## Advanced servo motor control

The drive provides dynamic control of brushless servo motors, both rotary and linear and closed loop AC vector and V/Hz modes for induction motors. A universal encoder interface (UEI) provides support for TTL incremental encoders (with or without Halls), 1V pk-pk SinCos, BiSS, SSI, EnDat 2.1 and 2.2 simply by software configuration.

## Programmable as standard

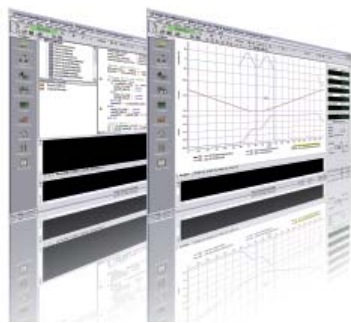
The MotiFlex e100 is an intelligent drive, offering Mint programming as standard. Mint is tailored for motion applications, providing control of communications, logic, motion and HMI interaction in a powerful yet simple programming language. Motion features include homing, indexing. For more advanced control a plug-in controller option is available.





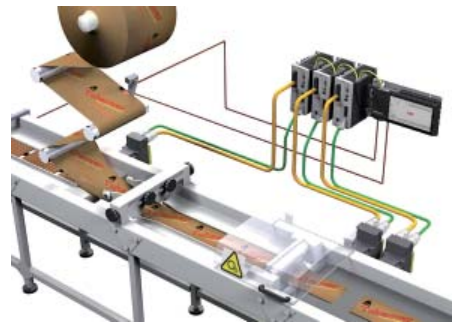
### e100 family of real-time Ethernet control products

The NextMove e100 is a powerful motion controller which integrates management of a real-time Ethernet network of drives, I/O devices, sensors, absolute encoders. Combined with MotiFlex e100 and MicroFlex e100 drives, e100 products greatly simplify system design and installation while providing high performance control.



### PC tool offers simple and intuitive commissioning

Mint Workbench PC tool offers fast and simple setup, commissioning and monitoring in a single software tool. In addition to a step by step configuration wizard, oscilloscope graphing, parameter view/edit/compare it also includes motion programming, integrated help and a tool to package a single concise email to streamline technical support when you need it.



### Motion technology fully integrated

The MotiFlex e100 can be used as a single axis machine controller, fully programmable in Mint and with Ethernet connectivity, on board I/O and serial port for a simple HMI interface. In all a very capable solution to applications requiring cut to length, infeed control or indexing. For more complex motion a plug-in controller for MotiFlex provides coordinated motion of up to four e100 drives and one analog axis.

#### Ethernet - POWERLINK and TCP/IP

- Integrated 2 x port hub - ease of connection
- Real-time Ethernet performance
- TCP/IP mode of operation (non real-time)

#### AC Servo - 3-phase AC operation

- 180 to 528 V AC 50/60Hz
- 1.5 to 65 A rms in three frame sizes
- Flexible overload modes for servo and AC induction motors

#### RS485, 2-wire serial communications

- PLC or HMI. Supports Modbus RTU

#### Service interface

- Status LEDs - power - CANopen - Ethernet
- Simple Ethernet node address selection
- USB interface for service local access

#### I/O - digital/analog - 24 V back-up

- Drive enable input
- 2 x fast inputs 1µs latency ideal for registration
- 1 x additional input
- 2 x digital outputs (eg. motor brake control)
- 1 x ±10 V differential analog input 12-bit

#### DC bus connection

- Pre-made slot-in links simple to install
- Share regenerative energy improve system efficiency

#### CANopen integrated - expand system I/O

- CANopen network manager
- Expand the system I/O from any drive via CAN
- Electrically isolated CAN interface

#### 2 x expansion slots - plug-in options

- Programmable Mint® motion controller option
- Digital and analog I/O expansion
- Additional feedback devices, resolver, encoder
- Fieldbus options:
  - PROFINET
  - Ethernet/IP™
  - Modbus TCP/IP
  - PROFIBUS DP
  - DeviceNet™



For more information please contact your local ABB representative or visit:

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