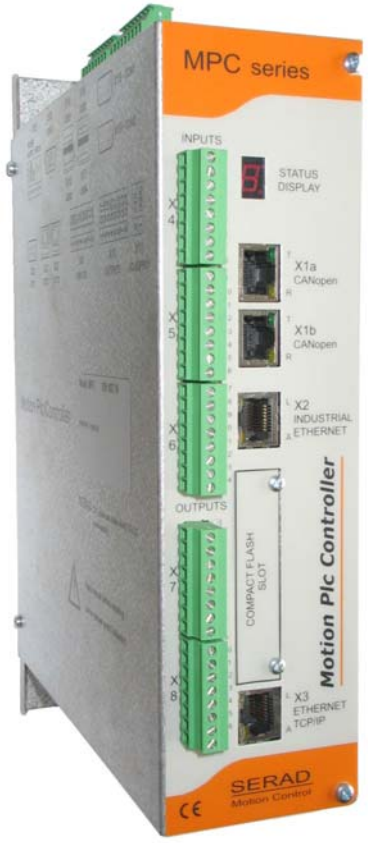
Motion PLC Controller

MPC series

Industrial PC for Automation



Providing both high performance and outstanding flexibility, the ***Serad MPC*** is ideally suited to a broad range of industrial applications.

The power of the ***MPC*** processor enables it to manage complex machines with a high update rate.

The ***MPC*** takes advantage of all the PC communication interfaces and, in addition, provides an industrial Ethernet port as well as a CANopen fieldbus port. The industrial Ethernet port provides communication with the IMD range of brushless ac servo drives.

KEY FEATURES :

Industrial Ethernet

- 100 Mbit/s bus
- Real-time and deterministic Ethernet
- Jitter less than 1 µs
- Transfer of cyclic and acyclic data

IEC 61131-3 PLC

Supports the 6 languages of the IEC 61131-3 standard

- LD Ladder logic
- ST Structured text
- IL Instruction list
- FBD Function block diagram
- SFC Sequential function chart
- CFC Continuous function chart

Advanced Motion Functions

- Fast and accurate positioning
- Electronic gearbox with adjustable ratio
- Cam profiles with dynamic phase adjustment
- Registration with 10 µs capture window
- Synchronisation
- Virtual axes
- Linear, circular and helical interpolation
- Cam boxes

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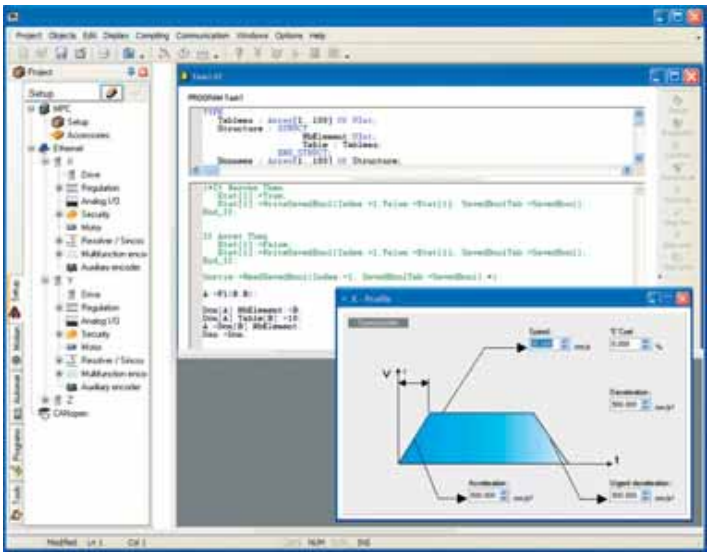
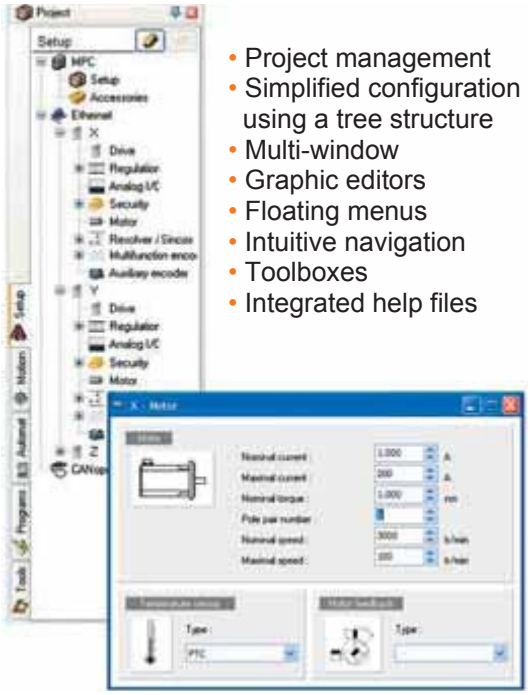
Motion Studio Software workshop

Thanks to its intuitive interface and its use of the standardized IEC 61131-3 language, the *Motion Studio* software workshop is extremely user-friendly and permits a rapid development of your application.



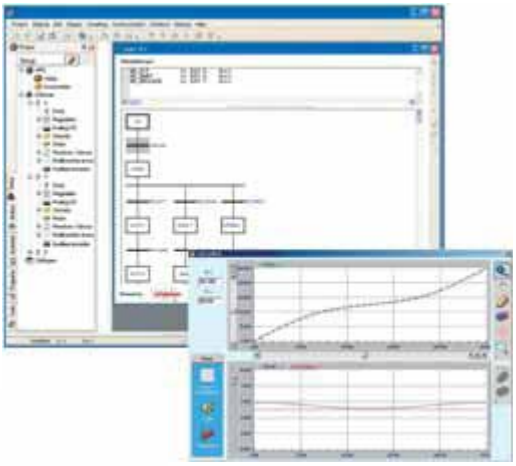
User-friendly



- Project management
- Simplified configuration using a tree structure
- Multi-window
- Graphic editors
- Floating menus
- Intuitive navigation
- Toolboxes
- Integrated help files

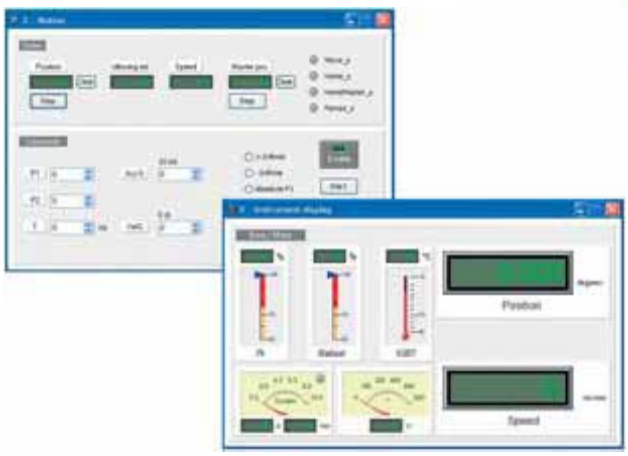
Rapid development

- Editors with syntax description
- Creation of function blocks
- Choice program type and priority
- Cross references
- Definition of CAM profiles by graphic tool
- Easy declaration of axes, I/O and variables
- Alarm display
- Numerous integrated libraries



Set-up tools

- Instrument display
- Trace mode and single step
- Breakpoints
- Axis auto-tuning
- Trajectory generators
- Motion simulator
- Hyper Terminal
- Variable watch list
- Animation tables
- Digital oscilloscope
- Network analyser



Advantages

- Motion controller, PLC and PC in the same box
- Open and evolutionary architecture
- Standardized programming using IEC61131-3
- Easy to use
- Simplified wiring using digital data bus, for example :-

  CANopen for remote I/O

  Industrial Ethernet for the servo drives

  Ethernet TCP/IP for an HMI etc.

Application areas

- Label printing
- Packaging machines
- Textile machines
- Press feeding
- Water jet cutters
- Pick and place robots
- Woodworking machines
- Flow regulation
- Dosing, etc.

Technical features

Power supply	24 V DC ±20 %, 1.5A typical Galvanic isolation
Architecture	Intel Celeron® processor 400 MHz Real time multi-tasking core Compact Flash memory 64 MB, Ram 64 MB RAM saved data memory 128 KB
Local inputs / outputs	MPCIO module (option) - 32 inputs / 24 outputs - 24 V DC PNP inputs - 24 V DC PNP static outputs, 500 mA per output
Communication	1 x Ethernet TCP/IP 100 Mbit/s 1 x Industrial Ethernet 100 Mbit/s 2 x USB 1 x CANopen 1Mbit/s 1 x RS232, 1 x RS232 / RS485
Watch Dog	Relay : N/O contact
Diagnostic	STATUS display
Advanced Motion Functions	Fast and accurate positioning Electronic gearbox with adjustable ratio CAM Profiles with dynamic phase adjustment Compensation and superposition movement functions Linear, circular and helical interpolation Registration CAM boxes
Dimensions w x h x d	66 x 283 x 198
Operating temperature	5 to 45 °C