

Motion goes fully digital

MECHATROLINK-II

up to 256 axes over high-speed motion link



Advanced Industrial Automation

OMRON

MECHATROLINK-II

Motion made easy

The market is changing, and technology is changing with it. To ensure that Omron continues to be at the forefront of providing the best motion control solutions to the market, the company is offering a series of controllers on all control architectures, including PLC-based, stand-alone and PC-based. The benefits are clear. A user can be confident that he is choosing a stable, flexible and reliable motion controller that suits his needs, not the other way around.

This motion controller series works with Mechatrolink, a common digital motion control bus. Such bus systems are increasingly replacing traditional analogue and pulse technology as they offer many benefits, including:

- **Ease of installation:** the Mechatrolink digital bus uses pre-configured cables, so connection between the motion controller and servo axes really is plug and go. There are no more complex terminations and wiring to contend with, which reduces installation costs and simplifies commissioning and fault-finding.
- **Information handling:** valuable application data such as status, torque, current and faults can be easily obtained via the Mechatrolink connections. This information is vital for reducing initial machine development time, commissioning and machine down-time.
- **Reliability:** by reducing the need for a high number of wires and connections, the system's reliability is improved.

These motion controllers form part of Omron's overall Automation product range. Motion control becomes an integrated part of the application, able to share information between areas of a machine or factory.



CJ1W-NCF71

PLC-based solution for point-to-point positioning

- Position control is directly controlled by the ladder program in the PLC's CPU
- Up to 16 axes are controlled from one NCF unit
- Position, speed and torque control modes are available
- Simple access to the whole system from one point



MP2300 & MP2200

Stand-alone solution for advanced motion control

- Flexible solution that easily integrates into existing system
- Network connectivity available for DeviceNet, Profibus and Ethernet
- Self-configuration of network nodes for an easy set-up
- The MP2300 controller can control up to 48 axes
- The MP2200 controller can handle up to 256 axes
- Functions include axes synchronisation, electronic CAMs and torque control



CJ1/CS1-MCH71

PLC-based solution for advanced motion control

- The motion controller is fully integrated in the PLC system CJ1 and CS1
- One MCH unit controls up to 30 axes over the bus
- Multi tasking programming using basic type language
- Axes synchronisation, electronic CAMs and torque control

MP2100

PC-based solution for advanced motion control

- Motion APIs are available for customised control applications. Motion commands can be input from either the PC application or the MP2100 program
- Self-configuration of network nodes for easy set-up
- The MP2100 controller can control up to 16 axes and the MP2100M controller can handle up to 32 axes
- Functions include axes synchronisation, electronic CAMs and torque control