OMRON

CP1L

The compact machine controller

» Fast processing speed

» Advanced motion functionality

» Easy connection and communication

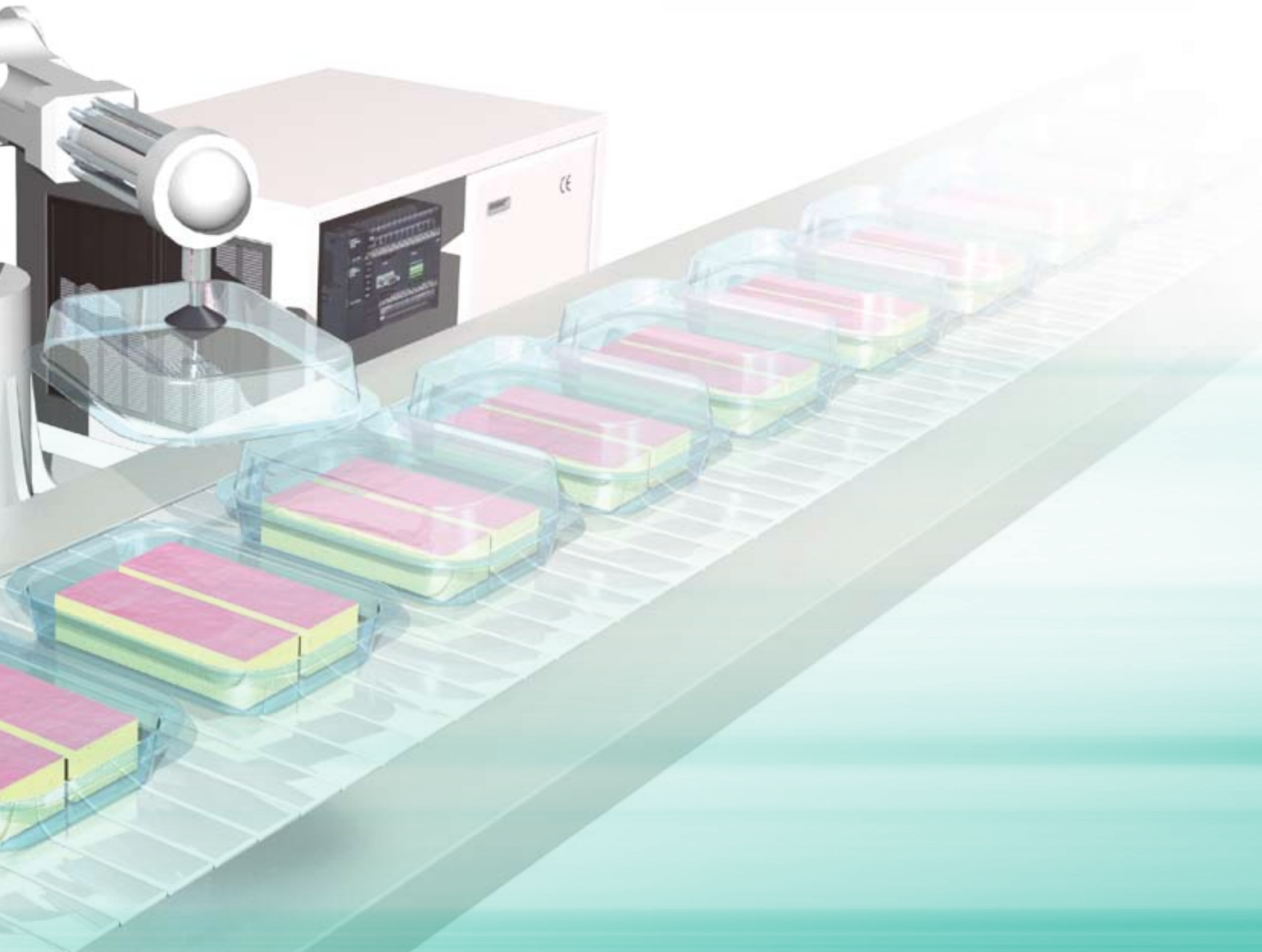realizing

OMRON

Think big...start small...

When it comes to controllers for compact machines, Omron's new CP1L series offers the compactness of a micro-PLC with the capability of a modular PLC. But this new and exciting range is not only compact, it is scalable, has a faster processing speed than other controllers and is in a class of its own when it comes to price/performance. Naturally, it is compatible with all other devices in the Omron PLC line up.

The CP1L series not only has all the functionality you need to control your machine, including outstanding positioning capability, it even has a USB interface as standard for programming and monitoring, so you can plug and play easily and cheaply without having to buy expensive cables. As the CP1L series shares the same architecture as the CS and CJ series, programs are fully compatible for memory allocations and instructions.

Input terminal block

Plug-in option board

Expansion I/O connector

Output terminal block

Removable memory unit

USB programming port

Analogue adjustment

Analogue input

Battery connection

...take the lead today!
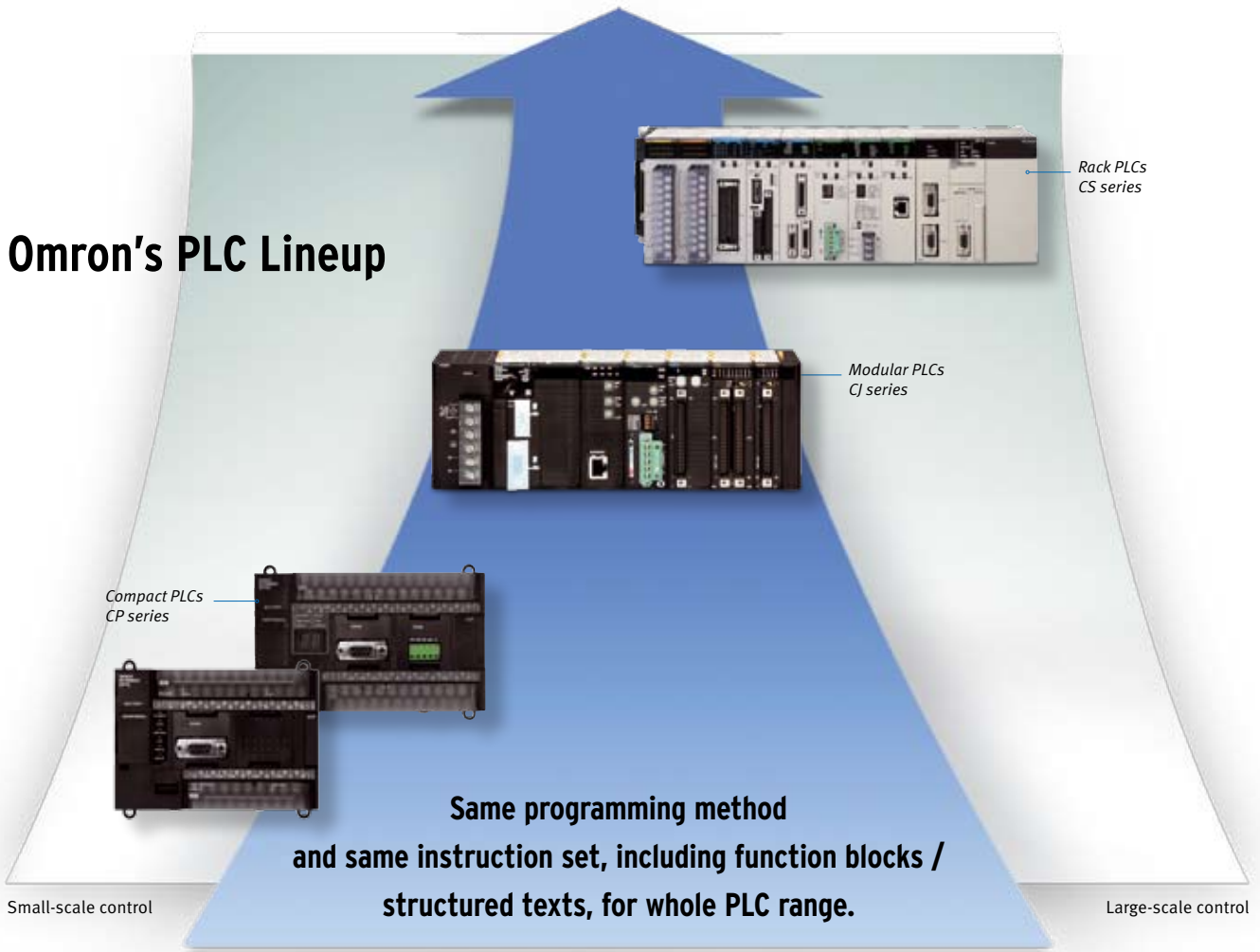
All you need in one series

With the CP1L series you get all the functionality and flexibility
you need in a controller plus the added advantage of one
single platform, which means no worries about field-buses
or integration of software. And the same 'Smart Platform'
communication routing is provided over multiple network
layers. The CP1L series... the compact range that simply meets
your needs.

Features at a glance

- 4 high-speed encoder inputs and 2 high-speed pulse outputs

- CPUs with AC or DC supply and 14, 20, 30 or 40 I/O built-in

- Instruction set compatible with CP1H-, CJ1-, and CS1 series PLC

- Optional RS232C and RS-422A/485 serial ports

- USB programming port

- Scaleable with a wide range of I/O units
  (maximum up to 160 I/O points)

- Motion functionality

- One and the same software as other Omron controllers

Omron's PLC Lineup

Rack PLCs
CS series

Modular PLCs
CJ series

Compact PLCs
CP series

**Same programming method
and same instruction set, including function blocks /
structured texts, for whole PLC range.**

Small-scale control

Large-scale control

Easy and familiar programming

Omron's CX-One software offers the same easy and familiar programming that saves you time and effort. Enabling you to build, configure and program your networks, PLCs, HMIs, motion-control systems, drives, temperature controllers and sensors.

USB interface, no expensive cabling required

No need for expensive additional cables with the CP1L series either because the USB interface enables you to simply plug and play.

Smart Platform
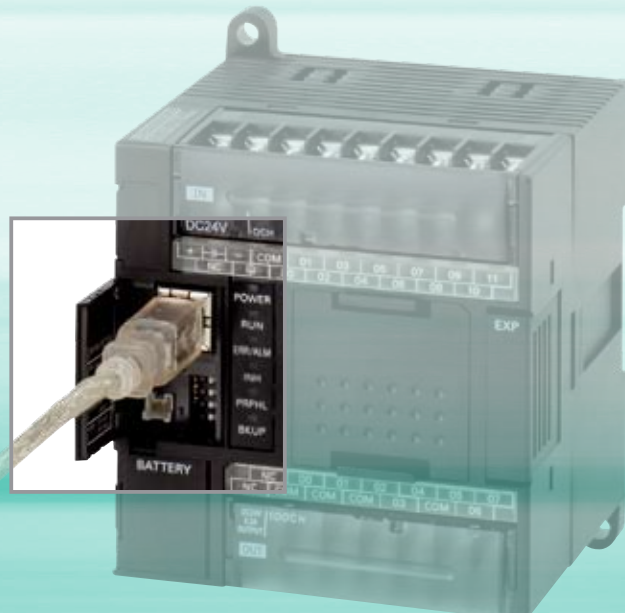
Prepared for future growth

CP1L-L

- CPU with 14 or 20 digital I/O built-in
- Expandable up to 60 I/O points (1 unit)
- USB port + 1 optional serial port
- 5 Ksteps user memory
- 0.6 µs instruction speed
- 4 encoder inputs (100 kHz)
- 2 pulse outputs (100 kHz)

Expansion of needs

CP1L-M

- CPU with 30 or 40 digital I/O built-in
- Expandable up to 160 I/O points (3 units)
- USB port + 2 optional serial ports
- 10 Ksteps user memory
- 0.6 µs instruction speed
- 4 encoder inputs (100 kHz)
- 2 pulse outputs (100 kHz)

Expansion of needs

CP1H

- CPU with 40 digital I/O and (optional) analogue I/O (4in/2Out) built-in
- Expandable up to 320 I/O points (7 units)
- USB port + 2 optional serial ports
- 20 Ksteps user memory
- 0.1 µs instruction speed
- 4 encoder inputs (2 x 1 MHz + 2 x 100 kHz)
- 4 pulse outputs (2 x 1 MHz + 2 x 100 kHz)

OMRON

Authorised Distributor:

Control Systems
• Programmable logic controllers • Human-machine interfaces • Remote I/O

Motion & Drives
• Motion controllers • Servo systems • Inverters

Control Components
• Temperature controllers • Power supplies • Timers • Counters • Programmable relays
• Digital panel indicators • Electromechanical relays • Monitoring products • Solid-state relays
• Limit switches • Pushbutton switches • Low voltage switch gear

Sensing & Safety
• Photoelectric sensors • Inductive sensors • Capacitive & pressure sensors • Cable connectors
• Displacement & width-measuring sensors • Vision systems • Safety networks • Safety sensors
• Safety units/relay units • Safety door/guard lock switches