

Complete Sysmac-based  
safety and control solution

OMRON

# Integrated safety kits

An easy way to make your machines safer and smarter



- High-performance, fully integrated control
- One IDE for all programming needs
- Database connectivity for safety IIoT

**sysmac**  
always in control

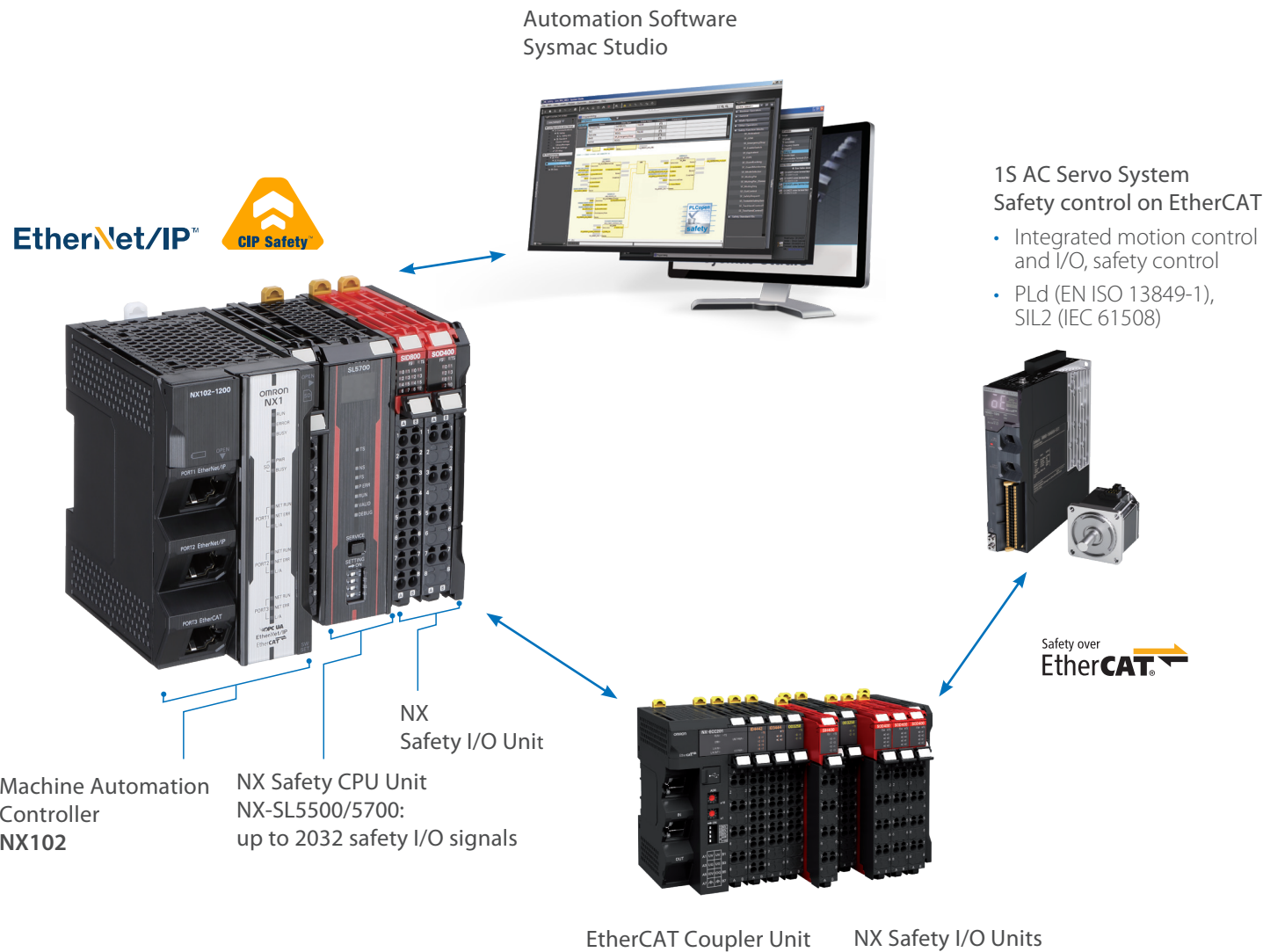
# Seamless integration

## For all programming needs

Take advantage of the powerful Sysmac platform for your machine control, safety and data collection projects. Our Integrated Safety Kits give you everything you need to design an integrated safety and control architecture and save time on development, startup and troubleshooting.

Our broad portfolio lets you choose from a variety of NX Series controllers paired with an NX-SL55 Series safety controller and NX I/O. Each kit comes with a downloadable single-license configuration software. Optional hardware such as EtherNet switch, remote safety I/O and safety components can be added.

We're also providing an Integrated Safety Configuration tutorial with a step-by-step guide on how to develop your project and take advantage of some unique functions such as Automatic Programming and Simple Automatic Test in our Sysmac environment.



# High-Performance

## Fully integrated control

High-performance, fully integrated control

The NJ/NX Series includes capabilities for seamless integration of logic, motion, safety, networking and enterprise-level control. Selectable models are based on application requirements.

### One integrated development environment for all needs

Sysmac Studio is a true Integrated development environment (IDE) that provides one environment to set up, program, debug and maintain standard and safety controls. Information is shared seamlessly between systems, while function blocks and built-in tools simplify programming and configuration to ensure compliance and traceability.

### Safety controllers for all applications

Ideal for applications of any size, the NX-SL5 Series supports both EtherCAT + FSoE and Ethernet/IP + CIP Safety. It facilitates the design of safety systems needing to reach PLe according to EN 13849-1 and SIL3 according to IEC 61508.

### Fully integrated safety configurations

Adding the NX-SL5 to the NX-102 Series creates a powerful and robust platform that reduces wiring, simplifies setup, and provides a single solution for all safety needs. Users can take advantage of FSoE for high-speed synchronous motion applications while enabling machine-to-machine safety messaging with CIP Safety.

### Database connectivity for safety IIoT

The NX102's embedded SQL client option lets users connect directly to a SQL database from the controller via pre-made function blocks to enable traceability for safety incidents. Data can be stored over the long term for future analysis to identify incident causes and event correlations.



# Part Numbers and Accessories

## NX102 controller part numbers

Choose from a wide range of controllers to meet your needs

Integrated Safety Kit Part Number	Description
IS-SAFETYKIT-1000	NX102-1000, 4PTP axes, 2 Coordinated Axes
IS-SAFETYKIT-1020	NX102-1020, 4PTP axes, 2 Coordinated Axes, SQL Client
IS-SAFETYKIT-9000	NX102-9000, 4PTP axes, 0 Coordinated Axes
IS-SAFETYKIT-9020	NX102-9020, 4PTP axes, 0 Coordinated Axes, SQL Client
IS-SAFETYKIT-1100	NX102-1100, 4PTP axes, 4 Coordinated Axes
IS-SAFETYKIT-1120	NX102-1120, 4PTP axes, 4 Coordinated Axes, SQL Client
IS-SAFETYKIT-1200	NX102-1200, 4PTP axes, 8 Coordinated Axes
IS-SAFETYKIT-1220	NX102-1220, 4PTP axes, 8 Coordinated Axes, SQL Client

Example: IS-SAFETYKIT-1000 will include the NX102-1000 with all the included parts from the table below.

## Integrated safety kit accessories

All kits include configuration example files and thorough product documentation

Part Number	Description	Quantity
NXSL5500	Safety CPU, CIP, 127 CONN, 2MB	1
NXSID800	NX SAFETY, 8 INPUT, STANDARD	2
NXSOD400	NX SAFETY, 4 OUTPUT, 0.5A	2
SYSMAC-LE201L	License	1
NXPF0630	NX IO Power Feed, 5-24VDC In	1
S8VKG12024	Power Supply, 120W 24VDC 5A 100-240VAC	1

## Additional part numbers

These items can be added for safety architectures requiring special characteristics

Part Number	Description
NX-SIH400 VER1.1	Safety Input, 4IN, special devices
NX-SOH200	NX Safety, 2-output module, PNP, 2A/point directly switches contactors and valves/valve banks
GI-SID1224	Remote Safety I/O, 12in, CIP Safety Terminal
GI-SMD1624	Remote Safety I/O, 12IN 4 OUT, CIP Safety Terminal
A22NE-M-P202-N	E-Stop, 40mm Trn Rs, 2NC 24V
A22Z-3466-1	60-dia. round plate with black letters on a yellow background
W4S1-05B	5 Port Ethernet Switch
XS6W-6LSZH8SS100CM-B	RJ45 Patch 1m Blue
XS6W-6LSZH8SS20CM-B	RJ45 Patch 0.2m Green