

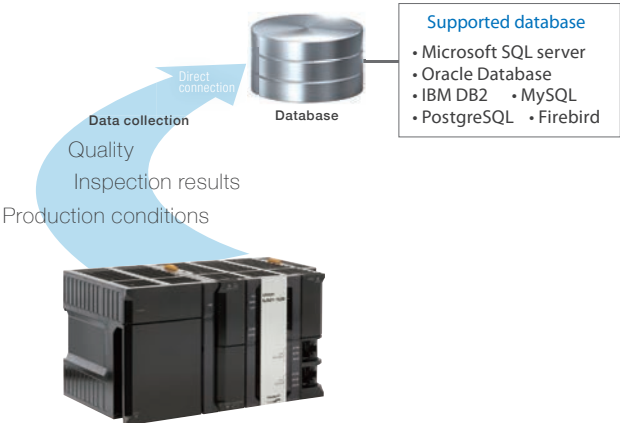
# machine data management for a variety of applications

## Information

### NX102-□□20/NJ101-□020/NJ501-□□20/NX701-1□20

#### Fast machine data storage in database

The controller connects directly to a database without the need for a gateway. The special instructions allow easy access to the database. Real-time data collection enables productivity improvement, predictive maintenance, and quality traceability.



### NX102-□□□□/ NJ501-1□□0

#### International standard communication protocol OPC UA directly connects automation and IT

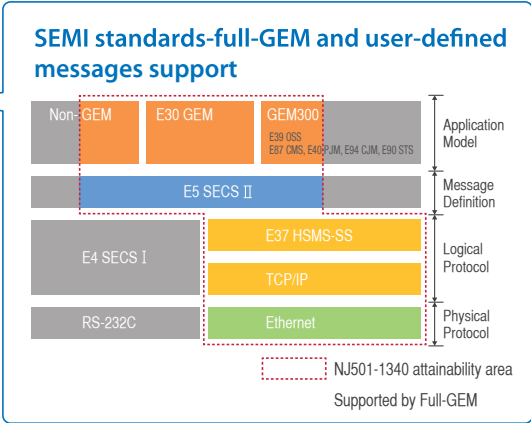
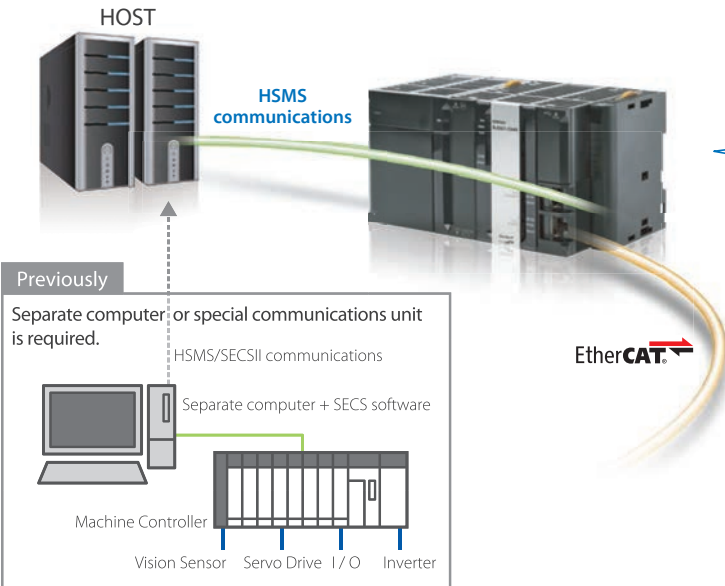
OPC UA with strong security features (e.g., authentication and encryption) is widely used across the world and adopted for Industrie 4.0 and PackML communications. The host system can access production data directly without connecting a gateway computer.



### NJ501-1340

#### Semiconductor industry standard SECS/GEM communications functionality

The SECS/GEM CPU Unit integrates machine control and host communications, reducing time, cost, and complexity to establish SECS/GEM communications.



Robotics

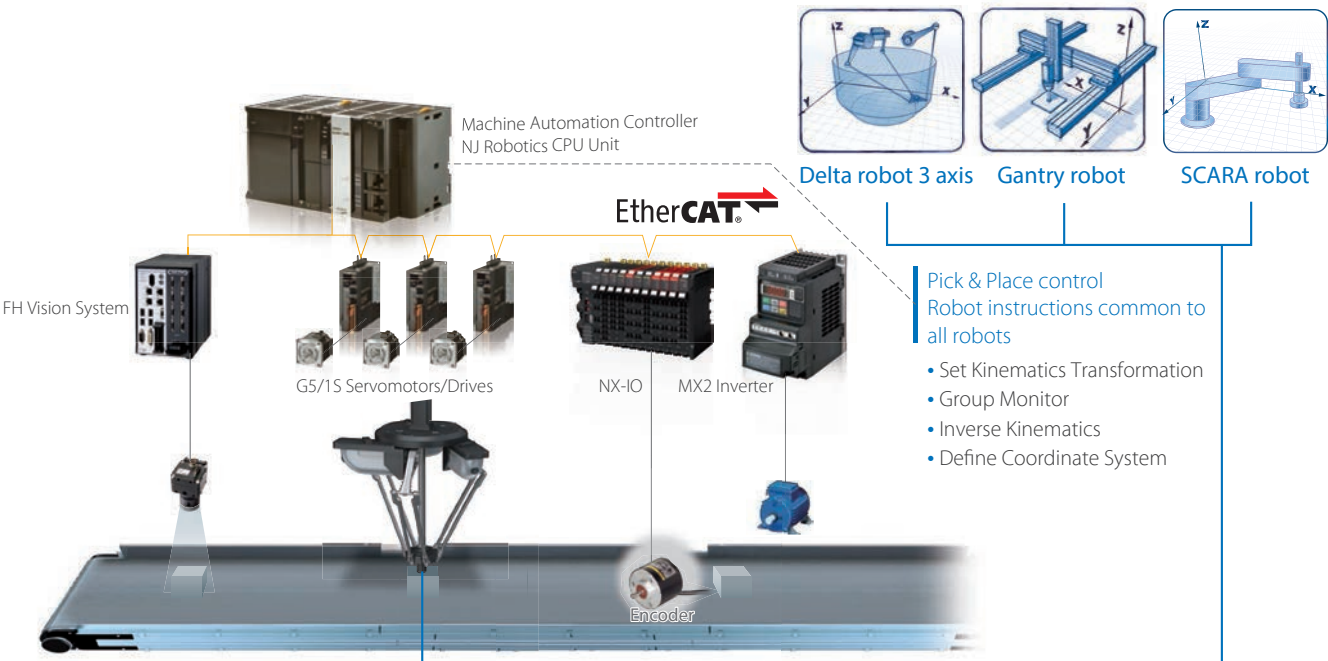
NJ501-4□□□

Integrated machine and robot control brings flexibility to build machines

Integrating machine control and robot control, one controller allows you to build a conveyor tracking application where robots are precisely synchronized with conveyors.

One controller can control up to 64 axes including 8 parallel, Cartesian, or serial robots.

Standard IEC 61131-3 based instructions for motion and robot control reduce programming time.



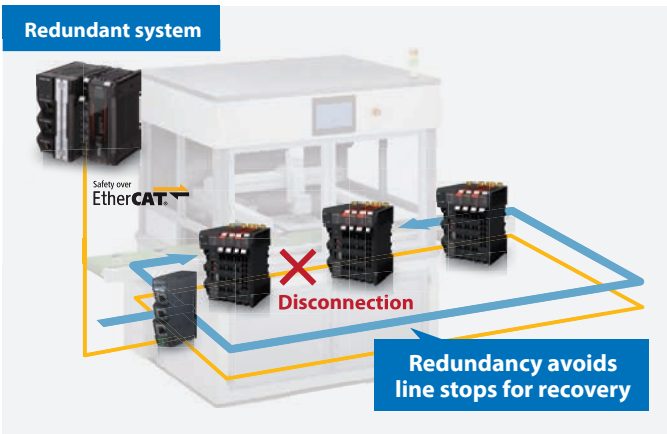
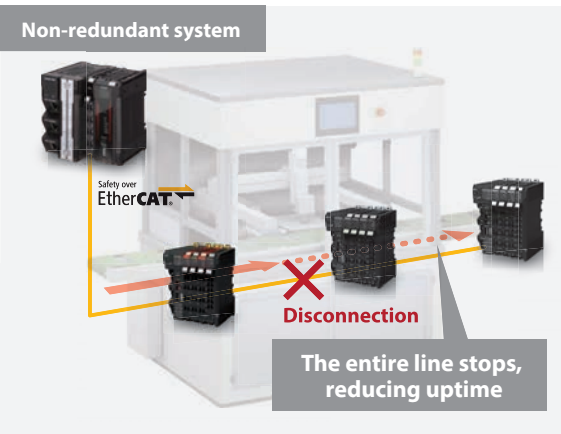
Maximized uptime





NX102-□□00/NX1P2-□□□□/NJ501-1□00/NJ301-1□00/NJ101-□□00

Redundancy minimizes downtime

Even if a part of the EtherCAT network is disconnected, Cable Redundancy provides continuous connectivity.

This function allows you to fix disconnection without stopping the machines and production line where one controller provides both machine control and safety control.



NJ Series							
NJ501 CPU Units					NJ301 CPU Units	NJ101 CPU Units	
NJ501-1□□□	NJ501-4□□□	NJ501-1□20	NJ501-1340	NJ501-5300	NJ301-1□□□	NJ101-□□□□	NJ101-□□20
 							
Ideal for large-scale, fast, and highly-accurate control with up to 64 axes.					Ideal for small control with up to 8 axes.	Ideal for simple machines.	
1.1 ns (1.7 ns or less)					1.6 ns (2.5 ns or less)	3.0 ns (4.5 ns or less)	
24 ns or more					35 ns or more	63 ns or more	
20 MB					5 MB	3 MB	
2 MB: Retained during power interruptions 4 MB: Not retained during power interruptions					0.5 MB: Retained during power interruptions 2 MB: Not retained during power interruptions	0.5 MB: Retained during power interruptions 2 MB : Not retained during power interruptions	
2,560 points/40 Units (3 Expansion Racks)					2,560 points/40 Units (3 Expansion Racks)	2,560 points/40 Units (3 Expansion Racks)	
16, 32, 64			16	16 *3	4, 8	0, 2	
192							
—	8 robots max. *2	—			—	—	
—	● NJ501-4320	●	—		—	—	●
—			●	—	—	—	
—				●	—	—	
Memory Cards					Memory Cards	Memory Cards	
P140							

Database Connection P088



SECS/GEM P086



NC integrated R190

