NL7 Servo Drive



NL7-EC series AC servo products are high-performance AC digital servo drives designed for highly accurate position, velocity, and torque control, with power ratings up to 7.5 kW. They provide a perfect solution for different applications with an easy tuning process. Based on the ETG COE + EtherCAT DS402 protocol, they connect seamlessly to controllers and drives that support this standard protocol. The NL7-EC series uses the latest Digital Signal Processing (DSP) chip and Intelligent Power Module (IPM), with compact component integration and great reliability. Thanks to the best PID calculation for Pulse Width Modulation (PWM) control, the NL7-EC series leads this product category.

In comparison to conventional pulse-controlled servo drives, the NL7-EC provides the advantages listed below.

Advantage	**Description**
Longer communication range and lower electromagnetic interference	Because they rely on pulse commands, pulse-controlled servo drives can be easily disrupted by electromagnetic interference. The EtherCAT communication protocol provides fault detection and error handling, making communication more reliable over long distances.
Greater motion control	Trajectory generation is done within the driver in non-cyclic synchronous mode. The controller only needs to deliver target position, velocity, and acceleration commands. The drivers then achieve greater control by applying feedforward to those commands.
Simpler wiring	Using EtherCAT communication, the connections between the master device and slave stations can be made with only LAN cables.

Lower cost — fewer ports required	Multiple axes can be controlled without extra ports or a pulse module on the master device/controller. Only a network port is needed to chain the axis controllers together in series.

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Last update: **2026/09/22 17:57**