

Application Story

NEIO Series: EtherCAT I/O Modules That Simplify Factory Automation



Are you in need of a compact and convenient EtherCAT solution to meet your factory automation needs? NexCOBOT, a NEXCOM subsidiary, is proud to showcase the NEIO family of EtherCAT slave I/O modules, a welcome addition to your own set of master controllers. With its industrial-grade certification, user-friendly design, and rich selection of I/O combinations, the NEIO series is the choice that's most cost-effective and easiest to install for machine control and robotic control applications.

Enjoy the intuitive design

Setting up an assembly line is no easy task. That's why NexCOBOT makes the process as easy as possible, with all NEIO I/O modules featuring an uncluttered and user-friendly design. To ensure safety, you'll notice that circuits are covered with protective smart latches, which prevent debris or other wires from accidentally falling into wiring slots when modules are placed in electrical control panels, thus avoiding costly short circuits. Additionally, stress-free maintenance is possible with the detachable screw terminals – remove wiring from the module or transfer existing wiring to another module. Quickly view I/O statuses and diagnose faults by

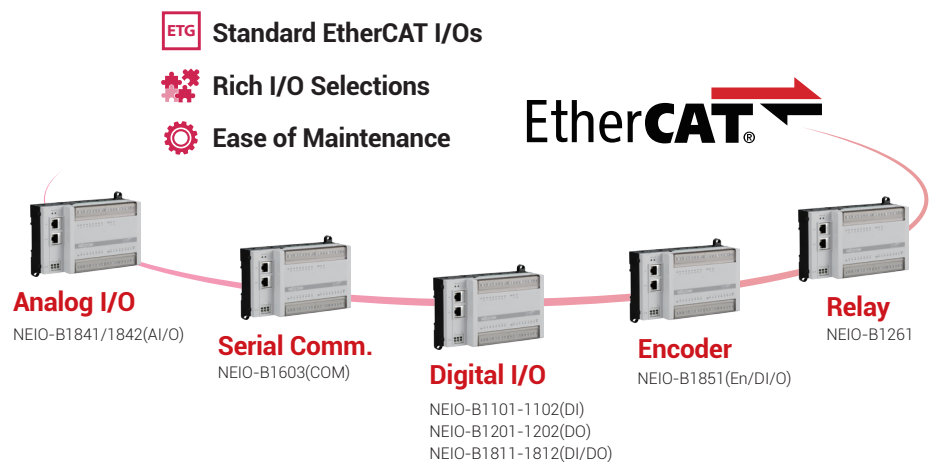
viewing the front-facing LED indicators. And finally, to suit a variety of manufacturing environments, we provide multiple mounting methods (DIN rail and wall mounts).

Industrial certifications mean peace of mind

To ensure problem-free operation and compatibility with other devices in your factory, all NEIO series modules have passed the EtherCAT Conformance Test, after testing with other third-party master controllers. As automation sites are subject to electromagnetic interference, our modules have also been tested for EMC against IEC EN 61000-6-2 and EN 61000-6-4, as well as received CE/FCC Class A certification. Moreover, they provide three-way isolation (LAN, power, and I/Os) and protection against surges, shocks, and vibration.

Mix and match till you're content

The NEIO series is perfect for industrial environments with assembly lines and individual machinery. Supporting high-density I/Os of up to 32 points, they



connect specifically to machine control and robotic control devices. Digital I/Os can link to any of our B1811/1812 modules (B1101/1102 DI only, B1201/1202 DO only), and analog I/Os to the B1841/ B1842. We also have models for other

specific needs: such as the B1603 for serial communication and B1851 for encoders. Likewise, the NEIO EtherCAT slaves match perfectly with our EtherCAT motion controllers, the NexMotion NET series.

Product Selection Guide

Digital Input/Output Module

Model Name	Channels	Type	Description	Ordering information
NEIO-B1101	32-ch DI	PNP	24VDC , filter 3ms (IEC 61131-2 type 1/2/3)	10J80110100X0
NEIO-B1102	32-ch DI	PNP/NPN	24VDC , filter 1ms	10J80110200X0
NEIO-B1201	32-ch DO	NPN	24VDC , output current 0.5A	10J80120100X0
NEIO-B1202	32-ch DO	PNP	24VDC , output current 0.5A	10J80120200X0
NEIO-B1811	16-ch DI 16-ch DO	DI: PNP DO: NPN	16-ch DI, 24VDC , filter 3ms (IEC 61131-2 type 1/2/3) 16-ch DO, 24VDC , output current 0.5A	10J80181100X0
NEIO-B1812	16-ch DI 16-ch DO	DI: PNP/NPN DO : PNP	16-ch DI, 24VDC , filter 1ms 16-ch DO, 24VDC , output current 0.5A	10J80181200X0

Mixed Analog Input/Output Module

Model Name	Channels	AI Signal	DI/O Type	Description	Ordering information
NEIO-B1841	8-ch AI, 2-ch AO 8-ch DI, 8-ch DO	single-ended	DI: PNP/NPN DO : PNP	8-ch AI, 16-bit, voltage, current (single-ended) 2-ch AI, 16-bit, voltage, current 8-ch DI, 24VDC , filter 1ms 8-ch DO, 24VDC , output current 0.5A	10J80184100X0
NEIO-B1842	4-ch AI, 2-ch AO 8-ch DI, 8-ch DO	differential	DI: PNP/NPN DO : PNP	4-ch AI, 16-bit, voltage, current (differential) 2-ch AI, 16-bit, voltage, current 8-ch DI, 24VDC , filter 1ms 8-ch DO, 24VDC , output current 0.5A	10J80184200X0

Communication Module

Model Name	Channels	Description	Ordering information
NEIO-B1603	4-ch	1-ch RS-232/422/485 3-ch RS-422/485	10J80160300X0



Founded in 1992 and headquartered in Taipei, Taiwan, NEXCOM is committed to being your trustworthy partner in building the intelligent solutions. NEXCOM integrates its capabilities and operates eight global businesses, which are Industrial Mesh, Intelligent Video Surveillance, Intelligent Platform @ Smart City, Mobile Computing Solutions, Medical and Healthcare Informatics, Network and Communication Solutions, Smart Manufacturing, and Open Robotics and Machinery. This strategic deployment enables NEXCOM to offer time-to-market, time-to-solution products and service without compromising cost.

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