



NX1P2-1140DT1

Symac NX1P CPU with 40 Digital Transistor I/O (PNP), 1.5 MB memory, EtherCAT (4 servo axes, 4 PTP axes, 16 EtherCAT nodes), EtherNet/IP and 2 serial option ports

Specifications

Primary task cycle time	2 ms
Program memory	1.5 MB
Variables memory	2 MB
Max. number of synchronous axes	4
Max. number of PTP axes	4
Number of digital inputs	24
Input type	PNP/NPN
Number of digital outputs	16
Output type	PNP
Number of serial option boards	2
Max. number of expansion units	8
Max. number of remote I/O nodes	16
Communication port(s)	EtherCAT Master, EtherNet/IP, Ethernet TCP/IP
Number of Ethernet ports	2
Number of USB ports	0
Communication option(s)	Serial RS-232C, Serial RS-422, Serial RS-485
Real-time clock	✓
Supply voltage DC	20.4-28.8 V
Product Height (unpacked)	100 mm
Product Width (unpacked)	148 mm
Product Depth (unpacked)	71 mm
Product Weight (unpacked)	660 g

Accessories



CJ1W-BAT01

Battery for CJ1M PLCs



GX-JC03

3-port EtherCAT Junction module, 24 VDC power supply



GX-JC06

6-port EtherCAT Junction module, 24 VDC power supply



GX-JC06-H

6-port EtherCAT Junction module, 24 VDC power supply, with node switches

HMC-SD493

SD memory card, 4 GB



NX-PF0730

NX I/O power feed unit, 5-24 V DC input, 8 terminals, 10A, screwless push-in connector, 12mm wide



NX1W-ADB21

Sysmac NX1P Analog I/O screwless option board, 2 x analog inputs 0 to 10 V, resolution 1/4000 or 0 to 20 mA, resolution 1:2000



NX1W-CIF01

Sysmac NX1P RS-232C screwless (15 m max.) serial communication option board



NX1W-CIF11

Sysmac NX1P RS422/485 screwless (50 m max.) serial communication option board



NX1W-CIF12

Sysmac NX1P RS422/485 screwless (isolated 500 m max.) serial communication option board



NX1W-DAB21V

Sysmac NX1P Analog I/O screwless option board, 2 x analog outputs 0 to 10 V, resolution 1:4000



NX1W-MAB221

Sysmac NX1P Analog I/O screwless option board, 2 x analog inputs 0 to 10 V, resolution 1:4000 or 0 to 20 mA, resolution 1:2000, 2 x analog outputs 0 to 10 V, resolution 1:4000



SYSMAC-SE201L

Sysmac Studio license. 1 Single user.



W4S1-05D

5-port enhanced Ethernet switch



XS6W-6LSZH8SS100CM-Y

Ethernet patch cable, F/UTP, Cat.6A, LSZH (Yellow), 1 m



XS6W-6LSZH8SS200CM-B

Ethernet patch cable, F/UTP, Cat.6A, LSZH (Blue), 2 m



XS6W-6LSZH8SS200CM-Y

Ethernet patch cable, F/UTP, Cat.6A, LSZH (Yellow), 2 m



XS6W-6LSZH8SS20CM-Y

Ethernet patch cable, F/UTP, Cat.6A, LSZH (Yellow), 0.2 m



XS6W-6LSZH8SS50CM-Y

Ethernet patch cable, F/UTP, Cat.6A, LSZH (Yellow), 0.5 m

Spare parts

NX-END02

Spare part - End plate for NX1P controller

Related products



NX I/O Series

Performance and practicality for machine control

Downloads

CAD Library



EAC Mark removal Discontinuation Notice

EN PDF 221 KB



NJ-series -[EtherCAT]- ORIENTAL MOTOR aSTEP DC Multi-Axis Drive (AZDxA-KED)

Connection Guide

EN PDF 3.99 MB



NJ-series -[EtherNet/IP]- SMC AMS-S Series

Connection Guide

EN PDF 2.23 MB



NJ-series -[Ethernet TCP/IP]- Hioki LCR Meter (IM3536)

Connection Guide

EN PDF 2.13 MB



NJ/NX-Series CPU Unit Built-in EtherCAT Port

Users Manual

EN PDF 16.4 MB



NJ/NX-Series CPU Unit Built-in EtherNet/IP Port

Users Manual

EN PDF 17.1 MB



NJ/NX-Series CPU Unit Motion Control

Users Manual

EN PDF 19.6 MB



NJ/NX-Series CPU Unit Software

Users Manual

EN PDF 18.9 MB




NJ/NX-Series Instructions

Reference Manual

EN PDF 16.3 MB




NJ/NX-Series Motion Control Instructions Reference Manual
EN PDF 7.21 MB




NJ/NX-Series Troubleshooting Manual Users Manual
EN PDF 10.2 MB




NJ/NX-Series for Motion Control Getting Started Guide
EN PDF 18.1 MB




NJ/NX-series - [EtherCAT]- CKD ABSODEX driver (AX9000TS/TH-U5) Connection Guide
EN PDF 1.73 MB




NJ/NX-series - [EtherCAT]- Denso Wave RC9 Robot Connection Guide
EN PDF 2.72 MB




NJ/NX-series - [EtherCAT]- Festo CPX-AP-I Connection Guide
EN PDF 1.37 MB



NJ/NX-series - [EtherCAT]- Festo MSE6-E2M Connection Guide
EN PDF 1.6 MB




NJ/NX-series - [EtherCAT]- HMS Anybus X-gateway ABX Connection Guide
EN PDF 1.96 MB




NJ/NX-series - [EtherCAT]- Hitachi ADV-Series AC Servo Drives Connection Guide
EN ZIP 4.29 MB




NJ/NX-series - [EtherCAT]- Inficon gauge (BPG402-SE) Connection Guide
EN PDF 1.22 MB



NJ/NX-series - [EtherCAT]- Kashiyama Dry Vacuum Pump (E-CAT01 1ch) Connection Guide
EN PDF 1.59 MB




NJ/NX-series - [EtherCAT]- Kashiyama Dry Vacuum Pump (E-CAT02) Connection Guide
EN PDF 1.61 MB




NJ/NX-series - [EtherCAT]- Kawasaki F-series Robot Controller F60 Connection Guide
EN PDF 2.32 MB




NJ/NX-series - [EtherCAT]- Mitutoyo EJ-102N Linear Gage Counter Connection Guide
EN PDF 1.63 MB




NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-CKD Sensor (PPX series) Connection Guide
EN PDF 2.43 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-CKD Sensor (WFC series) Connection Guide
EN PDF 2.75 MB




NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-CKD WFK2 Flow sensor Connection Guide
EN PDF 2.09 MB




NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-MTS Sensors (E-Series) Connection Guide
EN PDF 2.4 MB




NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-PATLITE Beacon (NE-IL) Connection Guide
EN PDF 2.02 MB




NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-PATLITE Tower (LR6-IL) Connection Guide
EN PDF 2.08 MB




NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-SMC (ISA3-xxx) Connection Guide
EN PDF 2.61 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-SMC (xSE20Bx-L(-M/-P)-x) Connection Guide
EN PDF 2.13 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-SMC ITVx000/-IO* Connection Guide
EN PDF 1.89 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]-SMC Servo 24VDC (JXCL1) Connection Guide
EN PDF 2.23 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]- Schmalz Ejector (SCPSi)

Connection Guide

EN PDF 2.4 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]- ifm (O5D10x/O5D15x)

Connection Guide

EN PDF 2.42 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]- ifm (PN7x94)

Connection Guide

EN PDF 2.72 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]- ifm (TN24xx)

Connection Guide

EN PDF 2.74 MB



NJ/NX-series - [EtherCAT]- NX-ECC + NX-ILM400 -[IO-Link]- ifm TR7439 Pt100/1000

Connection Guide

EN PDF 2.43 MB



NJ/NX-series - [EtherCAT]- Nidec Sankyo S-FLAG II Series AC Servo (DB6xx41)

Connection Guide

EN PDF 2.65 MB



NJ/NX-series - [EtherCAT]- NittoSeiko SD600T driver controller

Connection Guide

EN PDF 2.18 MB



NJ/NX-series - [EtherCAT]- ORIENTAL MOTOR Stepper Motor (AZ-series)

Connection Guide

EN PDF 2.89 MB



NJ/NX-series - [EtherCAT]- Oriental Motor Alpha STEP AZ series

Connection Guide

EN PDF 3.47 MB



NJ/NX-series - [EtherCAT]- SANYO DENKI AC Servo SANMOTION R 3E MODEL TYPE S

Connection Guide

EN PDF 3.08 MB



NJ/NX-series - [EtherCAT]- SANYO DENKI AC Servo SANMOTION R ADVANCED MODEL TYPE F

Connection Guide

EN PDF 3.61 MB



NJ/NX-series - [EtherCAT]- SHIMADZU Power Unit for Turbo Molecular Pump (TMP)

Connection Guide

EN PDF 1.29 MB



NJ/NX-series - [EtherCAT]- SICK Absolute Encoder (AFS60/AFM60)

Connection Guide

EN PDF 1.52 MB



NJ/NX-series - [EtherCAT]- Schmalz Compact Terminal (SCTSi-ECT)

Connection Guide

EN PDF 1.33 MB



NJ/NX-series - [EtherCAT]- Unipulse Weighing Indicator (FC400-ECT)

Connection Guide

EN PDF 1.72 MB



NJ/NX-series - [EtherCAT]- Weidmüller Remote I/O System (u- remote IP20)

Connection Guide

EN PDF 1.8 MB



NJ/NX-series - [EtherCAT]- YASKAWA Sigma 7-series

Connection Guide

EN ZIP 3.77 MB



NJ/NX-series -[EtherNet TCP/IP]- HIOKI Battery HiTESTER (BT356[A])

Connection Guide

EN PDF 2.27 MB



NJ/NX-series - [EtherNet/IP]- Balluff BNI EIP-50x-105-2015

Connection Guide

EN PDF 3.35 MB



NJ/NX-series - [EtherNet/IP]- CKD ABSODEX Driver (AX9000TS/TH-U6)

Connection Guide

EN PDF 1.71 MB



NJ/NX-series - [EtherNet/IP]- HMS Anybus Communicator

Connection Guide

EN PDF 1.51 MB



NJ/NX-series - [EtherNet/IP]- HMS Anybus X-gateway

Connection Guide

EN PDF 1.79 MB



NJ/NX-series - [EtherNet/IP]- Hilscher netTAP NT100 Gateway (NT 100-RE-DN)

Connection Guide

EN PDF 3.5 MB



NJ/NX-series - [EtherNet/IP]- IAI RCON system & MCON / MSEP Controller

Connection Guide

EN PDF 1.9 MB



NJ/NX-series - [EtherNet/IP]- KOGANEI Manifold Solenoid Valve (F Series)

Connection Guide

EN PDF 2.43 MB



NJ/NX-series - [EtherNet/IP]- Magnescale Digital Gauge (MG80-EI)

Connection Guide

EN PDF 1.84 MB



NJ/NX-series - [EtherNet/IP]- Nordson ProBlue Adhesive Melters

Connection Guide

EN PDF 2.61 MB



NJ/NX-series - [EtherNet/IP]- ORIENTAL MOTOR Alpha STEP Compatible Driver (AZD-xEP)

Connection Guide

EN PDF 1.82 MB



NJ/NX-series - [EtherNet/IP]- SMC Solenoid Valve (SI Unit EX260-SEN#)

Connection Guide

EN PDF 1.65 MB



NJ/NX-series - [EtherNet/IP]- Schmalz K.K. Compact Terminal (SCTSi-EIP)

Connection Guide

EN PDF 1.69 MB



NJ/NX-series - [EtherNet/IP]- Unipulse FC400-EIP

Connection Guide

EN PDF 2.26 MB



NJ/NX-series - [EtherNet/IP]- Unipulse FS2000-EIP

Connection Guide

EN PDF 3.38 MB



NJ/NX-series - [EtherNet/IP]- ifm IO-Link master (AL1322)

Connection Guide

EN PDF 3.18 MB



NJ/NX-series - [EtherNet/IP]- ifm IO-Link master (AL1920)

Connection Guide

EN PDF 3.07 MB



NX-series -[Ethernet TCP/IP]- V330-F, V430-F Code Readers

Connection Guide

EN PDF 2.89 MB



NX-series -[RS-232C]- V320-F, V420-F, V430-F Code Readers

Connection Guide

EN PDF 2.48 MB



NX-series NX1P2 CPU Unit Built-in I/O and Option Board

Users Manual

EN PDF 6.4 MB



NX-series NX1P2 CPU Unit Hardware

Users Manual

EN PDF 7.15 MB



NX1-series + NX-ILM400 -[IO-Link]- SMC D-MP# Actuator Position Sensor

Connection Guide

EN PDF 1.88 MB



NX1-series + NX-ILM400 -[IO-Link]- SMC Digital Flow Switch

Connection Guide

EN PDF 2.58 MB



NX1P Machine Automation Controller

Datasheet

EN PDF 4.34 MB



NX1P Machine Automation Controller

Brochure

EN PDF 1.66 MB



NX1P-L

Brochure

EN PDF 2.55 MB



NX1P-Series Machine Controller

Datasheet

EN PDF 1.7 MB



NX1P2/NX1W-Series

Instruction Sheet

EN PDF 635 KB



OEN Sample and Library files

Connection Guide

EN ZIP 9.25 MB



Omron GX-JC0x-x EtherCAT Junction Box

EtherCAT ESI file

EN ZIP 3.36 KB



Panel Building

Brochure

EN PDF 3.11 MB



SYSMAC-XR020 MQTT Communications Library

Flyer

EN PDF 621 KB



Sysmac Catalogue

EN PDF 43.5 MB



Sysmac: A Fully Integrated Platform Brochure

EN PDF 19.1 MB

TERMS OF WEBSITE USE

This PDF document was created from the European OMRON Industrial Automation website on 29 August, 2025. Click here for [terms of use](#).

OMRON

INDUSTRIAL AUTOMATION | INDUSTRIAL.OMRON.EU