

## Works great, looks great.

Our NY industrial Panel PC enables operator and maintenance engineer to operate and interact more effectively with the machine, using powerful, tough and future-proof PC technology for visualization, data-handling, measuring and controlling. Omron engineers used the latest insights in design simplification to cut faults caused by complexity, while optimizing operator efficiency, maximizing uptime and reducing costs.



## Features

- No internal cables in the PC part eliminates faults, maximizes uptime
- Unique simplified thermal design cuts downtime
- Powerful Intel® Core™ technology for optimum performance
- Industrial CPU's with long availability
- 12.1, 15.4 and 18.5 inch industrial display
- Multi-touch projected capacitive touchscreen
- False touch detection (palm, water)
- Operator can wear gloves \*

\* When using gloves, ensure to use gloves that are functional with this touchscreen.

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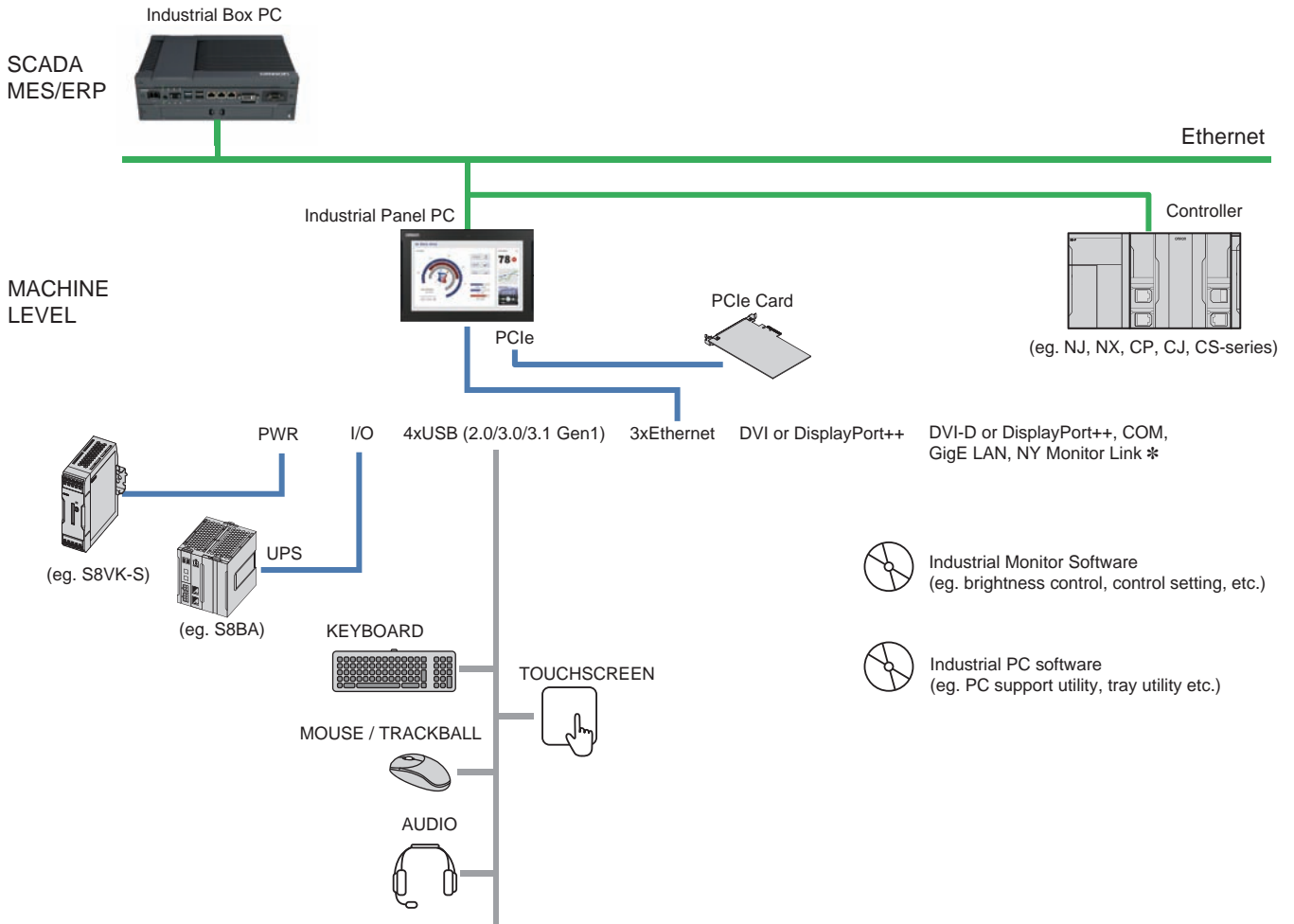
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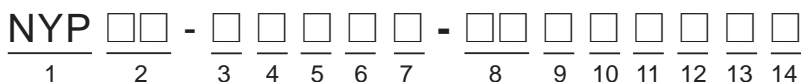
# System Configuration



\* NY Monitor Link option: Connect monitor up to 100 m via Ethernet cable.

## Model Number Structure

The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers.



| Item | Description             | Option / Description  |
|------|-------------------------|---|
| 1    | Series name             | NYP: NY- series Industrial Panel PC   |
| 2    | Processor               | 27: Intel® Core™ i7-7820EQ 7th generation CPU with fan unit for active cooling<br>35: Intel® Core™ i5-7300U 7th generation CPU with fanless cooling<br>65: Intel® Core™ i5-1145GRE 11th generation CPU with fanless cooling<br>13: Intel® Core™ i3-1115GRE 11th generation CPU with fanless cooling<br>2C: Intel® Celeron® 3965U 7th generation CPU with fanless cooling<br>2A: Intel® Atom® x5-E3940 with fanless cooling<br>3A: Intel® Atom® x6425RE with fanless cooling |
| 3    | Main memory             | 1: 2 GB, non-ECC<br>2: 4 GB, non-ECC<br>3: 8 GB, non-ECC<br>4: 16 GB, non-ECC<br>5: 32 GB, non-ECC<br>6: 64 GB, non-ECC<br>C: 8 GB, ECC<br>D: 16 GB, ECC  |
| 4    | Expansion slots         | 0: No PCIe slot<br>1: 1 PCIe slot   |
| 5    | Operating system        | 0: No operating system<br>3: Windows 10 IoT Enterprise 2016 LTSC - 64 bit<br>4: Windows 10 IoT Enterprise 2019 LTSC - 64bit<br>5: Windows 10 IoT Enterprise 2021 LTSC - 64 bit<br>F: Windows 10 IoT Enterprise 2019 LTSC - 64 bit + FH software   |
| 6    | Storage                 | 0: No disk<br>1: 128 GB, CFast 3DTLC<br>2: 256 GB, CFast 3DTLC<br>3: 512 GB, CFast 3DTLC<br>5: 64 GB, CFast MLC<br>6: 128 GB, CFast MLC<br>7: 256 GB, CFast MLC<br>9: 64 GB, SSD SLC<br>C: 320 GB, HDD<br>D: 500 GB, HDD<br>E: 1 TB, HDD<br>F: 128 GB, SSD 3DTLC<br>G: 256 GB, SSD 3DTLC<br>H: 512 GB, SSD 3DTLC<br>K: 128 GB, SSD MLC<br>L: 256 GB, SSD MLC<br>M: 500 GB, SSD MLC<br>P: 1 TB, SSD 3DTLC  |
| 7    | Optional interface      | 0: No optional interface<br>1: RS-232C<br>2: DVI-D<br>4: DisplayPort++<br>6: NY Monitor Link<br>9: GigE LAN   |
| 8    | Display size (diagonal) | 12: 12.1 inch model, 1280 x 800 pixels, 24 bit full color<br>15: 15.4 inch model, 1280 x 800 pixels, 24 bit full color<br>19: 18.5 inch model, 1,920 x 1,080 pixels, 24 bit full color  |
| 9    | Display ratio           | W: Wide   |
| 10   | Touchscreen             | C: Projected Capacitive Touch type  |
| 11   | Frame type              | 1: Panel mounted  |
| 12   | Material/finish         | 0: Aluminum, black paint<br>1: Aluminum, Nickel plating   |
| 13   | Built-in options        | 0: None   |
| 14   | Logo                    | 0: OMRON<br>2: Customized logo *  |

\* Please consult your OMRON representative for details.

## Ordering Information

### NY-series Industrial PC Platform

#### Recommended models

The industrial Panel PC has extended configuration possibilities to meet your requirements, below an overview of the most used and recommended models. Selecting one of the models below will bring the benefit of faster delivery times.

In case your preferred model is not listed below, please contact your Omron representative to discuss the possibilities.

| Product name        | Specifications |  |                                |                           |                           |                  |           | Model                |
|---------------------|----------------|--|--------------------------------|---------------------------|---------------------------|------------------|-----------|----------------------|
|                     | Display size   | Operating system                             | CPU type                       | RAM memory (non-ECC type) | Storage size              | Interface option | PCIe-slot |                      |
| Industrial Panel PC | 12.1 Inch      | Windows 10 IoT Enterprise 2016 LTSC - 64 bit | Intel® Core™ i5-7300U          | 8 GB                      | 256 GB CFast type (MLC)   | No               | No        | NYP35-30370-12WC1000 |
|                     |                |  | Intel® Celeron™ 3965U          | 8 GB                      | 256 GB CFast type (MLC)   | No               | No        | NYP2C-30370-12WC1000 |
|                     |                | Windows 10 IoT Enterprise 2019 LTSC - 64bit  | Intel® Core™ i7-7820EQ         | 8 GB                      | 128 GB CFast type (MLC)   | No               | No        | NYP27-30460-12WC1000 |
|                     |                |  | Intel® Atom® x5-E3940          | 4 GB                      | 128 GB CFast type (MLC)   | No               | No        | NYP2A-20460-12WC1000 |
|                     |                | Windows 10 IoT Enterprise 2021 LTSC - 64 bit | Intel® Core™ i3-1115GRE        | 16 GB                     | 256 GB CFast type (MLC)   | No               | No        | NYP13-40520-12WC1000 |
|                     |                |  | Intel® Atom® x6425RE Processor | 8 GB                      | 256 GB CFast type (3DTLC) | No               | No        | NYP3A-30520-12WC1000 |
|                     | 15.4 Inch      | Windows 10 IoT Enterprise 2016 LTSC - 64 bit | Intel® Core™ i5-7300U          | 8 GB                      | 256 GB CFast type (MLC)   | No               | No        | NYP35-30370-15WC1000 |
|                     |                |  | Intel® Celeron™ 3965U          | 8 GB                      | 256 GB CFast type (MLC)   | No               | No        | NYP2C-30370-15WC1000 |
|                     |                | Windows 10 IoT Enterprise 2019 LTSC - 64bit  | Intel® Core™ i7-7820EQ         | 8 GB                      | 128 GB CFast type (MLC)   | No               | No        | NYP27-30460-15WC1000 |
|                     |                |  | Intel® Atom® x5-E3940          | 4 GB                      | 128 GB CFast type (MLC)   | No               | No        | NYP2A-20460-15WC1000 |
|                     |                | Windows 10 IoT Enterprise 2021 LTSC - 64 bit | Intel® Core™ i5-1145GRE        | 16 GB                     | 512 GB CFast type (MLC)   | No               | No        | NYP65-40530-15WC1000 |
|                     |                |  | Intel® Atom® x6425RE Processor | 16 GB                     | 256 GB CFast type (3DTLC) | No               | No        | NYP3A-40520-15WC1000 |
|                     | 18.5 Inch *    | Windows 10 IoT Enterprise 2016 LTSC - 64 bit | Intel® Core™ i5-7300U          | 8 GB                      | 256 GB CFast type (MLC)   | No               | No        | NYP35-30370-19WC1000 |
|                     |                |  | Intel® Celeron™ 3965U          | 8 GB                      | 256 GB CFast type (MLC)   | No               | No        | NYP2C-30370-19WC1000 |
|                     |                | Windows 10 IoT Enterprise 2019 LTSC - 64bit  | Intel® Core™ i7-7820EQ         | 8 GB                      | 128 GB CFast type (MLC)   | No               | No        | NYP27-30460-19WC1000 |
|                     |                |  | Intel® Atom® x5-E3940          | 4 GB                      | 128 GB CFast type (MLC)   | No               | No        | NYP2A-20460-19WC1000 |
|                     |                | Windows 10 IoT Enterprise 2021 LTSC - 64 bit | Intel® Core™ i5-1145GRE        | 16 GB                     | 256 GB CFast type (3DTLC) | No               | No        | NYP65-40520-19WC1000 |
|                     |                |  | Intel® Core™ i3-1115GRE        | 16 GB                     | 256 GB CFast type (3DTLC) | No               | No        | NYP13-40520-19WC1000 |

\* 18.5 inch models also available with Nickel Plating front.

# Accessories

## Optional Hardware

| Product name   | Specifications   | Model            |
|--|--|------------------|
| Mounting Brackets #1                                 | VESA mount   | NY000-AB06       |
|  | VESA mount   | NY000-AB07       |
|  | VESA mount   | NY000-AB08       |
|  | VESA mount   | NY000-AB09       |
|  | VESA mount   | NY000-AB10       |
|  | VESA mount   | NY000-AB11       |
|  | VESA mount handle  | NY000-AB12       |
| SD Memory Cards                                      | Card type: SD Card<br>Capacity: 2 GB<br>Format: FAT16  | HMC-SD292        |
|  | Card type: SDHC Card<br>Capacity: 4 GB<br>Format: FAT32  | HMC-SD492        |
|  | Card type: SDHC Card<br>Capacity: 16 GB<br>Format: FAT32   | HMC-SD1A2        |
| USB Flash Drives                                     | Capacity: 2 GB   | FZ-MEM2G         |
|  | Capacity: 8 GB   | FZ-MEM8G         |
| Storage Devices                                      | Storage type: HDD<br>Capacity: 320 GB  | NY000-AH00       |
|  | Storage type: HDD<br>Capacity: 500 GB  | NY000-AH01       |
|  | Storage type: HDD<br>Capacity: 1 TB  | NY000-AH02       |
|  | Storage type: SSD SLC<br>Capacity: 32 GB   | NY000-AS00       |
|  | Storage type: SSD SLC (Apacer)<br>Capacity: 64 GB  | NY000-AS01       |
|  | Storage type: SSD SLC (Hagiwara)<br>Capacity: 64 GB  | NY000-AS03       |
|  | Storage type: SSD MLC (Innodisk)<br>Capacity: 128 GB   | NY000-AS04       |
|  | Storage type: SSD MLC<br>Capacity: 500 GB  | NY000-AS05       |
|  | Storage type: SSD 3DTLC<br>Capacity: 1 TB  | NY000-AS07       |
|  | Storage type: SSD MLC (Innodisk)<br>Capacity: 256 GB   | NY000-AS08       |
|  | Storage type: SSD 3DTLC (Acon)<br>Capacity: 128 GB   | NY000-AS09       |
|  | Storage type: SSD 3DTLC (Acon)<br>Capacity: 256 GB   | NY000-AS10       |
|  | Storage type: SSD 3DTLC (Acon)<br>Capacity: 512 GB   | NY000-AS11       |
|  | Storage type: SSD 3DTLC (Acon)<br>Capacity: 1 TB   | NY000-AS12       |
|  | Storage type: SSD 3DTLC (Acon)<br>Capacity: 2 TB   | NY000-AS13       |
|  | Storage type: CFast MLC<br>Capacity: 64 GB   | NY000-AT00       |
|  | Storage type: CFast MLC<br>Capacity: 128 GB  | NY000-AT01       |
|  | Storage type: CFast MLC<br>Capacity: 256 GB  | NY000-AT02       |
|  | Storage type: CFast 3DTLC (Acon)<br>Capacity: 128 GB   | NY000-AT05       |
|  | Storage type: CFast 3DTLC (Acon)<br>Capacity: 256 GB   | NY000-AT06       |
| Storage type: CFast 3DTLC (Acon)<br>Capacity: 512 GB | NY000-AT07   |                  |
| DVI Cables   | Cable length: 2 m<br>Supports DVI-D<br>Minimum bend radius: 36 mm  | NY000-AC00 2M    |
|  | Cable length: 5 m<br>Supports DVI-D<br>Minimum bend radius: 36 mm  | NY000-AC00 5M    |
| Power Supply   | <ul style="list-style-type: none"> <li>Output voltage: 24 VDC</li> <li>Push-In Plus terminal blocks</li> </ul>       | S8VK-G□□□24      |
|  | <ul style="list-style-type: none"> <li>Output voltage: 24 VDC</li> <li>EtherNet/IP, Modbus TCP-Compatible</li> </ul> | S8VK-X□□□24A-EIP |
|  | <ul style="list-style-type: none"> <li>Output voltage: 24 VDC</li> <li>Compact</li> </ul>                            | S8VK-S□□□24      |
|  | <ul style="list-style-type: none"> <li>Output voltage: 24 VDC</li> <li>Three-phase 200-V Power Supplies</li> </ul>   | S8VK-WA□□□24     |

| Product name                   | Specifications  | Model    |
|--------------------------------|---|----------|
| <b>UPS #2</b>                  | Output voltage during backup operation: 24 VDC ± 5%   | S8BA     |
| <b>UPS Communication Cable</b> | Cable length: 2 m<br>Signals for<br><ul style="list-style-type: none"> <li>• Signal output (BL, TR, BU, WB)</li> <li>• Remote ON/OFF input</li> <li>• UPS Stop Signal input (BS)</li> </ul> | S8BW-C02 |

**Note:** Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

**\*1.** Select the required type. Industrial Panel PC and Industrial Monitor type only.

NY000-AB06: for NYP35-□0□□□-12WC, NYP2C-□0□□□-12WC, NYP2A-□0□□□-12WC, NYP65-□0□□□-12WC, NYP13-□0□□□-12WC, NYP3A-□0□□□-12WC

NY000-AB07: for NYP35-□0□□□-15WC, NYP2C-□0□□□-15WC, NYP2A-□0□□□-15WC, NYP65-□0□□□-15WC, NYP13-□0□□□-15WC, NYP3A-□0□□□-15WC

NY000-AB08: for NYP35-□0□□□-19WC, NYP2C-□0□□□-19WC, NYP2A-□0□□□-19WC, NYP65-□0□□□-19WC, NYP13-□0□□□-19WC, NYP3A-□0□□□-19WC

NY000-AB09: for NYP35-□1□□□-12WC, NYP2C-□1□□□-12WC, NYP27-□0□□□-12WC

NY000-AB10: for NYP35-□1□□□-15WC, NYP2C-□1□□□-15WC, NYP27-□0□□□-15WC, NYP65-□1□□□-15WC, NYP13-□1□□□-15WC

NY000-AB11: for NYP35-□1□□□-19WC, NYP2C-□1□□□-19WC, NYP27-□0□□□-19WC

NY000-AB12 Handle for AB06 to AB11

**\*2.** Revision number 09 or later.

The revision number of the UPS can be retrieved from the serial number label on the product and the product packaging.

A3□ □□□□□□□□ □□ □  
 1            2            3    4

| Item | Description                          |
|------|--------------------------------------|
| 1    | Product code                         |
| 2    | Product period and sequential number |
| 3    | Revision number                      |
| 4    | RoHS status                          |

## Spare Parts

The following spare parts for the Industrial Panel PC are available.

| Product name         | Specifications   | Model        |
|----------------------|--|--------------|
| <b>Battery</b>       | One battery is supplied with the Industrial Panel PC. The battery supplies power to the real-time clock.<br>The battery is located inside the Industrial Panel PC.<br>Service life: 5 years at 25°C  | CJ1W-BAT01 * |
| <b>Fan Unit</b>      | The Fan Unit is available for the Industrial Panel PC that has active cooling.<br>Service life: 70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity.<br>Shelf life: 6 months<br>This is the storage limitation with no power supplied.  | NY000-AF00   |
| <b>Accessory Kit</b> | Replacement kit containing all accessories supplied with Industrial Panel PC.<br><ul style="list-style-type: none"> <li>• Power connector</li> <li>• I/O connector</li> <li>• Drive bracket for drive installation</li> <li>• 4 mounting screws for drive installation</li> <li>• PCIe Card support for PCIe Card installation</li> <li>• PCIe Card clip for PCIe Card installation</li> </ul> | NY000-AK00   |
|                      | Power connectors (10 pcs) for Industrial Box PC and Industrial Panel PC  | NY000-AK01   |

\* Only for models with replaceable battery.

## Installed Support Software

| Item                                  | Specifications   |
|---------------------------------------|--|
| Industrial PC Support Utility         | The Industrial PC Support Utility is a software utility to assist in diagnosing and resolving problems of the Industrial Panel PC.<br>It is pre-installed on the Industrial Box PC and the Industrial Panel PC.  |
| Industrial PC Tray Utility            | The Industrial PC Tray Utility is a software utility that provides information about the current state of the Industrial PC, its related devices, and associated software.<br>It is pre-installed on the Industrial Box PC and the Industrial Panel PC.  |
| Industrial PC System API              | The Industrial PC System API allows programmers to create programs that can retrieve information or set an indicator status of the Industrial Panel PC.<br>The API makes use of the included IPC System Service to manage the hardware.<br>It is pre-installed on the Industrial Box PC and the Industrial Panel PC. |
| Industrial Monitor Utility            | The Industrial Monitor Utility provides a user interface to control settings and display details of connected Industrial Monitors.<br>It is pre-installed on the Industrial Box PC and the Industrial Panel PC.  |
| Industrial Monitor Brightness Utility | The Industrial Monitor Brightness Utility is a small software utility that allows you to control the brightness of the screen backlight of all connected Industrial Monitors.<br>It is pre-installed on the Industrial Box PC and the Industrial Panel PC.   |

| Item                              | Specifications  |
|-----------------------------------|---|
| Industrial Monitor API            | The Industrial Monitor API allows programmers to create applications that can control the hardware features and retrieve information from connected Industrial Monitors.<br>It is pre-installed on the Industrial Box PC and the Industrial Panel PC. |
| Industrial PC Rescue Disk Creator | The Industrial PC Rescue Disk Creator creates a USB Rescue Disk which can be used to back-up and restore the Omron IPC Operating System. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.                                    |

## Soft-NA

| Product name | Specifications   | Number of licenses | Media      | Model    |
|--------------|--|--------------------|------------|----------|
| Soft-NA      | The Soft-NA is software that displays information on FA manufacturing sites while providing safety, reliability, and maintainability as an industrial display on which operations can be performed as necessary.<br>The Soft-NA runs on the following OS:<br>Windows 10 Pro Version 1903 or later 64 bit | -<br>(Media only)  | DVD        | NA-RTSM  |
|              |  | 1 license          | USB dongle | NA-RTL01 |
|              |  | 3 licenses         |            | NA-RTL03 |
|              |  | 10 licenses        |            | NA-RTL10 |

### System Requirements

| Item  | Requirement   |                      |
|---|---|----------------------|
| OS  | Windows 10 Pro Version 1903 or later 64 bit         |                      |
| Processor   | Intel Atom® x5-E3940 equivalent or higher processor |                      |
| RAM   | 4 GB or more  |                      |
| Free space in the hard drive necessary for installation | 1 GB or more  |                      |
| Optical disk drive                                      | DVD-ROM drive                                       |                      |
| Communication port                                      | USB   | USB2.0 Type-A x 2 *1 |
|   | LAN   | Ethernet x 2 *1      |

\*1. Since one port is for project transfer, it is not required unless the corresponding path is used.

**Note:** Refer to NA-series catalog (Cat. No. V413) for the system configuration of Soft-NA.

# General Specifications

## Performance Specifications

| Item                  |                               |  | NYP65-□1□□□                                  | NYP13-□1□□□   | NYP65-□0□□□  | NYP13-□0□□□   | NYP3A-□0□□□  |  |
|-----------------------|-------------------------------|--|--|---|--|---|--|--|
| Main system           | CPU                           | CPU type   | Intel® Core™ i5-1145GRE                      | Intel® Core™ i3-1115GRE                                   | Intel® Core™ i5-1145GRE                              | Intel® Core™ i3-1115GRE                                   | Intel Atom® x6425RE                                  |  |
|                       |                               | Cores / Threads  | 4 / 8  | 2 / 4   | 4 / 8  | 2 / 4   | 4 / 4  |  |
|                       |                               | CPU base frequency   | 1.5 GHz                                      | 2.2 GHz   | 1.5 GHz  | 2.2 GHz   | 1.9 GHz  |  |
|                       |                               | Maximum turbo frequency  | 4.1 GHz                                      | 3.9 GHz   | 4.1 GHz  | 3.9 GHz   | –  |  |
|                       |                               | Cache  | 8 MB   | 6 MB  | 8 MB   | 6 MB  | 1.5 MB   |  |
|                       |                               | Cooling details  | Passive cooling (fanless)                    |   |  |   |  |  |
|                       |                               | Intel CPU category   | Industrial (100% operation minimal 10yr)     |   |  |   |  |  |
|                       | Memory                        | Memory size *3   |  | 8, 16, 32, 64 GB  |  |   |  | 4, 8, 16, 32 GB                                      |
|                       |                               | Memory type  |  | DDR4  |  |   |  |  |
|                       |                               | Package Memory Format  |  | SO-DIMM   |  |   |  |  |
|                       |                               | Serial Presence Detect (SPD)                                   | Speed grade                                  | 3200 MT/s   |  |   |  |  |
|                       |                               |  | CAS latency                                  | CL17  |  |   |  |  |
|                       | Trusted platform module (TPM) |  | Available                                    |   |  |   |  |  |
|                       | Graphics controller           |  |  | Intel® Iris® Xe Graphics. Up to four independent screens. | Intel® UHD Graphics. Up to four independent screens. | Intel® Iris® Xe Graphics. Up to four independent screens. | Intel® UHD Graphics. Up to four independent screens. | Intel® UHD Graphics. Up to four independent screens. |
|                       |                               | Intel® Iris® Xe Graphics (80 EU)                               | Intel® UHD Graphics (48 EU)                  | Intel® Iris® Xe Graphics (80 EU)                          | Intel® UHD Graphics (48 EU)                          | Intel® UHD Graphics (32 EU)                               |  |  |
| Watchdog              |                               | Yes  |  |   |  |   |  |  |
| Operating system      | Windows OS                    |  | Windows 10 IoT Enterprise 2021 LTSC - 64 bit |   |  |   |  |  |
| Storage devices       | Drives *3                     | Hard Disk Drive  |  | –   |  |   |  |  |
|                       |                               | Solid State Drive  | SLC type                                     |   | –  |   |  |  |
|                       |                               |  | MLC type                                     |   | –  |   |  |  |
|                       |                               |  | 3DTLC type                                   |   | 128 GB, 256 GB, 512 GB, 1 TB                         | 128 GB, 256 GB, 512 GB                                    |  |  |
|                       | Drive bays (HDD/SSD) *1       |  | 2  | CFast slot  |  |   |  |  |
| Hardware-RAID support |                               | N/A  |  |   |  |   |  |  |
| Connectors            | Power connector               |  | 24 VDC                                       |   |  |   |  |  |
|                       | I/O connector                 |  | 2 inputs and 1 output                        |   |  |   |  |  |
|                       | USB2.0 Type-A                 | Number of ports  |  | –   |  |   |  |  |
|                       |                               | Maximum current  |  | –   |  |   |  |  |
|                       |                               | Maximum cable length   |  | –   |  |   |  |  |
|                       | USB3.0 Type-A                 | Number of ports  |  | 4   |  |   |  |  |
|                       |                               | Maximum current  |  | 900 mA  |  |   |  |  |
|                       |                               | Maximum cable length   |  | 3 m   |  |   |  |  |
|                       | Ethernet connectors           | Number of ports  |  | 3   |  |   |  |  |
|                       |                               | Physical layer   |  | 10BASE-T, 100BASE-TX, 1000BASE-T or 2500BASE-T            |  |   |  |  |
|                       |                               | Maximum transmission distance between Ethernet switch and node |  | 100 m   |  |   |  |  |
|                       | DVI-I connector               | Video interface  |  | –   |  |   |  |  |
|                       |                               | Resolution   |  | –   |  |   |  |  |
|                       |                               | Maximum cable length   |  | –   |  |   |  |  |
| DisplayPort ++        | Resolution                    |  | Up to 4,096 x 2,304 at 60 Hz                 |   |  |   |  |  |
|                       | Maximum cable length          |  | 3 m  |   |  |   |  |  |



| Item                                       |                    | NYP65-□1□□□                                      | NYP13-□1□□□                        | NYP65-□0□□□ | NYP13-□0□□□ | NYP3A-□0□□□ |
|--|--------------------|--|------------------------------------|-------------|-------------|-------------|
| Optional connector (select one per system) | RS-232C            | Standard SUBD9 connector (Non-Isolated)          |                                    |             |             |             |
|  | DVI-D              | Video interface                                  | -                                  |             |             |             |
|  |                    | Resolution                                       | -                                  |             |             |             |
|  |                    | Maximum cable length                             | -                                  |             |             |             |
|  | NY Monitor Link    | Video interface                                  | Digital only                       |             |             |             |
|  |                    | Resolution                                       | 1,280 x 800 pixels at 60 Hz        |             |             |             |
|  |                    | Connector type                                   | RJ45                               |             |             |             |
|  |                    | Cable shielding, type and max. length            | S/FTP, Cat.6A, 100m                |             |             |             |
|  | GigE LAN           | Physical layer                                   | 10BASE-T, 100BASE-TX or 1000BASE-T |             |             |             |
|  | DisplayPort ++     | Resolution                                       | Up to 4,096 x 2,304 at 60 Hz       |             |             |             |
| Maximum cable length                       |                    | 3 m  |                                    |             |             |             |
| PCIe Card Slot                             | Configuration      | X4 (4 lanes) up to Gen 3                         | N/A                                |             |             |             |
|  | Card height        | Standard height cards, 4.20 inches (106.7 mm) *2 | N/A                                |             |             |             |
|  | Card length        | Half length cards, 6.6 inches (167.65 mm)        | N/A                                |             |             |             |
| Battery                                    | Model              | CJ1W-BAT01                                       |                                    |             |             |             |
|  | Service life       | 5 years at 25°C                                  |                                    |             |             |             |
| Fan unit                                   | Model              | -  |                                    |             |             |             |
|  | Service life       | -  |                                    |             |             |             |
| LED  | PWR, ERR, HDD, RUN |  |                                    |             |             |             |

\*1. Depending on the model one or two drives are supported.

\*2. Low profile cards, 2.536 inches (64.4 mm) are not supported.

\*3. Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.

| Item                                       |                               |  | NYP35-□1□□□   | NYP2C-□1□□□  | NYP27-□0□□□  | NYP35-□0□□□  | NYP2C-□0□□□            | NYP2A-□0□□□           |                 |
|--|-------------------------------|--|---|--|--|--|------------------------|-----------------------|-----------------|
| Main system                                | CPU                           | CPU type   | Intel® Core™ i5-7300U   | Intel® Celeron® 3965U  | Intel® Core™ i7-7820EQ   | Intel® Core™ i5-7300U  | Intel® Celeron® 3965U  | Intel® Atom® x5-E3940 |                 |
|  |                               | Cores / Threads  | 2 / 4   | 2 / 2  | 4 / 8  | 2 / 4  | 2 / 2                  | 4 / 4                 |                 |
|  |                               | CPU base frequency   | 2.6 GHz   | 2.2 GHz  | 3.0 GHz  | 2.6 GHz  | 2.2 GHz                | 1.6 GHz               |                 |
|  |                               | Maximum turbo frequency  | 3.5 GHz   | –  | 3.7 GHz  | 3.5 GHz  | –                      | 1.8 GHz               |                 |
|  |                               | Cache  | 3 MB  | 2 MB   | 8 MB   | 3 MB   | 2 MB                   | 2 MB                  |                 |
|  |                               | Cooling details  | Passive cooling (fanless)   |  | Requires active cooling (fan)  | Passive cooling (fanless)  |                        |                       |                 |
|  |                               | Intel CPU category   | Industrial (100% operation minimal 10yr)  |  |  |  |                        |                       |                 |
|  | Memory                        | Memory size *3   | 4 or 8 GB   | 4 or 8 GB  | 8, 16 or 32 GB   | 8 or 16 GB   | 4 or 8 GB              | 2, 4 or 8 GB          |                 |
|  |                               | Memory type  | DDR4 (non ECC)  |  |  |  |                        |                       | DDR3L (non ECC) |
|  | Trusted platform module (TPM) |  | Available   |  |  |  |                        |                       |                 |
| Graphics controller                        |                               | Intel® HD Graphics. Up to two independent screens.   |   |  |  |  |                        |                       |                 |
|  |                               | Intel® HD Graphics 620   | Intel® HD Graphics 610  | Intel® HD Graphics 630   | Intel® HD Graphics 620   | Intel® HD Graphics 610   | Intel® HD Graphics 500 |                       |                 |
| Watchdog                                   |                               | Yes  |   |  |  |  |                        |                       |                 |
| Operating system                           | Windows OS                    | Windows 10 IoT Enterprise 2016 LTSC - 64 bit<br>Windows 10 IoT Enterprise 2019 LTSC - 64 bit<br>Windows 10 IoT Enterprise 2021 LTSC - 64 bit |   | Windows 10 IoT Enterprise 2019 LTSC - 64 bit<br>Windows 10 IoT Enterprise 2021 LTSC - 64 bit | Windows 10 IoT Enterprise 2016 LTSC - 64 bit<br>Windows 10 IoT Enterprise 2019 LTSC - 64 bit<br>Windows 10 IoT Enterprise 2021 LTSC - 64 bit | Windows 10 IoT Enterprise 2019 LTSC - 64 bit<br>Windows 10 IoT Enterprise 2021 LTSC - 64 bit |                        |                       |                 |
| Storage devices                            | Drives *3                     | Hard Disk Drive  | • 320 GB  |  | N/A  |  |                        |                       |                 |
|  |                               | Solid State Drive  | SLC type  | • 64 GB  |  | N/A  |                        |                       |                 |
|  |                               |  | MLC type  | • 128 GB   |  | • 64 GB, 128 GB, 256 GB  |                        |                       |                 |
|  |                               |  | 3DTLC type  | • 128 GB, 256GB, 512 GB, 1 TB  |  | • 128 GB, 256 GB   |                        |                       |                 |
| Drive bays (HDD/SSD) *1                    |                               | 2  | 2   | CFast slot   | CFast slot   | CFast slot   | CFast slot             |                       |                 |
| Connectors                                 | Power connector               |  | 24 VDC  |  |  |  |                        |                       |                 |
|  | I/O connector                 |  | 2 inputs (Power ON/OFF Input and UPS Mode Input) and 1 output (Power Status Output) |  |  |  |                        |                       |                 |
|  | USB2.0 Type-A                 | Number of ports  | 2   |  |  |  |                        |                       |                 |
|  |                               | Maximum current  | 500 mA  |  |  |  |                        |                       |                 |
|  |                               | Maximum cable length   | 5 m   |  |  |  |                        |                       |                 |
|  | USB3.0 Type-A                 | Number of ports  | 2   |  |  |  |                        |                       |                 |
|  |                               | Maximum current  | 900 mA  |  |  |  |                        |                       |                 |
|  |                               | Maximum cable length   | 3 m   |  |  |  |                        |                       |                 |
|  | Ethernet connectors           | Number of ports  | 3   |  |  |  |                        |                       |                 |
|  |                               | Physical layer   | 10BASE-T, 100BASE-TX or 1000BASE-T  |  |  |  |                        |                       |                 |
|  | DVI-I connector               | Video interface  | Digital only  |  |  |  |                        |                       |                 |
|  |                               | Resolution   | Up to 1,920 x 1,200 pixels at 60 Hz   |  |  |  |                        |                       |                 |
|  |                               | Maximum DVI cable length   | Dependent upon connected monitor type and resolution                                |  |  |  |                        |                       |                 |
| DisplayPort ++                             | Resolution                    | N/A  |   |  |  |  |                        |                       |                 |
|  | Maximum cable length          | N/A  |   |  |  |  |                        |                       |                 |
| Optional connector (select one per system) | RS-232C                       |  | Standard DSUB9 connector (Non-Isolated)   |  | N/A  |  |                        |                       |                 |
|  | DVI-D                         | Video interface  | Digital only  |  | N/A  |  |                        |                       |                 |
|  |                               | Resolution   | Up to 1,920 x 1,200 pixels at 60 Hz   |  | N/A  |  |                        |                       |                 |
|  |                               | Maximum DVI cable length   | Dependent upon connected monitor type and resolution                                |  | N/A  |  |                        |                       |                 |
|  | NY Monitor Link               | Video interface  | Digital only  |  |  |  |                        |                       |                 |
|  |                               | Connector type   | RJ45  |  |  |  |                        |                       |                 |
|  |                               | Cable shielding, type and max. length  | S/FTP, Cat.6A, 100 m  |  |  |  |                        |                       |                 |
|  |                               | USB data throughput  | 280 Mbps max.   |  |  |  |                        |                       |                 |
|  | GigE LAN                      | Physical layer   | N/A   |  |  |  |                        |                       |                 |
|  | DisplayPort ++                | Resolution   | N/A   |  |  |  |                        |                       |                 |
| Maximum cable length                       |                               | N/A  |   |  |  |  |                        |                       |                 |

| Item           |               | NYP35-□1□□□                                      | NYP2C-□1□□□ | NYP27-□0□□□  | NYP35-□0□□□             | NYP2C-□0□□□ | NYP2A-□0□□□ |
|----------------|---------------|--|-------------|--|-------------------------|-------------|-------------|
| PCIe Card Slot | Configuration | X2 (2 lanes) up to Gen 3                         |             | N/A  |                         |             |             |
|                | Card height   | Standard height cards, 4.20 inches (106.7 mm) *2 |             | N/A  |                         |             |             |
|                | Card length   | Half length cards, 6.6 inches (167.65 mm)        |             | N/A  |                         |             |             |
| Battery        | Model         | Non replaceable battery                          |             | CJ1W-BAT01   | Non replaceable battery |             |             |
|                | Service life  | 10 years at 40°C *4                              |             | 5 years at 25°C  | 10 years at 40°C *4     |             |             |
| Fan unit       | Model         | No fan unit                                      |             | NY000-AF00   | No fan unit             |             |             |
|                | Service life  | -  |             | 70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity | -                       |             |             |
| LED            |               | PWR, ERR, HDD, RUN                               |             |  |                         |             |             |

- \*1. Depending on the model one or two drives are supported.
- \*2. Low profile cards, 2.536 inches (64.4 mm) are not supported.
- \*3. Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.
- \*4. Battery service life highly depend on circuntance and is in normal operation >20yr longer

## Display Specifications

| Item    |  | Specifications                   |   |                                      |   |
|---------|--|----------------------------------|---|--------------------------------------|---|
|         |  | 12.1 Inch models                 | 15.4 Inch models                                      | 18.5 Inch models                     |   |
| Display | Display panel *1   | Display device                   | TFT LCD   |                                      |   |
|         |  | Screen size                      | 12.1 inches   | 15.4 inches                          | 18.5 inches   |
|         |  | Surface treatment                | Anti glare treatment                                  |                                      |   |
|         |  | Surface hardness                 | Mohs scale: 5 - 6                                     |                                      |   |
|         |  | Resolution                       | 1,280 × 800 pixels at 60 Hz (horizontal × vertical)   |                                      | 1,920 × 1,080 pixels at 60 Hz (horizontal × vertical) |
|         |  | Colors                           | 16,770,000 colors                                     |                                      |   |
|         |  | Effective display area           | 261 × 163 mm (horizontal × vertical)                  | 331 × 207 mm (horizontal × vertical) | 409 × 230 mm (horizontal × vertical)                  |
|         |  | View angles                      | Left: 60°, Right: 60°, Top: 60°, Bottom: 60°          |                                      | Left: 89°, Right: 89°, Top: 89°, Bottom: 89°          |
|         |  | Typical LCD Brightness (initial) | 1,500 cd/m <sup>2</sup>                               | 400 cd/m <sup>2</sup>                | 500 cd/m <sup>2</sup>                                 |
|         |  | Life                             | 50,000 hours min. *2                                  |                                      |   |
|         | Brightness adjustment  | 200 levels *3                    |   |                                      |   |
|         | Touch  | Technology                       | Projected capacitive                                  |                                      |   |
|         |  | Touch resolution                 | Touch accuracy 1.5% (4-5 mm)                          |                                      |   |
|         |  | Multi touch                      | Up to 5 simultaneous touches                          |                                      |   |
|         |  | Features                         | Water detection *4, hand palm rejection *5, gloves *6 |                                      |   |
| Life    |  | 50,000,000 operations min.       |   |                                      |   |
| EMC     | Correct touchscreen operation is possible within allowable EMC immunity conditions |                                  |   |                                      |   |

- \*1. There may be some defective pixels in the display. This is not a fault as long as the numbers of defective light and dark pixels fall within the following standard range: light and dark pixels 10 or less. (There must not be 3 consecutive light/dark pixels.)
- \*2. This is the estimated time before brightness is reduced by half at room temperature and humidity. The life expectancy is drastically shortened if used at high temperatures.
- \*3. If the brightness is set to very dark, it causes flickering or the screen will be too dark to use.
- \*4. If water is detected the touch functionality will not be available.
- \*5. If a palm is detected that specific area is ignored.
- \*6. The touchscreen can be operated when wearing gloves. Check correct usage of the gloves before using them.

## Electrical Specifications

| Item  | NYP65-□1□□□   | NYP13-□1□□□             | NYP65-□0□□□              | NYP13-□0□□□             | NYP3A-□0□□□             |
|---|---|-------------------------|--------------------------|-------------------------|-------------------------|
| CPU type  | Intel® Core™ i5-1145GRE   | Intel® Core™ i3-1115GRE | Intel® Core™ i5-1145GRE  | Intel® Core™ i3-1115GRE | Intel® Atom® x6425RE    |
| Rated power supply voltage                                | 24 VDC, non-isolated  |                         |                          |                         |                         |
| Allowable power supply voltage range                      | 20.4 to 28.8 VDC  |                         |                          |                         |                         |
| Grounding method  | Ground to less than 100 Ω   |                         |                          |                         |                         |
| Inrush current  | At 24 VDC: 12 A / 6 ms max. for cold start at room temperature  |                         |                          |                         |                         |
| Overvoltage category                                      | JIS B3502 and IEC 61131-2: Category II  |                         |                          |                         |                         |
| EMC immunity level  | IEC 61131-2: Zone B   |                         |                          |                         |                         |
| RTC accuracy  | At ambient temperature of 55°C: -3.5 to +0.5 min error per month<br>At ambient temperature of 25°C: -1.5 to +1.5 min error per month<br>At ambient temperature of 0°C: -3 to +1 min error per month |                         |                          |                         |                         |
| Power button life   | 100,000 operations  |                         |                          |                         |                         |
| Battery life  | 5 years at 25°C (for battery CJ1W-BAT01)  |                         |                          |                         |                         |
| Fan life  | -   | -                       | -                        | -                       | -                       |
| Power consumption *1                                      | -   |                         |                          |                         |                         |
| Maximum power consumption including drives and expansions | 100 W   | 79 W                    | 98 W<br>93 W<br>107 W *2 | 77 W<br>72 W<br>86 W *2 | 60 W<br>55 W<br>69 W *2 |
| Maximum power consumption excluding drives and expansions | 73 W  | 52 W                    | 78 W<br>73 W<br>87 W *2  | 57 W<br>52 W<br>66 W *2 | 40 W<br>35 W<br>49 W *2 |
| Drives  | -   |                         |                          |                         |                         |
| HDD 320 GB  | 2 W   |                         |                          | -                       |                         |
| HDD 500 GB  | 2 W   |                         |                          | -                       |                         |
| HDD 1 TB  | 2 W   |                         |                          | -                       |                         |
| SSD SLC 32 GB   |   |                         |                          | -                       |                         |
| SSD SLC 64 GB   |   |                         |                          | -                       |                         |
| SSD MLC 128 GB  |   |                         |                          | -                       |                         |
| SSD MLC 500 GB  |   |                         |                          | -                       |                         |
| SSD 3DTLC 128 GB  | 1 W   |                         |                          | -                       |                         |
| SSD 3DTLC 256 GB  | 1 W   |                         |                          | -                       |                         |
| SSD 3DTLC 512 GB  | 2 W   |                         |                          | -                       |                         |
| SSD 3DTLC 1 TB  | 2 W   |                         |                          | -                       |                         |
| CFast MLC 64 GB   |   |                         |                          | -                       |                         |
| CFast MLC 128 GB  |   |                         |                          | -                       |                         |
| CFast MLC 256 GB  |   |                         |                          | -                       |                         |
| CFast 3DTLC 128 GB  |   | -                       | 1 W                      |                         |                         |
| CFast 3DTLC 256 GB  |   | -                       | 1 W                      |                         |                         |
| CFast 3DTLC 512 GB  |   | -                       | 2 W                      |                         |                         |
| Expansions  | -   |                         |                          |                         |                         |
| USB   | 18 W max. (4 x 900 mA at 5 V)   |                         |                          |                         |                         |
| PCIe  | 5 W max.  |                         |                          |                         |                         |

**Note:** Refer to the Industrial Panel PC User's Manual (W555) for details.

\*1. The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.

\*2. The upper number is for the 12.1 inch models, the middle number is for the 15.4 inch models, and the lower number is for the 18.5 inch models.

To guarantee S8BA UPS operation in combination with our IPC, the specified combination of UPS and power-supply must be used.

| Item                       | NYP65-□1□□□  | NYP13-□1□□□ | NYP65-□0□□□ | NYP13-□0□□□ | NYP3A-□0□□□ |
|----------------------------|--------------|-------------|-------------|-------------|-------------|
| Minimum power requirements | Power supply | 120 W       |             |             |             |
|                            | UPS          | 120 W       |             |             |             |

| Item  | NYP35-□1□□□   | NYP2C-□1□□□           | NYP27-□0□□□                              | NYP35-□0□□□           | NYP2C-□0□□□           | NYP2A-□0□□□           |
|---|---|-----------------------|--|-----------------------|-----------------------|-----------------------|
| CPU type  | Intel® Core™ i5-7300U   | Intel® Celeron® 3965U | Intel® Core™ i7-7820EQ                   | Intel® Core™ i5-7300U | Intel® Celeron® 3965U | Intel® Atom® x5-E3940 |
| Rated power supply voltage                                | 24 VDC, non-isolated  |                       |  |                       |                       |                       |
| Allowable power supply voltage range                      | 20.4 to 28.8 VDC  |                       |  |                       |                       |                       |
| Grounding method  | Ground to less than 100 Ω   |                       |  |                       |                       |                       |
| Inrush current  | At 24 VDC: 12 A / 6 ms max. for cold start at room temperature  |                       |  |                       |                       |                       |
| Overvoltage category                                      | Meets IEC 61010-2-201: Category II  |                       |  |                       |                       |                       |
| EMC immunity level  | IEC 61131-2: Zone B   |                       |  |                       |                       |                       |
| RTC accuracy  | At ambient temperature of 55°C: -3.5 to +0.5 min error per month<br>At ambient temperature of 25°C: -1.5 to +1.5 min error per month<br>At ambient temperature of 0°C: -3 to +1 min error per month |                       |  |                       |                       |                       |
| Power button life   | 100,000 operations  |                       |  |                       |                       |                       |
| Battery life  | 10 years at 40°C  |                       | 5 years at 25°C (for battery CJ1W-BAT01) | 10 years at 40°C      |                       |                       |
| Fan life  | -   | -                     | 8 years of continuous operation at 40°C  | -                     | -                     | -                     |
| Power consumption *1                                      | -   |                       |  |                       |                       |                       |
| Maximum power consumption including drives and expansions | 84 W  | 66 W                  | 116 W<br>140 W *2                        | 76 W<br>99 W *2       | 58 W<br>80 W *2       | 57 W<br>79 W *2       |
| Maximum power consumption excluding drives and expansions | 61 W  | 43 W                  | 101 W<br>125 W *2                        | 61 W<br>84 W *2       | 43 W<br>65 W *2       | 42 W<br>64 W *2       |
| Drives  | -   |                       |  |                       |                       |                       |
| HDD 320 GB  | 2 W   |                       |  |                       | -                     |                       |
| HDD 500 GB  | 2 W   |                       |  |                       | -                     |                       |
| HDD 1 TB  | 2 W   |                       |  |                       | -                     |                       |
| SSD SLC 32 GB   | 2 W   |                       |  |                       | -                     |                       |
| SSD SLC 64 GB   | 2 W   |                       |  |                       | -                     |                       |
| SSD MLC 128 GB  | 2 W   |                       |  |                       | -                     |                       |
| SSD MLC 500 GB  |   |                       |  |                       | -                     |                       |
| SSD 3DTLC 128 GB  | 1 W   |                       |  |                       | -                     |                       |
| SSD 3DTLC 256 GB  | 1 W   |                       |  |                       | -                     |                       |
| SSD 3DTLC 512 GB  | 2 W   |                       |  |                       | -                     |                       |
| SSD 3DTLC 1 TB  | 2 W   |                       |  |                       | -                     |                       |
| CFast MLC 64 GB   |   | -                     | 1 W                                      |                       |                       |                       |
| CFast MLC 128 GB  |   | -                     | 1 W                                      |                       |                       |                       |
| CFast MLC 256 GB  |   | -                     | 1 W                                      |                       |                       |                       |
| CFast 3DTLC 128 GB  |   | -                     | 1 W                                      |                       |                       |                       |
| CFast 3DTLC 256 GB  |   | -                     | 2 W                                      |                       |                       |                       |
| CFast 3DTLC 512 GB  |   | -                     | 2 W                                      |                       |                       |                       |
| Expansions  | -   |                       |  |                       |                       |                       |
| USB   | 14 W max. ((2 x 500 mA at 5 V) + (2 x 900 mA at 5 V))   |                       |  |                       |                       |                       |
| PCIe  | 5 W max.  | 5 W max.              |  |                       |                       | -                     |

Note: Refer to the *Industrial Panel PC User's Manual (W555)* for detail.

\*1. The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.

\*2. The upper number is for the 12.1 and 15.4 inch models, and the lower number is for the 18.5 inch models.

To guarantee S8BA UPS operation in combination with our IPC, the specified combination of UPS and power-supply must be used

| Item                       |              | NYP27 | NYP35 / NYP2C / NYP2A |
|----------------------------|--------------|-------|-----------------------|
| Minimum power requirements | Power supply | 240 W | 120 W                 |
|                            | UPS          | 240 W | 120 W                 |

## Components and functions

The intent behind our IPC platform is to empower engineers to become unstoppable in developing machines and factories that are better, faster and safer by giving them the freedom and flexibility to explore the opportunities provided by modern IT. In line with Omron's traditional quality standards, the Industrial Panel PC is designed to meet the demands of industrial users for maximum robustness and reliability.

### Powerful CPU options

Three powerful CPU options provide high performance for various applications.

### Fanless cooling for multiple CPU types

The Industrial Panel PC has passive cooling for multiple CPU types which means no moving parts and less maintenance effort.

### Easy access to storage devices and the PCIe Express Card

Adding or changing storage devices (HDD, SSD) and the PCIe Express Card is fast and simple.

### LED indicators



**DVI-I video interface \*1**

**DisplayPort++ \*1**

**3 1Gbps Ethernet ports**

**Built-in IO**

**4 USB ports**

**Built-in SD Memory Card slot \*1**

**LCD touchscreen**

### Multi-touch functionality

Up to 5 simultaneous touches are supported for complex functions.

\*1. 11th generation CPU: Equipped with DisplayPort++ instead of DVI, but no SD Memory Card slot.

## Environmental Specifications

| Item                    |  | Specifications  |
|-------------------------|--|---|
| Operation environment   | Ambient operating temperature *1   | 0 to 55°C   |
|                         | Ambient storage temperature *1   | -20 to 70°C   |
|                         | Ambient operating humidity *1  | 10% to 90% with no condensation   |
|                         | Ambient storage humidity *1  | 10% to 90% with no condensation   |
|                         | Operating atmosphere   | No corrosive gases  |
|                         | Altitude   | 2,000 m max.  |
|                         | Noise resistance (during operation)  | Conforms to IEC61000-4-4, 2kV (power lines)   |
|                         | Vibration resistance (during operation)  | The vibration resistance depends on the storage device(s): <ul style="list-style-type: none"> <li>For a Panel PC with only SSD storage devices: 5 to 8.4 Hz with 3.5 mm single amplitude and 8.4 to 150 Hz with 9.8 m/s<sup>2</sup> for 10 times each in X, Y and Z directions. Conforms to IEC 60068-2-6.</li> <li>For a Panel PC with one or more HDD storage devices the Panel PC must be installed in a vibration free environment. *2</li> </ul> |
|                         | Shock resistance (during operation)  | Conforms to IEC 60068-2-27.<br>147 m/s <sup>2</sup> , 3 times in each X, Y and Z directions   |
|                         | Installation method  | Mount on panel  |
| Degree of protection    | Front of Monitor: IP65 *3  |   |
| Pollution degree        | 2 or less: Meets IEC 61010-2-201.  |   |
| Applicable standards *4 | EU Directives: EMC Directive 2014/30/EU (EN 61131-2) and RoHS Directive<br>KC Registration, RCM, cULus |   |

\*1. The allowed ambient operating temperature and ambient humidity depend on product type, CPU type, mounting orientation, and storage device type.

\*2. A Panel PC with one or more HDD storage devices should not be used in applications subject to vibration.

Examples of applications subject to vibration:

- AGV (Automated Guided Vehicles)
- Rail vehicle
- Stacker crane
- Elevator
- Tableting machine
- Connector pin assembling machine
- Bending machine

Ensure your Panel PC with HDD does not vibrate. When in doubt use a Panel PC with SSD storage devices.

\*3. The Panel PC may not operate properly in locations subjected to oil splashes for extended periods of time.

\*4. Refer to the OMRON website ([www.ia.omron.com](http://www.ia.omron.com)) or contact your OMRON representative for the most recent applicable standards for each model.

## Storage Device Specifications

| Item                                  | Specifications                    |                  |                                   |                                   |                |                 |                |                                  |                |                |                 |                 |
|---------------------------------------|-----------------------------------|------------------|-----------------------------------|-----------------------------------|----------------|-----------------|----------------|----------------------------------|----------------|----------------|-----------------|-----------------|
| <b>Model</b>                          | NY000-AS00                        | NY000-AS01       | NY000-AS03                        | NY000-AS04                        | NY000-AS05     | NY000-AS07      | NY000-AS08     | NY000-AS09                       | NY000-AS10     | NY000-AS11     | NY000-AS12      | NY000-AS13      |
| <b>Capacity</b>                       | 32 GB                             | 64 GB            | 64 GB                             | 128 GB                            | 500 GB         | 1 TB            | 256 GB         | 128 GB                           | 256 GB         | 512 GB         | 1 TB            | 2 TB            |
| <b>Type</b>                           | SSD (SLC)                         |                  | SSD (SLC)                         | SSD (MLC)                         | SSD (MLC)      | SSD (3DTLC)     | SSD (MLC)      | SSD (3DTLC)                      | SSD (3DTLC)    | SSD (3DTLC)    | SSD (3DTLC)     | SSD (3DTLC)     |
| <b>S.M.A.R.T. support</b>             | Yes                               |                  |                                   |                                   |                |                 |                |                                  |                |                |                 |                 |
| <b>Rotation speed</b>                 | -                                 | -                | -                                 | -                                 | -              | -               | -              | -                                | -              | -              | -               | -               |
| <b>Interface</b>                      | Serial ATA 3.1                    |                  |                                   |                                   |                |                 |                |                                  |                |                |                 |                 |
| <b>Sustained standard read speed</b>  | Up to 160 MB/s                    | Up to 160 MB/s   | Up to 500 MB/s                    | Up to 530 MB/s                    | Up to 415 MB/s | Up to 550 MB/s  | Up to 530 MB/s | Up to 550 MB/s                   | Up to 550 MB/s | Up to 550 MB/s | Up to 550 MB/s  | Up to 550 MB/s  |
| <b>Sustained standard write speed</b> | Up to 145 MB/s                    | Up to 150 MB/s   | Up to 370 MB/s                    | Up to 190 MB/s                    | Up to 200 MB/s | Up to 340 MB/s  | Up to 210 MB/s | Up to 450 MB/s                   | Up to 485 MB/s | Up to 500 MB/s | Up to 510 MB/s  | Up to 510 MB/s  |
| <b>Operating temperature</b>          | 0 to 70°C                         |                  |                                   |                                   |                |                 |                |                                  |                |                |                 |                 |
| <b>Operating humidity</b>             | 10% to 95% (with no condensation) |                  | 10% to 85% (with no condensation) | 10% to 95% (with no condensation) |                |                 |                | 5% to 90% (with no condensation) |                |                |                 |                 |
| <b>Storage temperature</b>            | -40 to 100°C                      |                  | -45 to 90°C                       | -55 to 95°C                       |                |                 |                | -40 to 85°C                      |                |                |                 |                 |
| <b>Storage humidity</b>               | 10% to 95% (with no condensation) |                  |                                   |                                   |                |                 |                | 5% to 93% (with no condensation) |                |                |                 |                 |
| <b>Life</b>                           | 1,500 TB written                  | 3,000 TB written | 1900 TB written                   | 208 TB written                    | 154 TB written | 1000 TB written | 416 TB written | 90 TB written                    | 230 TB written | 550 TB written | 1200 TB written | 3000 TB written |

| Item                                  | Specifications   |               |   |                                   |                |                |                                  |                |                |
|---------------------------------------|--|---------------|---|-----------------------------------|----------------|----------------|----------------------------------|----------------|----------------|
| <b>Model</b>                          | NY000-AH00 *1  | NY000-AH01 *1 | NY000-AH02 *1   | NY000-AT00                        | NY000-AT01     | NY000-AT02     | NY000-AT05                       | NY000-AT06     | NY000-AT07     |
| <b>Capacity</b>                       | 320 GB   | 500 GB        | 1 TB  | 64 GB                             | 128 GB         | 256 GB         | 128 GB                           | 256 GB         | 512 GB         |
| <b>Type</b>                           | HDD  | HDD           | HDD   | CFast (MLC)                       | CFast (MLC)    | CFast (MLC)    | CFast (3DTLC)                    | CFast (3DTLC)  | CFast (3DTLC)  |
| <b>S.M.A.R.T. support</b>             | Yes  |               |   |                                   |                |                |                                  |                |                |
| <b>Rotation speed</b>                 | 5,400 r/min  |               |   | -                                 | -              | -              | -                                | -              | -              |
| <b>Interface</b>                      | Serial ATA 3.0   |               |   | Serial ATA 3.1                    |                |                |                                  |                |                |
| <b>Sustained standard read speed</b>  | -  | -             | -   | Up to 530 MB/s                    | Up to 530 MB/s | Up to 530 MB/s | Up to 550 MB/s                   | Up to 550 MB/s | Up to 550 MB/s |
| <b>Sustained standard write speed</b> | -  | -             | -   | Up to 100 MB/s                    | Up to 190 MB/s | Up to 210 MB/s | Up to 450 MB/s                   | Up to 485 MB/s | Up to 500 MB/s |
| <b>Operating temperature</b>          | 5 to 55°C  | 5 to 55°C     | 0 to 60°C   | -40 to 85°C                       |                |                |                                  |                |                |
| <b>Operating humidity</b>             | 8% to 90% (with no condensation)   |               |   | 10% to 95% (with no condensation) |                |                | 5% to 90% (with no condensation) |                |                |
| <b>Storage temperature</b>            | -40 to 65°C  |               |   | -55 to 95°C                       |                |                | -40 to 85°C                      |                |                |
| <b>Storage humidity</b>               | 8% to 90% (with no condensation)   |               | 5% to 95% (with no condensation)  | 10% to 95% (with no condensation) |                |                | 5% to 90% (with no condensation) |                |                |
| <b>Life</b>                           | Approximately 5 years or 20,000 powered-ON hours (whichever comes first) under the following conditions:<br><ul style="list-style-type: none"> <li>• 25°C at 101.3 kPa</li> <li>• Less than 333 powered-ON hours/month *2</li> <li>• Less than 20% operation while powered-ON *3</li> <li>• Less than 1.30 x 10<sup>6</sup> seeks/month</li> </ul> |               | Average Annualized Failure Rate (AFR): 0.50%<br>Under the following conditions:<br><ul style="list-style-type: none"> <li>• Case Temperature 40°C</li> <li>• Power on Hours (POH) ≤ 3120</li> </ul> | 125 TB written                    | 208 TB written | 417 TB written | 90 TB written                    | 230 TB written | 550 TB written |

**Note:** Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

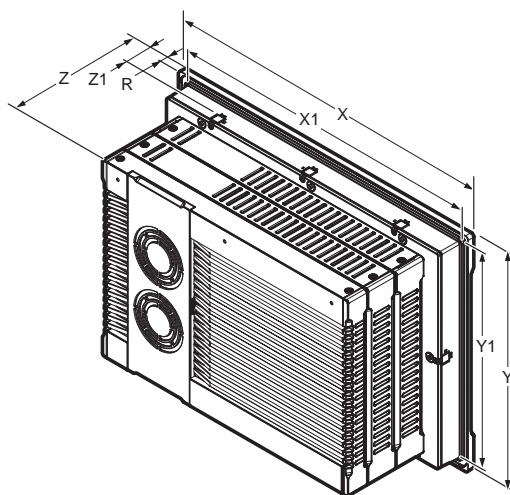
\*1. For a Panel PC with an HDD: this device can only be installed in a vibration free environment only. (NYP)

\*2. Powered-ON hours include sleep and standby modes.

\*3. Operation includes seeking, writing, and reading functions.



# Dimensions



| Item                                | Panel   |  |  |
|-------------------------------------|---|--|--|
|                                     | 12.1 Inch   |  |  |
|                                     | NYP35-□1□□□<br>NYP2C-□1□□□  | NYP27-□0□□□  | NYP35-□0□□□<br>NYP2C-□0□□□<br>NYP2A-□0□□□<br>NYP65-□0□□□<br>NYP13-□0□□□<br>NYP3A-□0□□□ |
| Panel preparation dimensions        | Cutout Width X1 = 314 <sup>-0 +1</sup> mm<br>Cutout Height Y1 = 216 <sup>-0 +1</sup> mm |  |  |
| Panel thickness range *             | Panel thickness range Z1 = 1.6 to 6.0 mm  |  |  |
| Dimensions                          | Width X = 332 mm<br>Height Y = 234 mm<br>Depth Z = 105 mm                               | Width X = 332 mm<br>Height Y = 234 mm<br>Depth Z = 88 mm | Width X = 332 mm<br>Height Y = 234 mm<br>Depth Z = 73 mm                               |
| Monitor thickness in front of panel | Rim thickness R = 8.0 mm  |  |  |
| Weight                              | 5.6 kg  | 5.1 kg   | 4.7 kg   |

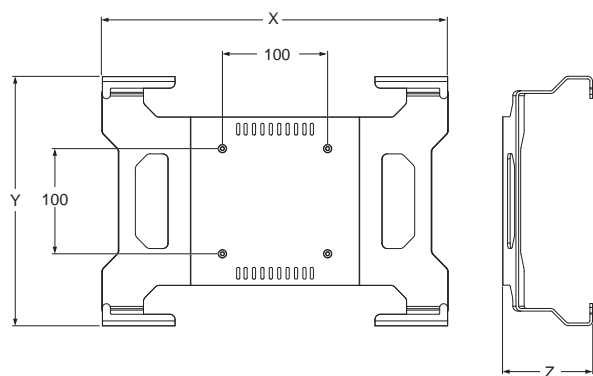
| Item                                | Panel   |  |  |
|-------------------------------------|---|--|--|
|                                     | 15.4 Inch   |  |  |
|                                     | NYP35-□1□□□<br>NYP2C-□1□□□<br>NYP65-□1□□□<br>NYP13-□1□□□                                | NYP27-□0□□□  | NYP35-□0□□□<br>NYP2C-□0□□□<br>NYP2A-□0□□□<br>NYP65-□0□□□<br>NYP13-□0□□□<br>NYP3A-□0□□□ |
| Panel preparation dimensions        | Cutout Width X1 = 383 <sup>-0 +1</sup> mm<br>Cutout Height Y1 = 259 <sup>-0 +1</sup> mm |  |  |
| Panel thickness range *             | Panel thickness range Z1 = 1.6 to 6.0 mm  |  |  |
| Dimensions                          | Width X = 401 mm<br>Height Y = 277 mm<br>Depth Z = 105 mm                               | Width X = 401 mm<br>Height Y = 277 mm<br>Depth Z = 88 mm | Width X = 401 mm<br>Height Y = 277 mm<br>Depth Z = 73 mm                               |
| Monitor thickness in front of panel | Rim thickness R = 8.0 mm  |  |  |
| Weight                              | 6.6 kg  | 6.0 kg   | 5.6 kg   |

| Item                                | Panel   |  |
|-------------------------------------|---|--|
|                                     | 18.5 Inch   |  |
|                                     | NYP27-□0□□□   | NYP35-□0□□□<br>NYP2C-□0□□□<br>NYP2A-□0□□□<br>NYP65-□0□□□<br>NYP13-□0□□□<br>NYP3A-□0□□□ |
| Panel preparation dimensions        | Cutout Width X1 = 463 <sup>-0 +1</sup> mm<br>Cutout Height Y1 = 285 <sup>-0 +1</sup> mm |  |
| Panel thickness range *             | Panel thickness range Z1 = 1.6 to 6.0 mm  |  |
| Dimensions                          | Width X = 482 mm<br>Height Y = 304 mm<br>Depth Z = 88 mm                                | Width X = 482 mm<br>Height Y = 304 mm<br>Depth Z = 73 mm                               |
| Monitor thickness in front of panel | Rim thickness R = 8.0 mm  |  |
| Weight                              | 7.0 kg  | 6.6 kg   |

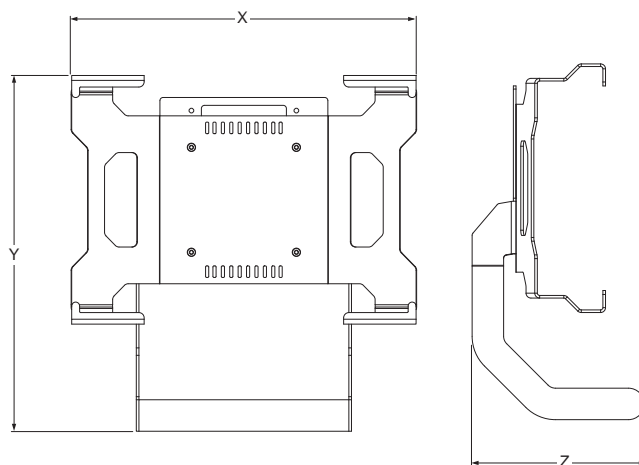
\* The minimum panel thickness depends on the panel material.

## Bracket Specifications

Without handle



With handle NY000-AB12



| Model  | Bracket type | Bracket ID | Without handle  |                  |                 | With handle NY000-AB12 |                  |                 |
|--|--------------|------------|-----------------|------------------|-----------------|------------------------|------------------|-----------------|
|  |              |            | Bracket width X | Bracket height Y | Bracket depth Z | Bracket width X        | Bracket height Y | Bracket depth Z |
| NYP35-□0□□□-12WC<br>NYP2C-□0□□□-12WC<br>NYP2A-□0□□□-12WC<br>NYP65-□0□□□-12WC<br>NYP13-□0□□□-12WC<br>NYP3A-□0□□□-12WC | Vesa mount   | NY000-AB06 | 328 mm          | 237 mm           | 86 mm           | 328 mm                 | 339 mm           | 164 mm          |
| NYP35-□0□□□-15WC<br>NYP2C-□0□□□-15WC<br>NYP2A-□0□□□-15WC<br>NYP65-□0□□□-15WC<br>NYP13-□0□□□-15WC<br>NYP3A-□0□□□-15WC | Vesa mount   | NY000-AB07 | 397 mm          | 280 mm           | 86 mm           | 397 mm                 | 381 mm           | 164 mm          |
| NYP35-□0□□□-19WC<br>NYP2C-□0□□□-19WC<br>NYP2A-□0□□□-19WC<br>NYP65-□0□□□-19WC<br>NYP13-□0□□□-19WC<br>NYP3A-□0□□□-19WC | Vesa mount   | NY000-AB08 | 478 mm          | 306 mm           | 83 mm           | 478 mm                 | 409 mm           | 164 mm          |
| NYP35-□1□□□-12WC<br>NYP2C-□1□□□-12WC<br>NYP27-□0□□□-12WC   | Vesa mount   | NY000-AB09 | 328 mm          | 237 mm           | 118 mm          | 328 mm                 | 339 mm           | 164 mm          |
| NYP35-□1□□□-15WC<br>NYP2C-□1□□□-15WC<br>NYP27-□0□□□-15WC<br>NYP65-□1□□□-15WC<br>NYP13-□1□□□-15WC                     | Vesa mount   | NY000-AB10 | 397 mm          | 280 mm           | 118 mm          | 397 mm                 | 381 mm           | 164 mm          |
| NYP27-□0□□□-19WC   | Vesa mount   | NY000-AB11 | 478 mm          | 306 mm           | 98 mm           | 478 mm                 | 409 mm           | 164 mm          |

## Recommended Related Products

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### Industrial Box PC NY-series

The Industrial Box PC is designed to meet the specific needs of the industrial environment. Design simplification and future-proof architecture minimize the risk of failure.



### Industrial Monitor NY-series

The Industrial Monitor is of key importance at the interface between operator and system. The Industrial Monitor is efficient, effective and highly visible with an attractive design.



### UPS S8BA-series

The OMRON S8BA UPS protects the Industrial PC from power failures, voltage variations and instantaneous voltage drops.

## Related Manuals

The following manuals are related. Use these manuals for reference.

| Manual name   | Cat. No. | Model numbers  | Application  | Description  |
|---|----------|--|--|--|
| Industrial Box PC User's Manual                           | W553     | NYB1E-□1□□□□<br>NYB27-□□□□□□<br>NYB35-□□□□□□<br>NYB2C-□□□□□□<br>NYB2E-□1□□□□<br>NYB37-□□□□□□<br>NYB55-□□□□□□<br>NYB65-□□□□□□   | Learning all basic information about the Industrial Box PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Box PC.     | An introduction to the Industrial Box PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>   |
| Industrial Monitor User's Manual                          | W554     | NYM19W-C1□□□□<br>NYM15W-C10□□□<br>NYM12W-C10□□□  | Learning all basic information about the Industrial Monitor. This includes introductory information with features, hardware overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Monitor.                      | An introduction to the Industrial Monitor is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>  |
| Industrial Panel PC User's Manual                         | W555     | NYP27-□□□□□□<br>NYP35-□□□□□□<br>NYP2C-□□□□□□<br>NYP65-□□□□□□<br>NYP13-□□□□□□<br>NYP3A-□□□□□□   | Learning all basic information about the Industrial Panel PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Panel PC. | An introduction to the Industrial Panel PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>   |
| UPS S8BA User's Manual                                    | U702     | S8BA   | Learning the information that is necessary to use the Uninterruptible Power Supply (UPS) Unit.   | An introduction to the UPS is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Preparation</li> <li>• Installation and Connection</li> <li>• Check and Start Operation</li> <li>• Maintenance and Inspection</li> <li>• Shutdown Processing</li> <li>• I/O Signal Functions</li> <li>• Troubleshooting</li> </ul> |
| NY-series Operating Systems and Software Utilities Manual | W616     | NYB□□-□□□0<br>NYB□□-□□□1<br>NYB□□-□□□2<br>NYB□□-□□□3<br>NYB□□-□□□4<br>NYB□□-□□□5<br>NYP□□-□□□0<br>NYP□□-□□□1<br>NYP□□-□□□2<br>NYP□□-□□□3<br>NYP□□-□□□4<br>NYP□□-□□□5 | Learning all software related information about the Industrial Box PC. This includes introductory information, installation, operating procedures and maintenance. Mainly software information is provided.  | An introduction to the Box PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>  |

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2023.11

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