

## NB PROGRAMMABLE TERMINAL SERIES

The feature-rich, economic programmable terminal



» Quality color display with LED backlighting

» Complete HMI family

» Comprehensive features

## A complete HMI family...

*Omron's new NB HMI series is simply as smart and as dependable as it looks. A feature-rich HMI with Omron's high quality extending throughout the complete series, this new HMI generation offers you the utmost in reliability. The logical choice for use with Omron's popular CP1 family of compact machine controllers, the NB series has just the right model to suit your application, no matter for what branch of industry.*

Available with screen sizes from 3.5 to 10 inches, the NB series is not only complete, but also has many outstanding design features that will make it easy to create attractive HMI applications.

The combination of high quality and rich features add up give outstanding value for an HMI in the economy class. The NB-Designer software to create your HMI application is free of charge and can be downloaded from our website.



## with comprehensive features



### Best-in-class display

The robust TFT, color touch LCD gives excellent visibility and features long-life (50,000 hours) LED backlighting. Screen sizes range from 3.5 to 10 inches.

- LED backlit TFT LCD
- Wide viewing angle
- More than 65,000 display colors
- Stores up to 120 MBs of screen data



### Smart design

When developing the NB series, we considered every aspect of the design to give you maximum flexibility. A typical example is the portrait or landscape display mode.

- Portrait or landscape display mode
- Connection to Omron and non-Omron devices, e.g. PLCs/ inverters
- Serial, USB or Ethernet connectivity
- PictBridge printer connection



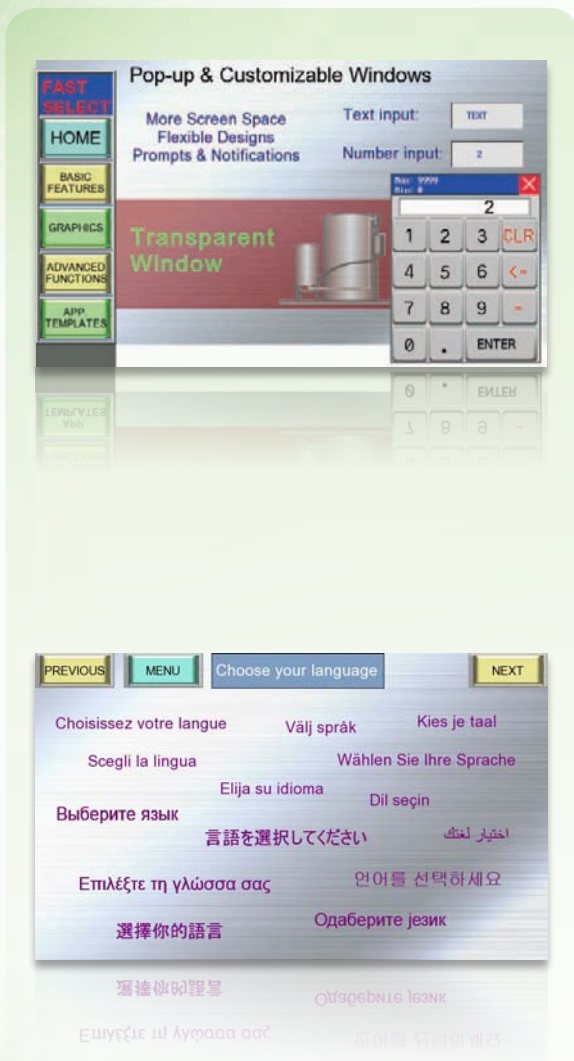
### Saves you time

The NB series has many useful features that will make it easy to create and maintain your projects, such as the USB memory stick support.

- USB memory stick support
- Animations and easy-to-use functions
- Multi-language support and tool
- On/off-line simulation

# Turn your idea into an application...

The NB series gives you all the features and functionality to easily create intuitive operator screens really quickly. Features such as window handling give you many screen-creation possibilities, while texts can be defined in up to 32 languages. Furthermore, off-line simulation enables you to quickly test your project.



## Flexible window handling

Your scope to create screens for your project using the familiar window concept was never greater than with the NB series. Three standard windows maximize your creative freedom: 1) Basic for general or pop-up screens, 2) Common for fixed or template screens and 3) Fast Selection for menu screens. Besides the standard window, you can also show 'window-in-window' using the indirect window component. And you can manage pop-up windows using the direct window component. Furthermore, the NB series also supports bottom windows and transparency for pop-up windows.

## Extensive language support

Currently supporting 32 languages, you will find it easy to manage texts with the NB series. Thanks to the Text Library function, you can store the texts used many times in a project. Similarly, you can also store the text for a component supporting multiple states (ON/OFF), using a text for each state. And you can do this together with the font setting for each language.

Alarm  
 Event  
 RECIPE  
 TREND  
 Graph  
 L  
 NOTE  
 Input  
 METER  
 animation  
 L  
 BITMAP  
 Timer  
 macro  
 SCALE  
 vector

# exactly how you want it!



## Easy remote access

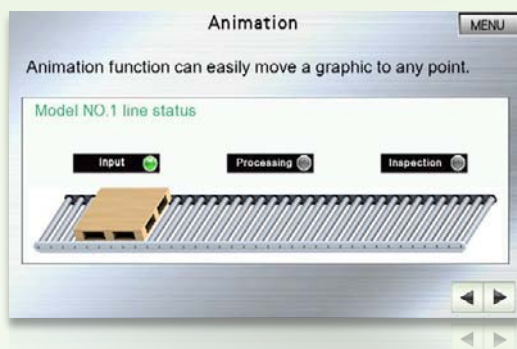
Now NB series gives you a possibility to monitor from remote. You can use your PC or Tablet PC to see what's going on your HMI. No extra software is needed to install, just start your web browser and specify the NB device you want to see. Now you have your NB screen right in front of you where ever you are. Also you can operate your screen as required.

### Support OS

Windows7/8  
iOS.6x

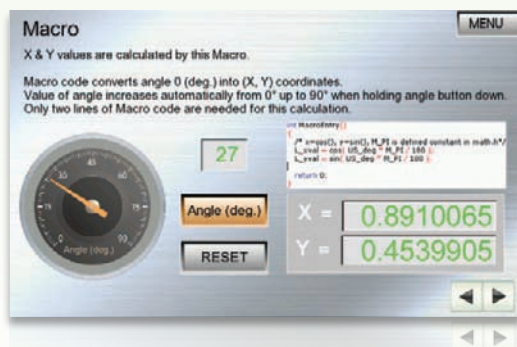
### Support web browser

Internet Explorer8/9/10  
Safari6



## Easy animation

The NB series gives you many possibilities to create animations easily and quickly. Moving components can be created easily and in many ways. For example, you may want to show a different status with text and graphics, or showing free or trajectory movement while changing the displayed graphic. All of this can be done by simply configuring the status, X/Y coordinates and corresponding address.



## Powerful Macros

Thanks to its powerful macros, the NB series also allows you to do even more, such as perform calculations and comparisons or iterations, and mathematical functions. It also enables you to draw graphics and patterns on the NB screen, as well as writing / reading a value from or to the local memory and the memory of a connected device.

USER

amp  
PAD

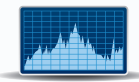
# The logical choice for your machine

The feature-rich NB series has everything you will need for creating applications for a wide range machines and in many industries, for example, packaging, food, plastics and textiles. From a simple lid placing or loading/unloading machine right up to an in-line filling or sealing /labeling packaging machine. And last but not least, Omron's latest NB-Designer software can be downloaded free of charge and at any time from our website.



## Always informed about alarms

Event monitoring (alarming) is both flexible and easy to use. Not only do you have the possibility to enter bit and word alarms for on/off or on-condition triggering, there is also the possibility to use different fonts and color to indicate varying degrees of status and priorities. Specific alarms are indicated with an audible buzzer sound, as well as by an accompanying text message, and you can even create pop-up alarms for situations where immediate action has to be taken.



## Easy data presentation

Graphical representation of real-time and historical data is easy with the NB series. As well as display of time sampling and trending data, you have the option to save sampling data (max. 16 consecutive words) of basic real-time trending data. And you can plot using x/y coordinates, in which case sampling can be done via single or multiple points and with historical data. Furthermore, data can be presented in a variety of ways, such as sampling points using x and y components.



## Multiple security options

Protecting your developed project with a password using the NB series is both a simple and secure matter. Among the comprehensive security options is the possibility to define up to 16 minimum security levels on screens, buttons and inputs, and you can set up to 32 specific permission controls for each operator. There is also a register condition (bit/word) control for a check of actual condition against a predefined value, and a standard operator confirmation check to confirm that critical actions have been performed by the operator.



## Direct connection with safety

The NB series can be directly connected to Omron's G9SP Safety Controller via RS-232C serial communications.

Direct connection allows you to easily monitor details of errors that occur in the G9SP series and operation status, which contributes to reduce machine downtime. Now you do not need to create the program that was previously required for data exchange between the G9SP and HMI through PLC.





### The perfect partner for CP1

With its large range of screen sizes, ample specifications, rich functionality and proven Omron high quality, the new NB series has everything you need in a compact HMI to accompany Omron's popular CP1 Compact Machine Controller range. The CP1 offers increasing degrees of sophistication to perfectly match your specific automation requirement and connection to the NB series is possible via Serial or Ethernet. Similarly, data transfer of recipes between HMI and PLC (with data back-up to external memory if required) is easy and the recipe screen format is freely selectable, or can be a standard table if preferred.



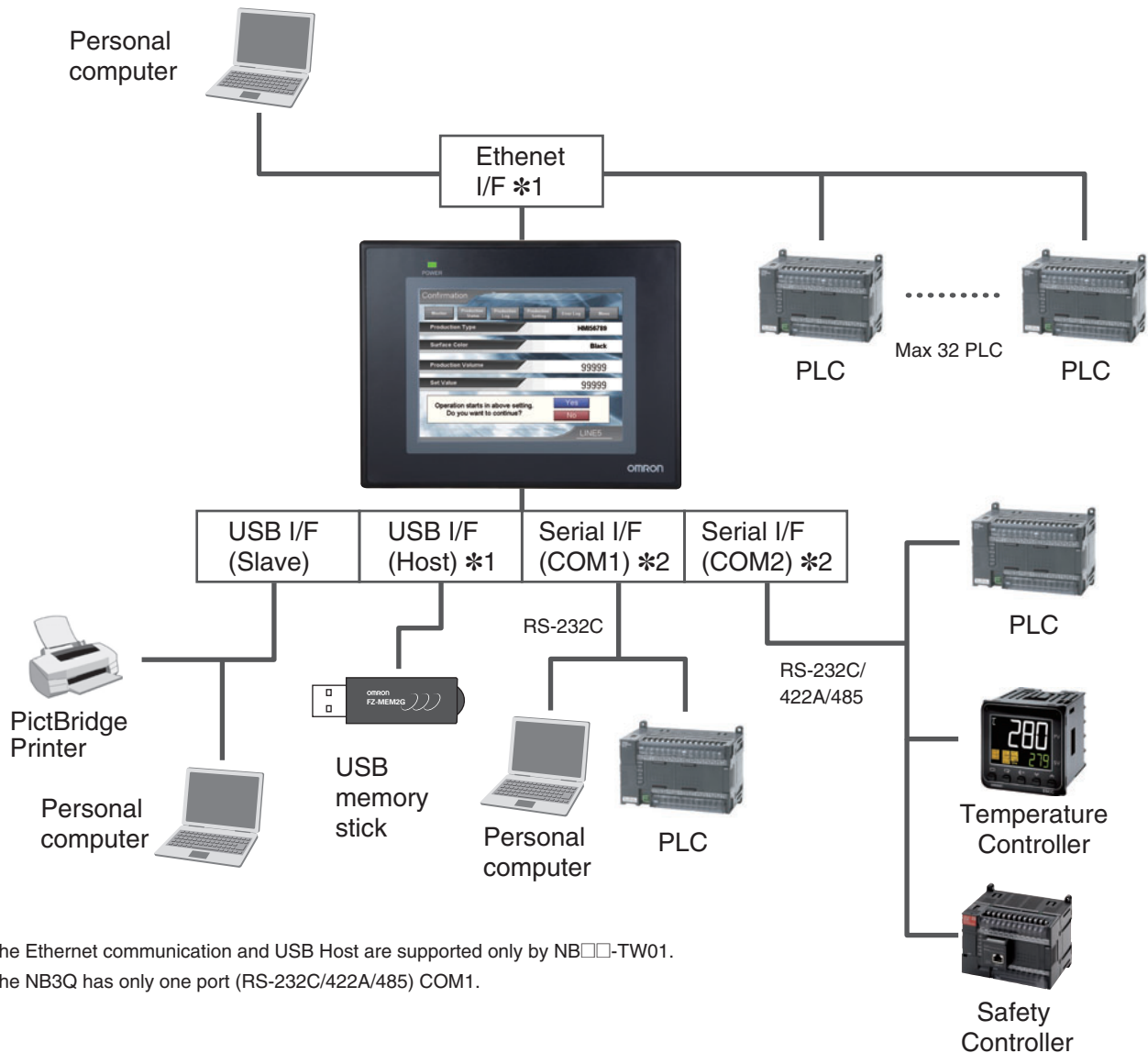
# Programmable Terminals NB series

## The feature-rich, economic programmable terminal

- More than 65,000 display colors TFT, color touch-screen for all models
- Available in sizes ranging from 3 to 10 inches
- Long-life LED backlight
- Serial, USB or Ethernet communication
- USB memory stick support



## System Configuration



Windows is registered trademarks of Microsoft Corporation in the USA and other countries.

Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.

Safari is trademark of Apple Inc., registered in the U.S. and other countries.

Other company names and product names in this document are the trademarks or registered trademarks of their respective companies.

The product photographs and figures that are used in this catalog may vary somewhat from the actual products.



## Ordering Information

### Programmable Terminals

| Product name | Specifications  | Model       |
|--------------|---|-------------|
| NB3Q         | 3.5 inch, TFT LCD, Color, 320 × 240 dots                      | NB3Q-TW00B  |
|              | 3.5 inch, TFT LCD, Color, 320 × 240 dots, USB Host, Ethernet  | NB3Q-TW01B  |
| NB5Q         | 5.6 inch, TFT LCD, Color, 320 × 234 dots                      | NB5Q-TW00B  |
|              | 5.6 inch, TFT LCD, Color, 320 × 234 dots, USB Host, Ethernet  | NB5Q-TW01B  |
| NB7W         | 7 inch, TFT LCD, Color, 800 × 480 dots                        | NB7W-TW00B  |
|              | 7 inch, TFT LCD, Color, 800 × 480 dots, USB Host, Ethernet    | NB7W-TW01B  |
| NB10W        | 10.1 inch, TFT LCD, Color, 800 × 480 dots, USB Host, Ethernet | NB10W-TW01B |

### Options

| Product name               | Specifications  | Model         |
|----------------------------|---|---------------|
| Software                   | Supported Operating Systems:<br>Windows 8, Windows 7, Windows Vista®, Windows XP (SP3 or higher).<br><b>Note:</b> Except for Windows XP 64-bit version.<br>Download from Omron's regional websites. | NB-Designer * |
| NB-to-PLC Connecting cable | For NB to PLC via RS-232C (CP/CJ/CS), 2m  | XW2Z-200T     |
|                            | For NB to PLC via RS-232C (CP/CJ/CS), 5m  | XW2Z-500T     |
|                            | For NB to PLC via RS-422A/485, 2m   | NB-RSEXT-2M   |
| Display protective sheets  | For the NB3Q contains 5 sheets  | NB3Q-KBA04    |
|                            | For the NB5Q contains 5 sheets  | NB5Q-KBA04    |
|                            | For the NB7W contains 5 sheets  | NB7W-KBA04    |
|                            | For the NB10W contains 5 sheets   | NB10W-KBA04   |
| Attachment                 | Mounting bracket for NT31/NT31C series to NB5Q series   | NB5Q-ATT01    |

**Note:** Use a standard USB cable (Type A male to Type B male) or standard Ethernet cable (10 BASE-T/100 BASE-TX twisted-pair cable) to connect the NB series to software (personal computer).

Use a standard Ethernet cable (10 BASE-T/100 BASE-TX twisted-pair cable) to connect the NB series to a PLC. For detail, refer to the NB Series Setup Manual (Cat. No. V107).

\* The NB5Q-TW01B and NB7W-TW01B are supported by NB-Designer version 1.10 or higher.

\* The NB3Q-TW01B and NB10W-TW01B are supported by NB-Designer version 1.20 or higher.

### System Configuration

| Items                 | Minimum Configurations   |
|-----------------------|--|
| Operating System (OS) | Microsoft Windows XP (SP3 or higher)<br>Microsoft Windows Vista (32-bit or 64-bit edition)<br>Microsoft Windows 7 (32-bit or 64-bit edition)<br>Microsoft Windows 8 (32-bit or 64-bit edition) |
| CPU                   | Windows computers with CPU recommended for OS  |
| Memory                | 512 MB or more   |
| Hard Disk             | 2.5 GB or more, with the disk space more than 800 MB at least  |
| Display               | Supports the display with resolution of 800x600 and 16-bit high color (1024x768 and 32-bit true color are recommended.)  |
| Communication ports   | RS-232C Port, USB Port, Ethernet Port  |

### Recommended USB Memory

| Product name     | Specifications | Model    |
|------------------|----------------|----------|
| USB memory stick | Capacity: 2 GB | FZ-MEM2G |
|                  | Capacity: 8 GB | FZ-MEM8G |

# NB Series

## Specifications

### HMI

| Specifications               | NB3Q   |            | NB5Q           |            | NB7W           |            | NB10W                |
|------------------------------|--|------------|----------------|------------|----------------|------------|----------------------|
|                              | TW00B  | TW01B      | TW00B          | TW01B      | TW00B          | TW01B      | TW01B                |
| Display type                 | 3.5" TFT LCD   |            | 5.6" TFT LCD   |            | 7" TFT LCD     |            | 10.1" TFT LCD        |
| Display resolution (H x V)   | 320 × 240  |            | 320 × 234      |            | 800 × 480      |            | 800 × 480            |
| Number of colors             | 65,536   |            |                |            |                |            |                      |
| Backlight                    | LED  |            |                |            |                |            |                      |
| Backlight lifetime           | 50,000 hours of operating time at the normal temperature (25 °C)*                    |            |                |            |                |            |                      |
| Touch panel                  | Analog resistance membrane, resolution 1024 × 1024, life: 1 million touch operations |            |                |            |                |            |                      |
| Dimensions in mm (H × W × D) | 103.8 × 129.8 × 52.8   |            | 142 × 184 × 46 |            | 148 × 202 × 46 |            | 210.8 × 268.8 × 54.0 |
| Weight                       | 300 g max.   | 305 g max. | 620 g max.     | 627 g max. | 710 g max.     | 715 g max. | 1525 g max.          |

\* This is the estimated time when the luminous intensity is decreased by 50% per LED at room temperature and humidity. It is a typical value.

### Functionality

| Specifications     | NB3Q   |               | NB5Q   |               | NB7W  |               | NB10W         |
|--------------------|--|---------------|--|---------------|-------|---------------|---------------|
|                    | TW00B  | TW01B         | TW00B  | TW01B         | TW00B | TW01B         | TW01B         |
| Internal memory    | 128MB (including system area)  |               |  |               |       |               |               |
| Memory interface   | ---  | USB Memory    | ---  | USB Memory    | ---   | USB Memory    | USB Memory    |
| Serial (COM1)      | RS-232C/422A/485 (not isolated),<br>Transmission distance: 15m Max. (RS-232C),<br>500m Max. (RS-422A/485),<br>Connector: D-Sub 9-pin |               | RS-232C,<br>Transmission distance: 15 m Max.,<br>Connector: D-Sub 9-pin  |               |       |               |               |
| Serial (COM2)      | ---  |               | RS-232C/422A/485 (not isolated),<br>Transmission distance: 15m Max. (RS-232C),<br>500m Max. (RS-422A/485),<br>Connector: D-Sub 9-pin |               |       |               |               |
| USB Host           | Equivalent to USB 2.0 full speed, type A, Output power 5V, 150mA   |               |  |               |       |               |               |
| USB Slave          | Equivalent to USB 2.0 full speed, type B, Transmission distance: 5m  |               |  |               |       |               |               |
| Printer connection | PictBridge support   |               |  |               |       |               |               |
| Ethernet           | ---  | 10/100 base-T | ---  | 10/100 base-T | ---   | 10/100 base-T | 10/100 base-T |

### General

| Specifications                | NB3Q  |       | NB5Q  |       | NB7W  |       | NB10W |
|-------------------------------|---|-------|-------|-------|-------|-------|-------|
|                               | TW00B   | TW01B | TW00B | TW01B | TW00B | TW01B | TW01B |
| Line voltage                  | 20.4 to 27.6 VDC (24 VDC -15 to 15%)  |       |       |       |       |       |       |
| Power consumption             | 5 W   | 9 W   | 6 W   | 10 W  | 7 W   | 11 W  | 14 W  |
| Battery lifetime              | 5 years (at 25 °C) *  |       |       |       |       |       |       |
| Enclosure rating (front side) | Front operation part: IP65 (Dust proof and drip proof only from the front of the panel) |       |       |       |       |       |       |
| Obtained standards            | EC Directives, KC, cUL508   |       |       |       |       |       |       |
| Operating environment         | No corrosive gases.   |       |       |       |       |       |       |
| Noise immunity                | Compliant with IEC61000-4-4, 2KV (Power cable)  |       |       |       |       |       |       |
| Ambient operating temperature | 0 to 50 °C  |       |       |       |       |       |       |
| Ambient operating humidity    | 10% to 90% RH (without condensation)  |       |       |       |       |       |       |

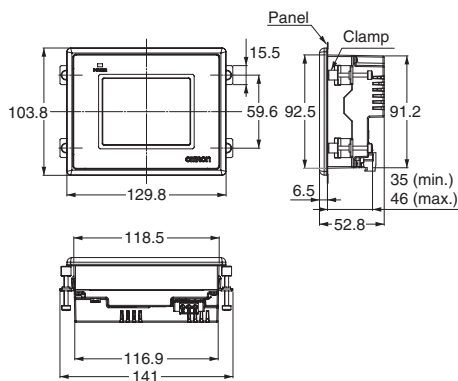
Note: Flash memory can be written to up 100,000 times.

\* OMRON accepts NB unit including the display device for repair and analysis within five years of the manufacture date.

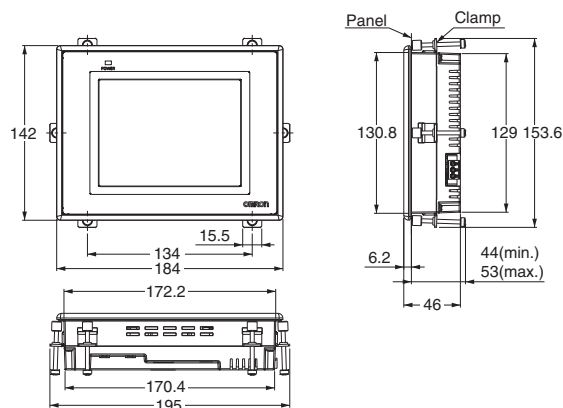
## Dimensions

(Units: mm)

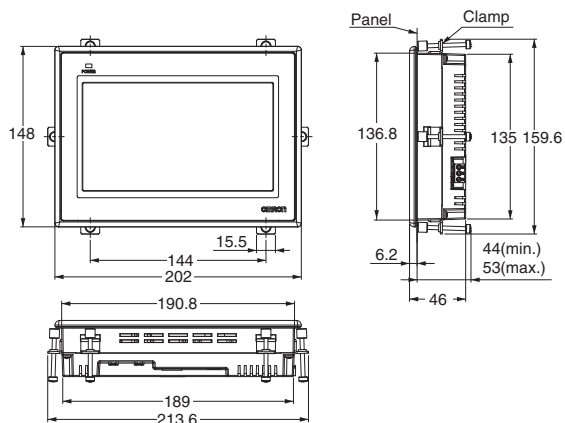
### NB3Q



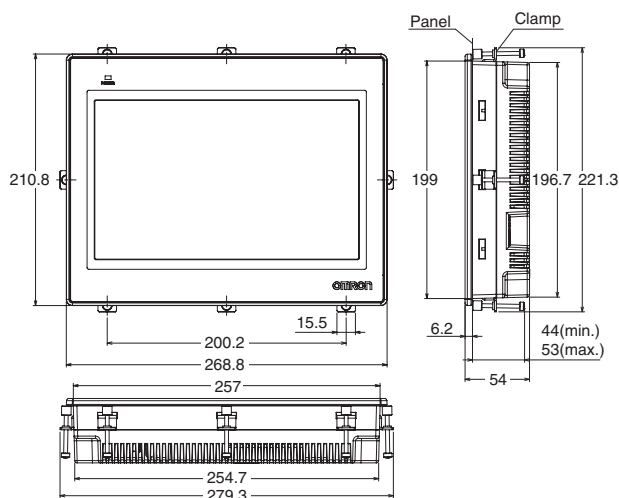
### NB5Q



### NB7W



### NB10W



| Model | Panel cutout (H × V mm)           |
|-------|-----------------------------------|
| NB3Q  | 119.0 (+0.5/-0) × 93.0 (+0.5/-0)  |
| NB5Q  | 172.4 (+0.5/-0) × 131.0 (+0.5/-0) |
| NB7W  | 191.0 (+0.5/-0) × 137.0 (+0.5/-0) |
| NB10W | 258.0 (+0.5/-0) × 200.0 (+0.5/-0) |

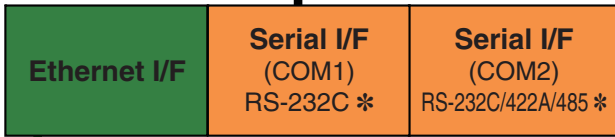
Applicable panel thickness: 1.6 to 4.8 mm

## Related Manuals

| Cat. No | Model                   | Name                                   |
|---------|-------------------------|--|
| V106    | NB-Designer             | NB Series NB-Designer Operation Manual |
| V107    | NB3Q, NB5Q, NB7W, NB10W | NB Series Setup Manual                 |
| V108    | NB3Q, NB5Q, NB7W, NB10W | NB Series Host Connection Manual       |
| V109    | NB3Q, NB5Q, NB7W, NB10W | NB Series Startup Guide                |

# NB Series

NB3Q/NB5Q/NB7W/NB10W



\* The NB3Q has one serial port COM1 (RS-232C/422A/485) only.

## [Ethernet Communications]

### OMRON

- CP Series
- CJ/CJ2/CS/NJ Series

### Mitsubishi

- L Series (CPU Ethernet port)
- QnU Series (CPU Ethernet port)
- QnUDV Series (CPU Ethernet port)
- Q Series/L Series (Ethernet Communication Unit)
- FX Series (Communication expansion board)

### KEYENCE

- KV Series (KV-5000)

### Siemens

- S7-200 (Smart) Series
- S7-300 Series
- S7-1200 Series

### Allen-Bradley (Rockwell)

- MicroLogix Series

### Modbus

- Modbus TCP Slave

## [Serial Communications]

### OMRON

- CP Series
- CJ/CJ2/CS Series
- C Series
- G9SP Series

### Mitsubishi

- FX Series (CPU)
- FX Series (Communication expansion board)
- Q Series (CPU)
- QnU Series (CPU)
- Q Series/L Series (Serial Communication Unit)

### KEYENCE

- KV Series (KV-3000)

### Panasonic

- FP Series

### Siemens

- S7-200 Series
- S7-300/400 Series

### Allen-Bradley (Rockwell)

- SLC500/MicroLogix Series
- CompactLogix/ControlLogix Series

### Schneider

- TSX-Micro/Premium/Nano Series
- Twido Series

### GE Fanuc

- Series 90-30
- VersaMax/VersaMax Micro & Nano Series

### Delta

- DVP Series

### LG (LS)

- Master-K Series
- XGT Series

### Modbus

- Modbus ASCII
- Modbus RTU
- Modbus RTU Slave
- Modbus RTU Extend
- OMRON: Temperature Controller E5CC/E5EC, Inverter 3G3MX2-V1 or later

| Company  | Series                                    | Model  |   |
|--|---|--|---|
|  |   | Ethernet communication   | Serial communication  |
| OMRON  | CP Series                                 | CP1L-EM/-EL (Built-in Ethernet port)<br>CP1H, CP1L, CP1E<br>(CP1W-CIF41 Option Board required)           | CP1H, CP1L, CP1E  |
|  | CJ/CJ2/CS/NJ Series                       | CJ1W-ETN21/EIP21<br>CS1W-ETN21/EIP21<br>CJ2H-□□□-EIP, CJ2M-CPU3□<br>NJ□01                                | CJ1□, CJ2□, CS1□  |
|  | C Series                                  | ---  | C200HX/HG/HE(-Z)<br>CQM1H<br>CPM1□/2□   |
|  | G9SP Series                               | ---  | G9SP-N□□□ (CP1W-CIF01<br>Option Board required)   |
| * For connectable OMRON PLC models, refer to the <i>Appendices</i> in the <i>NB Series NB-Designer Operation Manual</i> (Cat. No. V106). |   |  |   |
| Mitsubishi   | FX Series (Port built into CPU)           | ---  | FX1N/1NC/2N/2NC/3G/3GC<br>FX1S<br>FX3U/3UC/3S   |
|  | FX Series (Communication expansion board) | FX3U-ENET-L  | FX-485ADP/485BD/232BD   |
|  | Q Series (Port built into CPU)            | ---  | Q00, Q00J, Q01, Q02, Q02H,<br>Q06H, Q12H, Q25H  |
|  | QnU Series (Port built into CPU)          | Q03UDE, Q04UDEH, Q06UDEH,<br>Q10UDEH, Q13UDEH,<br>Q20UDEH, Q26UDEH,<br>Q50UDEH, Q100UDEH                 | Q00UCPU, Q01UCPU,<br>Q02UCPU, Q03UD, Q04UDH,<br>Q06UDH  |
|  | QnUDV Series (Port built into CPU)        | Q03UDV, Q04UDV, Q06UDV,<br>Q13UDV, Q26UDV  | ---   |
|  | Q Series (Communication Unit)             | QJ71E71-100  | QJ71C24/-R2<br>QJ71C24N/-R2/-R4   |
|  | L Series (Port built into CPU)            | L02CPU/-P, L06CPU/-P,<br>L26CPU/-P/-BT/-PBT  | ---   |
|  | L Series (Communication Unit)             | LJ71E71-100  | LJ71C24/-R2   |
| KEYENCE  | KV Series (Port built into CPU)           | KV-5000  | KV-3000   |
| Panasonic  | FP Series                                 | ---  | FP, FP0, FP1, FP2, FP3, FP2SH,<br>FP10S/SH, FP-M, FP-e, FP-X  |
| Siemens  | S7-200 Series                             | CP243-1, CP243-1 IT,<br>SMART CPU CR40,<br>SMART CPU SR20  | CPU212/214/215/216<br>CPU221/222/224/226  |
|  | S7-300/400 Series                         | CP343-1, CP343-1 IT,<br>CPU315-2 PN/DP,<br>CPU317-2 PN/DP,<br>CPU319-3 PN/DP                             | CPU312/313/314/315/316/318<br>CPU412/413/414/416/417  |
|  | S7-1200 Series                            | CPU1211C, CPU1214C   | ---   |
| Allen-Bradley (Rockwell)   | SLC500/MicroLogix Series                  | MicroLogix 1100/1400 (Built-in<br>Ethernet port), MicroLogix 1000/1200/<br>1400/1500 (1761-NET-ENI Unit) | MicroLogix1000/1200/1400/1500<br>SLC 5  |
|  | CompactLogix/ControlLogix Series          | ---  | 1756-L61/63<br>1769-L20/30/31/32E/35E   |
| Schneider  | TSX-Micro/Premium/Nano Series             | ---  | TSX 37/P57/07   |
|  | Twido Series                              | ---  | TWD LCAA/LMDA   |
| GE Fanuc   | Series 90-30                              | ---  | IC693CPU/CSE  |
|  | VersaMax/<br>VersaMax Micro & Nano Series | ---  | CPU001/002/005/E05<br>IC200UAL/UDD/UDR/UAA/UAR  |
| Delta  | DVP Series                                | ---  | DVP-□□ES/EX/SS<br>DVP-□□SA/SX/SC<br>DVP-□□EH/EH2/SV   |
| LG (LS)  | Master-K Series                           | ---  | K120s, K200s  |
|  | XGT Series                                | ---  | XGB   |
| Modbus   | Modbus                                    | Modbus TCP Slave   | Modbus ASCII<br>Modbus RTU<br>Modbus RTU Slave<br>Modbus RTU Extend<br>--- OMRON:Temperature<br>Controller etc. |

**Note:** OMRON does not guarantee the normal operation of all PLCs in each series. The NB series can be connected to temperature controllers, inverters, and other devices. For details, refer to the *NB Series Host Connection Manual* (Cat.No V108).

# Terms and Conditions Agreement

## Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

## Warranties.

(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.

(b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See <http://www.omron.com/global/> or contact your Omron representative for published information.

## Limitation on Liability; Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

## Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

## Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

## Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

## Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

## Errors and Omissions.

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

**Note:** Do not use this document to operate the Unit.

**OMRON Corporation Industrial Automation Company**

Tokyo, JAPAN

Contact: [www.ia.omron.com](http://www.ia.omron.com)

**Regional Headquarters**

**OMRON EUROPE B.V.**

Wegalaan 67-69, 2132 JD Hoofddorp  
The Netherlands  
Tel: (31)2356-81-300/Fax: (31)2356-81-388

**OMRON ELECTRONICS LLC**

2895 Greenspoint Parkway, Suite 200  
Hoffman Estates, IL 60169 U.S.A  
Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

**OMRON ASIA PACIFIC PTE. LTD.**

No. 438A Alexandra Road # 05-05/08 (Lobby 2),  
Alexandra Technopark,  
Singapore 119967  
Tel: (65) 6835-3011/Fax: (65) 6835-2711

**OMRON (CHINA) CO., LTD.**

Room 2211, Bank of China Tower,  
200 Yin Cheng Zhong Road,  
PuDong New Area, Shanghai, 200120, China  
Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

**Authorized Distributor:**

© OMRON Corporation 2011-2014 All Rights Reserved.  
In the interest of product improvement,  
specifications are subject to change without notice.

**CSM\_7\_1\_1014**  
**Cat. No. V412-E1-06**

1014 (1211)



## Стандарт Электрон Связь

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

### Наши контакты:

**Телефон:** +7 812 627 14 35

**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

**Адрес:** 198099, Санкт-Петербург,  
Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331