

The complete Machine Management Tool

# NS HMI TERMINALS

puts you right in the heart of your production!

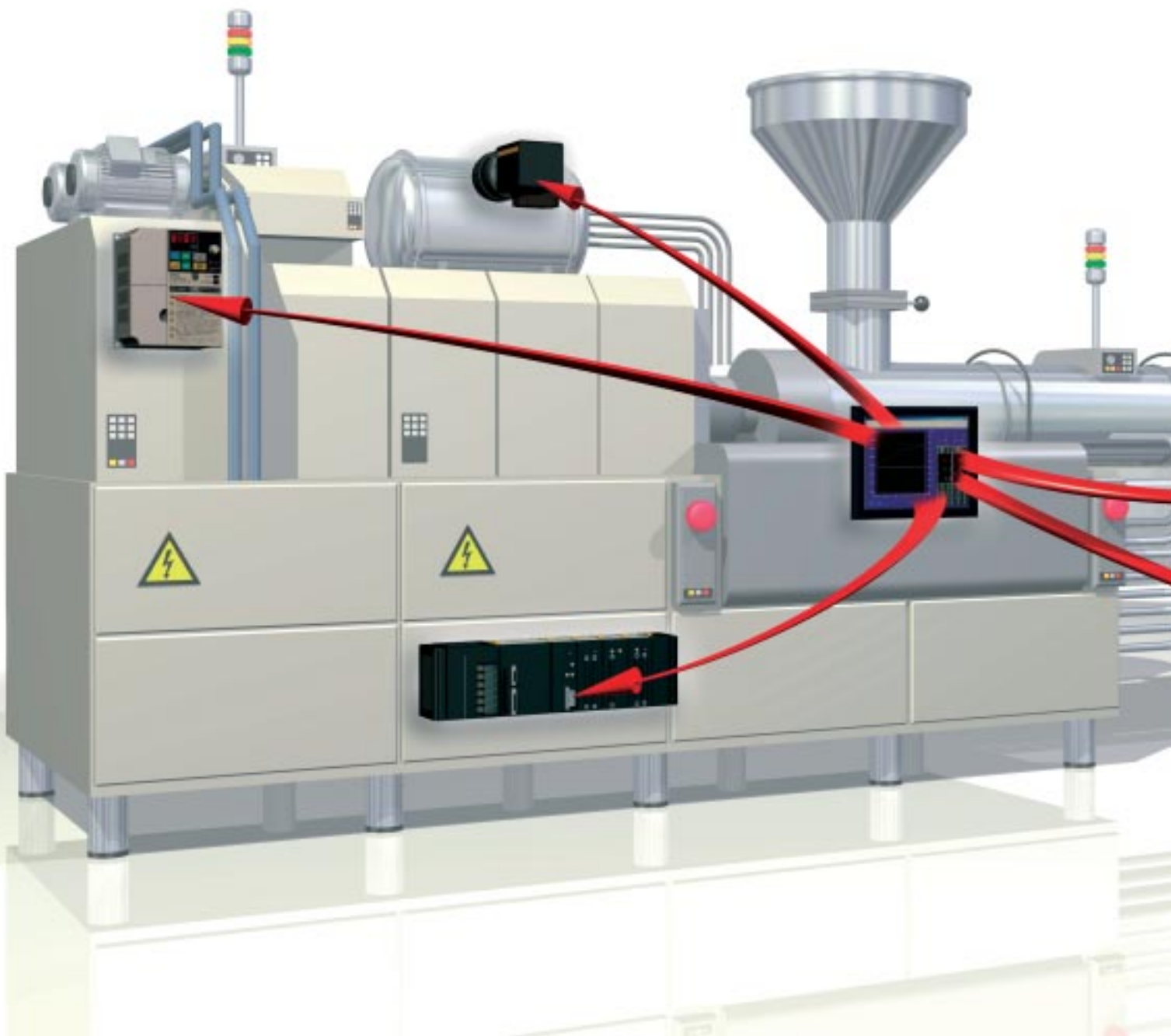


Advanced Industrial Automation

**OMRON**

# NS at the heart of your machine

- NS becomes the heart of your machine
- Monitoring, informing and fault-finding
- Communicating directly with control components





NS5

NS8

NS10

NS12

### Omron's HMI - the difference is clear!

For over a decade Omron has been a global supplier of HMI solutions and high-reliability industrial touch-screen technology. The company has supplied more than 500,000 pieces of HMI through more than 200 Omron Sales & Support offices world-wide, each offering after-sales support, service and training in local languages.

We also understand the changing needs of our customers. As control systems become more complex, the HMI is being used not only as an operator display and data-setting terminal, but also as a maintenance tool for the complete control system. Many HMI applications now contain hundreds of screens

containing maintenance information for the complete control system. Omron's easy software and hardware integration within the control system can radically reduce the programming time needed as well as increase the functionality of the maintenance. This means dramatic reductions in total cost of ownership!

### Quality, reliability and assurance

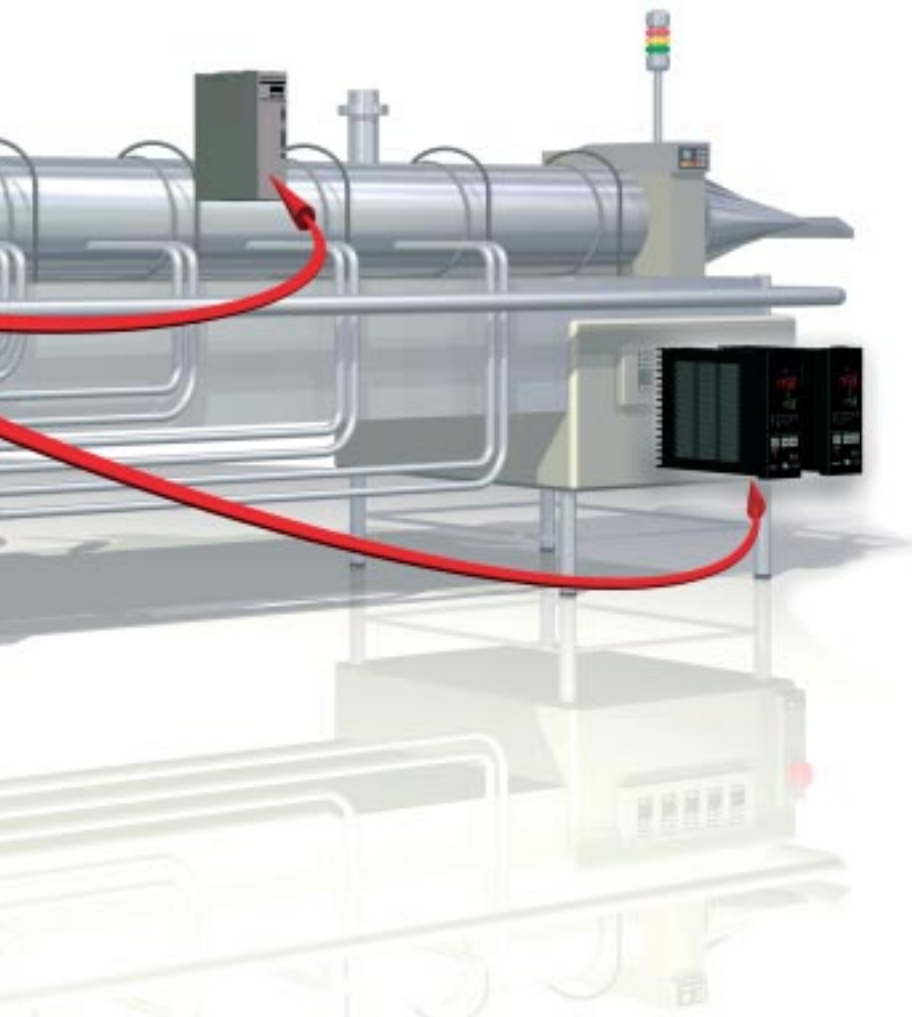
As this increased HMI functionality has become necessary to operate the machine to its maximum efficiency, customers are demanding product quality and reliability.

Omron's products are renowned for having these

characteristics. That's why Omron uses an operating system that guarantees 24-hour operation (OS9) – something that other operating systems cannot do. In addition, Omron offers the longest backlight life in the industry for its display products to ensure that the Machine Maintenance Tool doesn't need to be maintained or repaired every year.

### 3-year warranty

To support our claim of having the best, most reliable products in the market, we have introduced a 3-year repair warranty on all NS products.





### **Everyone claims easy programming - prove it!**

There are 4 simple stages to applying a SMART Active Part that can save you hours of work.

1. Create a new screen
2. Select the SMART Active Parts library from the library menu of NS Designer
3. Choose from the extensive library of pre-tested SMART Active Parts and click on the 'USE' button
4. Finally, 'right mouse click' on the component on the screen and set the address of the component you want to control or monitor

# Program-less SMART Functionality

### **Increase functionality with pre-tested SMART Active Parts**

SMART Active Parts are pre-tested components that communicate directly with control-system components, for example temperature controllers, inverters and motion controllers. They all feature commonly required customer functionality as standard, and they bring powerful functionality to your machine without expert communications or programming knowledge. This saves you time and money, and enables you to add complex features that were previously not available.

### **Save time with pre-tested SMART Active Parts**

The technology behind SMART Active Parts is patented by Omron, and is designed to make embedded, network independent, pre-tested communications components that can be dragged-and-dropped into your application. All you have to do is to set the address you want to talk to! SMART Active Parts components are supplied, created and tested to give you maximum functionality.



If you think this sounds too easy, then please visit the Omron website ([www.europe.omron.com](http://www.europe.omron.com)). Here you will see a demonstration showing how easy the SMART Active Parts are to use\*. Why not download your own library of SMART Active Parts? While you create, let us automate!

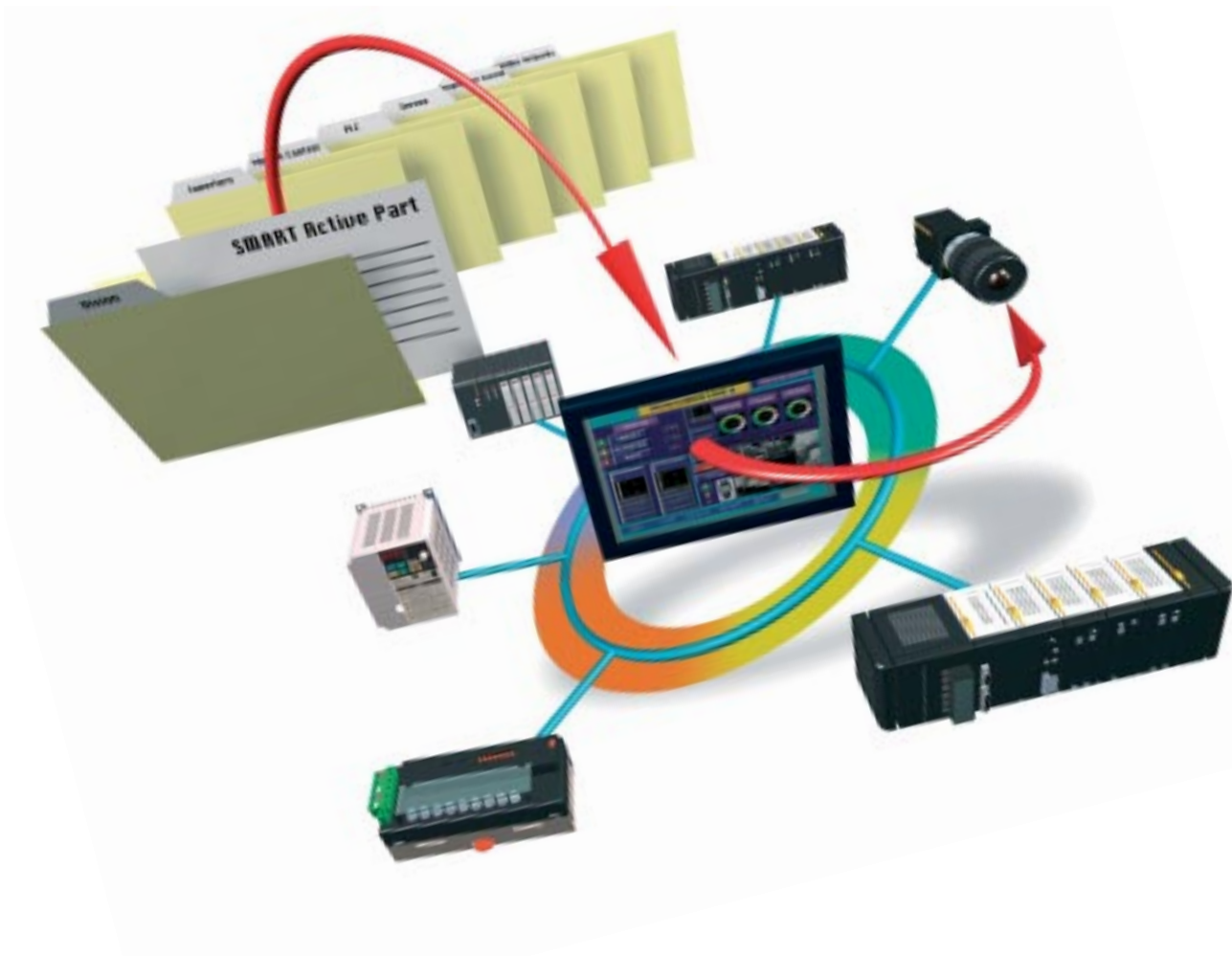


Once you have downloaded the SMART Active Parts library you'll be able to create – in minutes - the kind of functionality for your machine that previously would have taken skilled programmers hours or even days to create.

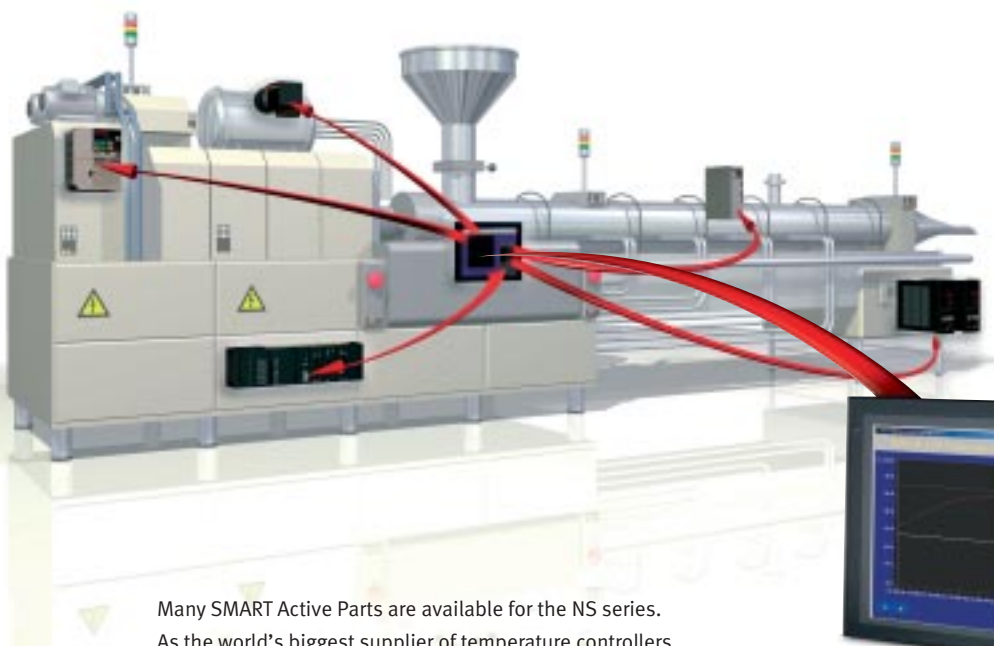
#### The functionality you need for the components you use

The number of products available covers many parts of the Omron product range, but typically you will need a screen to monitor the status of network nodes, and a function to diagnose faults on a DeviceNet to the building sequence for setting up and configuring motion control products.

\* Available from summer 2004.



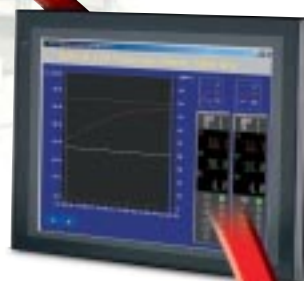
# A SMART Active Part at work!



Many SMART Active Parts are available for the NS series. As the world's biggest supplier of temperature controllers, it goes without saying that Omron can provide such modules for its temperature controllers. The NS terminals can communicate via an industrial network or via a direct serial link with these devices.

## SMART advantages to the user

Omron's temperature controllers communicate directly with the NS. On the NS, the faceplates for the temperature controllers are presented on one HMI screen. All relevant process and maintenance information is presented in a standardised way, without the need for any external tool. Such a comprehensive overview makes it very easy to compare different process values. And because Omron's SMART Active Parts contain comprehensive maintenance information, trouble-shooting by the operator has been made easier or can even be avoided!

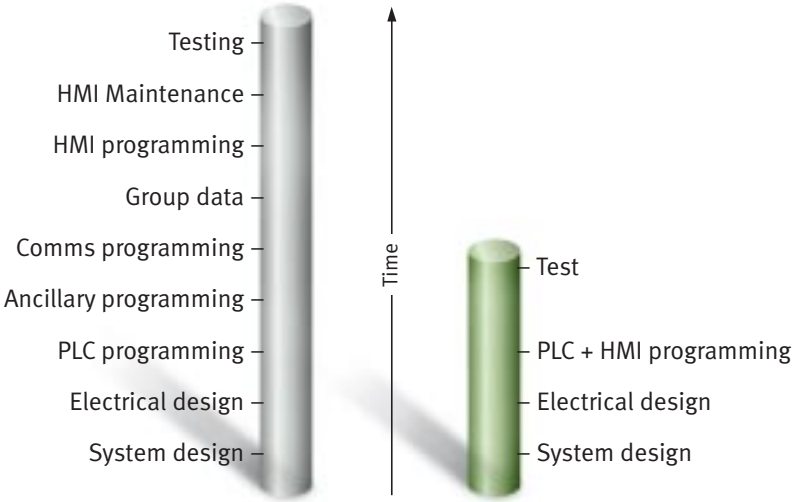




# Reducing development times for your machine

With SMART Active Parts, you:

- **Drastically reduce programming and development time**
- **Don't need to program communications**
- **Reduce testing**



### How to increase machine performance while decreasing development time

Omron has recognised that many OEMs and end-users want to add advanced functionality to give their machines a competitive advantage. They also want unique features for commissioning, faultfinding or maintaining their machines, but don't have the time or know-how to develop the necessary HMI and control code to offer this enhanced functionality.





To give these customers the competitive edge, Omron has added powerful hardware and software integration features into the NS-series operation, some with patented technology.

### Can Omron decrease my machine development costs in other ways?

Products available from this library include a trouble-shooter function (patent applied for) where alarm codes are linked to a user-definable trouble-shooting guide. This allows you to incorporate your skill and know-how on your machine, and make this feature available to all or selected operators.

It is also possible to program the PLC, to monitor the existing control program or to reconfigure settings from the HMI without using any PCs or programming software. That's why we call it Machine Management. And that's why it's more than just an HMI!

## Overview of products

Series	NS12	NS10	NS8	NS5
Appearance				
Dimensions (W x H x D)	315 x 241 x 48.5mm	315 x 241 x 48.5mm	232 x 177 x 48.5mm	195 x 142 x 54mm
Effective display area	12.1 inch	10.4 inch	8 inch	5.7 inch
Display device	TFT	TFT	TFT	STN
Number of dots	800 x 600	640 x 480	640 x 480	320 x 240
Display colour	256 colours Image data: 32,000 colours	256 colours Image data: 32,000 colours	256 colours Image data: 32,000 colours	256 colours Image data: 4,096 colours
Screen data capacity	20 Mbytes	20 Mbytes	6 Mbytes	6 Mbytes
Memory card	Yes	Yes	Yes	Yes
Ladder monitor function	Yes	Yes	Yes	Pro-con function
Video input unit support	Yes	Yes	Yes	No
Controller link interface unit support	Yes	Yes	No	No
Multi-vendor support	Supported for most third-party PLCs. Please contact your local Omron distributor for more information.			

**OMRON EUROPE B.V.** Wegalaan 67-69, NL-2132 JD, Hoofddorp, The Netherlands. Tel: +31 (0) 23 568 13 00 Fax: +31 (0) 23 568 13 88 [www.europe.omron.com](http://www.europe.omron.com)

### Austria

Tel: +43 (0) 1 80 19 00  
[www.omron.at](http://www.omron.at)

### Belgium

Tel: +32 (0) 2 466 24 80  
[www.omron.be](http://www.omron.be)

### Czech Republic

Tel: +420 234 602 602  
[www.omron.cz](http://www.omron.cz)

### Denmark

Tel: +45 43 44 00 11  
[www.omron.dk](http://www.omron.dk)

### Finland

Tel: +358 (0) 9 549 58 00  
[www.omron.fi](http://www.omron.fi)

### France

Tel: +33 (0) 1 49 74 70 00  
[www.omron.fr](http://www.omron.fr)

### Germany

Tel: +49 (0) 2173 680 00  
[www.omron.de](http://www.omron.de)

### Hungary

Tel: +36 (0) 1 399 30 50  
[www.omron.hu](http://www.omron.hu)

### Italy

Tel: +39 02 32 681  
[www.omron.it](http://www.omron.it)

### Netherlands

Tel: +31 (0) 23 568 11 00  
[www.omron.nl](http://www.omron.nl)

### Norway

Tel: +47 (0) 22 65 75 00  
[www.omron.no](http://www.omron.no)

### Poland

Tel: +48 (0) 22 645 78 60  
[www.omron.com.pl](http://www.omron.com.pl)

### Portugal

Tel: +351 21 942 94 00  
[www.omron.pt](http://www.omron.pt)

### Russia

Tel: +7 095 745 26 64  
[www.russia.omron.com](http://www.russia.omron.com)

### Spain

Tel: +34 913 777 900  
[www.omron.es](http://www.omron.es)

### Sweden

Tel: +46 (0) 8 632 35 00  
[www.omron.se](http://www.omron.se)

### Switzerland

Tel: +41 (0) 41 748 13 13  
[www.omron.ch](http://www.omron.ch)

### Turkey

Tel: +90 (0) 216 474 00 40  
[www.omron.com.tr](http://www.omron.com.tr)

### United Kingdom

Tel: +44 (0) 870 752 08 61  
[www.omron.co.uk](http://www.omron.co.uk)

For the Middle East, Africa and other countries in Eastern Europe, Tel: +31 (0) 23 568 13 00 [www.europe.omron.com](http://www.europe.omron.com)

### Authorised Distributor:

#### Automation and Drives

- Programmable logic controllers • Networking
- Human-machine interfaces • Inverter drives • Motion control

#### Industrial Components

- Electromechanical relays • Timers • Counters • Sockets
- Programmable relays • Low voltage switch gear • Power supplies
- Temperature & process controllers • Solid-state relays
- Panel indicators • Level controllers • Industrial switches • Pushbutton switches

#### Sensing and Safety

- Photoelectric sensors • Proximity sensors • Rotary encoders
- Vision systems • RFID systems • Safety switches
- Safety relays • Safety sensors

Although we strive for perfection, Omron Europe B.V. and/or its subsidiary and affiliated companies do not warrant or make any representations regarding the correctness or completeness of the information described in this document. We reserve the right to make any changes at any time without prior notice.

BRP\_AUT\_APP\_NS\_EVU\_INTOL\_0404

# OMRON