## OMRON Brings a New Level of Accuracy to Embedded Face Recognition With OKAO™ Vision

Market-proven image-sensing libraries now available for popular embedded platforms

**Hoofddorp, Netherlands, Friday, 22 January 2021** – OMRON Electronic Components Europe has announced a new OKAO<sup>™</sup> Vision face recognition package, offering highly accurate deep-learning face recognition. Developers are able to deploy OKAO Vision flexibly on their own choice of embedded hardware platform.

The new deep learning libraries of OKAO Vision Face Recognition V9.0 address applications that require a high degree of confidence under various conditions, including poor lighting and when the face is at various angles relative to the detector. These include security and access control, time and attendance monitoring, login/wakeup systems, and camera autofocus/auto-exposure control. An important potential application is monitoring the attendance at face-to-face and online meetings, facilitating contact tracing and verifying actual attendance. Automotive applications include driver recognition to manage features such as seat adjustment.

The new face-recognition libraries achieve excellent evaluation results with various skin tones and face sizes, with extremely low error rate down to image size as small as 40 pixels. Benchmark testing with Intel and Arm processors has demonstrated that OKAO Vision Face Recognition V9.0 maintains exceptionally fast recognition times despite the enhanced accuracy, ensuring that users in access control applications, for example, will be barely conscious of the need to wait for validation of their identity.

The complete OKAO Vision Face Recognition V9.0 package contains modular libraries that provide a variety of sensing capabilities, including expression estimation, age and gender estimation, and photographic image beautification, including red-eye reduction, facial shaping, eye enlargement, and blemish removal. Users can combine various modules' functionalities to add value to their applications.

Gabriele Fulco, European Product Marketing Manager for Sensors at OMRON Electronic Components Europe added, "In addition to boosting recognition accuracy with deep learning, we are making OKAO Vision available as a set of software libraries ready to integrate with Linux, Windows®, and iOS operating systems. This lets users leverage the extensive functionalities of OMRON's machine-vision package in their own embedded systems running on custom hardware. Off-the-shelf libraries are already available for various platforms."

OMRON'S OKAO Vision is market proven, with over 1.5 billion licenses shipped to date. The legacy OKAO Vision Face Recognition V7.0 and V8.0 packages, which leverage traditional face-recognition techniques and are embedded in the OMRON HVC camera module, remain available for applications that need even faster response times.

## **About Omron**

Omron Electronic Components Europe is a leader in electromechanical PCB relays, as well as a leading supplier of components such as micro switches, MOSFET relays, DIP switches, photomicrosensors and connectors. Omron has a strong portfolio of innovative technologies including MEMS based pressure, flow and thermal measurement sensors, human face and gesture recognition modules, vibration and tilt sensors.

Omron Electronic Components Europe strongly supports its customers in Western and Eastern Europe, Russia and the CIS through 8 regional offices, a network of local offices and partnerships with specialist, local, regional and global distributors.

Omron Electronic Components Europe is a subsidiary of the Omron Corporation, recognised worldwide as a leader of high quality, high technology electrical and electronic control equipment and component products.

Please send reader enquiries to:
Marketing Support Group
Omron Electronic Components Europe B.V.
Wegalaan 57, 2132 JD, Hoofddorp, The Netherlands
Tel: +31 235 681 296, Fax: +31 235 681 222

Email: info-components-eu@omron.com
Web: http://components.omron.eu