

Orchestrating a brighter world

**NEC**

# NeoFace<sup>®</sup> Watch

The most accurate and fastest face recognition platform available



**AIRPORTS & BORDER CONTROL**  
*High Performance Face Recognition*

# Why NeoFace Watch?

## High Performance

In regular tests by the United States' NIST laboratories, NeoFace Watch has an error rate of less than half of the nearest competitor and handles 3.02 million searches per second, significantly faster than the nearest competitor.

## Easy to Implement

NeoFace Watch uses common off-the-shelf hardware, including IP cameras, networks, servers and, where possible, existing infrastructure. Smart device applications are also available on iOS and Android platforms.

## Easy to Integrate

Using robust RESTful APIs, solution providers can easily integrate NeoFace Watch with other systems that manage videos, customer relationships and security, offering an added dimension in facial recognition competency.

## Flexible

Easy-to-use system configuration tools and monitoring utilities enable customers to tailor NeoFace Watch to specific operational requirements and ensure continued optimal operation.

## Scalable

NeoFace Watch caters to a wide range of configurations to suit local deployment conditions and requirements, with a centralized or distributed architecture supporting multiple sites. It is designed to handle hundreds of millions of faces, thousands of cameras, and thousands of simultaneous user interface sessions.

From airports to stadiums, mass transit and on city streets, NEC's NeoFace Watch platform is ideally suited to preserve security anywhere people congregate – protecting assets, identifying threats and improving society.

# NeoFace Watch Features



NeoFace Watch can perform **REAL TIME MONITORING** against thousands of surveillance cameras for individuals that pose a security threat and trusted travellers, automating alerts to security staff and reducing friction in airport operations.



The NeoFace Watch forensic **FACE SEARCH** feature uncovers the identities of individuals seen in poor quality images and video surveillance, enabling security staff and enforcement agents to better respond and manage critical infrastructure from known and suspected threats.



NeoFace Watch **VIDEO ANALYSIS** processes large volumes of recorded video at better than real-time speeds, enabling post-event analysis of faces for access control, security reviews and response to known and suspected threats.



NeoFace Watch **FLOW ANALYSIS** anonymously monitors passengers and calculates their time-in-queue, providing actionable information about the efficiency of immigration reviews, security screening and airport operations in aggregate.



NeoFace Watch **FACE ARCHIVE** automatically captures facial images of passers-by without impeding flow, enabling authorities to collect anonymous yet searchable data in the event investigations involving access sensitive facilities or borders is warranted.



A rich **RESTful API** enables airports to build integrated solutions using the NeoFace Watch platform, providing highly accurate, scalable, and customized face recognition functions for security and traveller experience programs.

# A Face Recognition Platform for Airports and Border Control

NeoFace Watch is a high-performance face recognition platform for real-time monitoring of surveillance video and forensic searching of archived video and static images. NeoFace Watch helps secure transportation hubs, critical facilities and public spaces by checking individuals appearing in surveillance video against watchlists containing persons of concern and producing real-time alerts to security and enforcement staff.

NeoFace Watch's scalable architecture and enterprise class features provide opportunities to monitor security checkpoints, the ability to speed trusted traveller identification, and to recognize and investigate known and suspected threats.

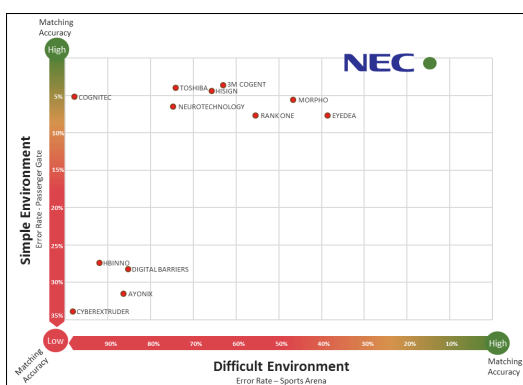


## Enhance Security and Operational Efficiency

- Monitor queue times and passenger journeys, assuring optimal service levels and customer experience.
- Speed identity authentication of low risk travellers.
- Monitor for persons of concern and automate alerts to security staff.
- Create searchable face archives for physical access control audits and arrivals investigation.
- Document security contacts for identity confirmation, law enforcement investigations and reporting.

## World's Most Accurate Face Recognition Solution

**NEC is 2.5 times more accurate than the number two ranked participant for challenging scenarios involving crowded places.**



As independently evaluated by NIST in its most recent Face In Video Evaluation (FIVE) of Non-Cooperative Subjects, NEC's NeoFace face recognition technology has demonstrated its ability to perform face recognition under the most demanding real-world circumstances at the highest level of accuracy.

In earlier published reports, MBE (2010, 2011), FRVT (2013), NEC was also evaluated as the leading technology for accuracy, speed, resilience to viewing angles and other environmental variables.

**NIST Face In Video Evaluation (FIVE) | March 2017**  
Graph produced from data published in NIST Interagency Report 8173. Results of the test are not intended to imply recommendation or endorsement of particular products by the U.S. government.



**As an Information and Communications Technology (ICT) leader with more than 117 years of expertise, NEC combines its advanced technologies, services and knowledge to help ensure the safety, security, efficiency and equality of society - enabling people to live brighter, more enriched lives.**

ABOUT NEC

## CORPORATION

NEC Corporation is a leader in the integration of IT and network technologies that benefit businesses and people around the world. By providing a combination of products and solutions that cross utilize the company's experience and global resources, NEC's advanced technologies meet the complex and ever-changing needs of its customers. NEC brings more than 100 years of expertise in technological innovation to empower people, businesses and society.

The NEC Group globally provides "Solutions for Society" that promote the safety, security, efficiency and equality of society. NEC's brand message of "Orchestrating a brighter world" represents the fusion of advanced information and communication technologies and know-how created in coordination with partners and customers all over the world in order to contribute to the betterment of society and realise a brighter and more prosperous future.

ABOUT NEC

## IN PUBLIC SAFETY

NEC has a proven track record in public safety and continually aims to bring its best-of-breed cutting-edge security technologies and total solutions to help public and private institutions safeguard lives and property in both the real and virtual worlds.

With a strong global footprint, NEC can leverage across regions to keep cities safer.

"Safer Cities" is an integral part of NEC's vision for Smart Cities, where people are able to live, work, and play in safety and comfort while also coexisting in harmony with the environment. NEC offers advanced technologies and solutions to make this a reality.

NEC has developed biometric technologies for more than 30 years and has solutions used by more than 1000 customers in over 50 countries worldwide. NEC's fingerprint and face recognition solutions are recognised in independent tests as the world's fastest and most accurate biometric technologies for identification.



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