

# SYSTIMAX®

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## SOLUTIONS

## SYSTIMAX® Structured Connectivity Solutions Connects Giant New Air Transport Hub

### South Korea's state-of-the-art Incheon International Airport uses both copper and fiber to connect advanced airport systems

Opened in March 2001, Incheon International Airport is the largest infrastructure project ever undertaken in Korea. Currently, it can handle 170,000 flight movements with 27 million passengers and 1.7 million tonnes of cargo annually. In the future, it will be expanded to handle more than 100 million passengers annually.

The Incheon International airport has two runways, and 70 buildings including a passenger terminal with 44 boarding gates, three cargo terminals, and a transportation center. All these are linked via more than 6,300 km of SYSTIMAX® structured cabling with nearly 52,000 outlets. Focused on the airport's integrated information and communication center, the cabling infrastructure serves locations right across the 1,400 hectare site, which is built on land reclaimed from the sea.

Office systems are served by the SYSTIMAX PowerSUM Solution, based on UTP copper cabling conforming to the Category 5e standard. This cabling also supports telephony systems and a range of other applications including security and access control.

SYSTIMAX OptiSPEED® singlemode optical fiber cables are used where even higher speeds are needed. OptiSPEED 4-fiber cables connect security cameras, server installations and other

communications-intensive applications, and 84-fiber types are used in the network backbones. In total, there is more than 100 km of fiber cable on the site.

Among the facilities served by SYSTIMAX Structured Connectivity Solutions (SCS) are the airport's advanced flight information and baggage handling systems. As an aircraft approaches, radar will signal the expected time of landing to a computer that automatically readies the centralized tilt-tray baggage handling facility that can handle up to 32,000 items per hour. At the same time, gate management systems, public address and information displays are also activated. Incheon International Airport also has 39 subsystems which are automatically controlled and operated. This fully-integrated system is the most refined of its kind in operation anywhere.



Millennium Hall, Incheon Airport



Passenger Terminal, Incheon Airport

### Team Work

Involved in the airport project from the beginning, the SYSTIMAX® Solutions team in Korea worked closely with the airport construction managers on design, inspection, project management and all other aspects of the cabling infrastructure.

Through its continuous efforts, the team showed the New Airport Construction Authority, now re-named IIAC (Incheon International Airport Corp.), that SYSTIMAX SCS was the best system for the project. The SYSTIMAX SCS 20-year warranty and application assurances were among the benefits that convinced IIAC, since the airport's current expansion plans extend to 2020. By then, it will have four runways, two passenger terminals, and four remote concourses.

"Communications are critical to the operation of a large airport, so we wanted a high-performance, high-quality cabling system," said Mr Jung Keun Park, Director of Communication Operation Division of the IIAC. "SYSTIMAX Solutions™ demonstrated that they could provide this and could back it up with the best guarantees available."

The teamwork between SYSTIMAX Solutions, one of its BusinessPartners Dacom Systems Technology (ST) and the IIAC team was the key to the successful completion of the project.

Cable routing and layout for the huge site was handled by Dacom ST working with the network designers, Samsung Electronics. For the main cabling distribution frames, Dacom ST used the SYSTIMAX high performance, space saving 110 connector system. In the patching closets located across the site, they used the familiar RJ45-based 1100 series patching, and in the fiber distribution frames standard SYSTIMAX SC connectors were installed.

Commenting, J.H. Lee, Sales Manager, SYSTIMAX Solutions, Korea said: "The successful operation of any modern airport depends heavily on its cabling. With annual passenger numbers planned to rise from 27 million to 100 million, and a 20-year planning horizon, there was no room for compromise on connectivity at Incheon - that's why they chose SYSTIMAX SCS."

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