

Magnum 6K Switches Chosen for City-Wide CCTV Surveillance Projects Throughout Turkey

A Surveillance & Security Application

ABOUT THE MOBESE SURVEILLANCE PROJECTS

MOBESE (Mobile Electronic Systems Integration) is a series of high-profile city wide CCTV surveillance projects for all 81 provinces in Turkey. The general design for MOBESE projects is to install network cameras on the poles in critical areas and to monitor and record the live video at several police stations and at the 911 centers. At the field under every pole there are field cabinets where network switches, video encoders, UPSs and some sensors are installed. One of the most experienced system integrators in Turkey of the Mobese projects is Vitel.

ABOUT VITEL

Founded in 1993, Vitel is a well known system integrator and value added distributor in Turkey. With a very experienced team of network engineers and technicians, Vitel provides turn-key network and network security solutions including 24 x 7 support services. Vitel is generally qualified as one of the best network system integrator for complex and very important country wide projects.

THE CHALLENGE

One of the most important parts of any Mobese project is the networking equipment. Because the network

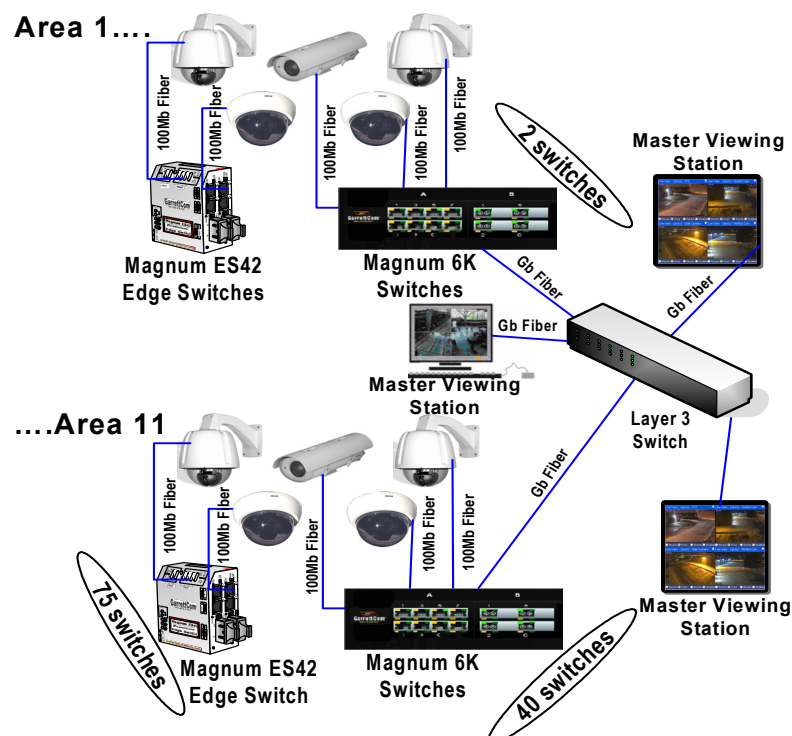
switches were placed in field cabinets that are exposed to direct weather conditions with no special shelter or building for them, they needed to be hardened. Additionally, the switches needed to handle multicast traffic well. Live multicast video traffic would be coming into the switches from all corners of the city and required good management otherwise the traffic could flood the network in seconds. The other requirement was network redundancy via redundant links with very rapid recovery.

THE SOLUTION

With these requirements, very few vendors could even make the short list. Then field tests had to be performed with live video traffic. Because of the very high and continuous throughput requirement of the application, two of the switches from other vendors on the short list failed to transmit continuous live video traffic at the required frame rate and video quality. After the final tests, GarrettCom Magnum 6KQ switches were qualified and were recommended.

The Magnum 6KQ met the "hardening" requirement. The 6KQ offers an advanced thermal design with a heavy-duty case with a ribbed surface for heat dissipation (no fans). The 6KQ also operates in a wide temperature range with a high IP rating. The 6KQ, like other Magnum products, is

Magnum 6K and Edge Switches Provide Networking for Turkey's Mobese Video Surveillance Project



Magnum 6K Switches Chosen for City-Wide CCTV Surveillance Projects Throughout Turkey

SOLUTION (CONT.)

available with conformal coating for humidity and corrosion. To handle and manage the multicast traffic, the 6KQ's management software (MNS-6K) offered IGMP Snooping and IGMP-L2. For self-healing redundancy, the 6K switch offered many fast link recovery features such as S-Ring®. The Magnum 6K switches were also recommended for the wide breadth of fiber and copper configuration options.

Magnum ES42 Edge Switches (small six-port 10/100Mb switches with one or two of the ports 100Mb fiber) were also selected and deployed at many of the network edges. Each Magnum ES42 connected two or three cameras. The Magnum ES42 Switches then connected to a Magnum 6KQ via a 100Mb fiber link. The Magnum 6KQ Switches then connected back to a core layer three switch via Gigabit fiber links. The 6KQ Switches also connected directly to the cameras in many cases (see diagram previous page).

Future Magnum switch installations are planned for the ongoing Mobese projects throughout Turkey.

ABOUT GARRETTCOM

GarrettCom is a leading designer and manufacturer of networking products for industrial and outdoor markets such as surveillance & security, power utilities, transportation, and factory automation. GarrettCom's focus has been on developing innovative, heavy-duty products that are designed with customer flexibility, security, and reliability needs in mind.

For the Power Over Ethernet (PoE) line, GarrettCom has developed a range of industrial Power-Source PoE products based on the IEEE 802.3af standard specification supporting security products such as IP-cameras & badge readers. To learn more about GarrettCom's range of hardened and innovative video surveillance products, visit www.GarrettCom.com/surveillance_security.htm.



GarrettCom®

Industrial Networking at Its Best™

GarrettCom, Inc.

47823 Westinghouse Drive. • Fremont, CA 94539 • PH: (510) 438-9071 • FAX: (510) 438-9072

Email: mktg@garrettcom.com • Web: www.GarrettCom.com or www.GarrettCom.co.uk