

TDSi Provides EXpert Solution for Shanghai Metro



The Project: Shanghai Metro

Type of Site: Railway Station

Number of Users / Doors: 2,000 doors per line

Solution Required: An integrated system that caters for high volumes of users passing through multiple access points

Solutions Used: TDSi EXpert Controllers, MIFARE Readers and EXgarde Enterprise Software

With successful installations already in full operation on Shanghai Metro's Line 6 and Line 9, access control specialist TDSi, in partnership with a distribution partner in China, later completed work on the system installation for the Metro's Line 7.

Shanghai Metro is one of the newest and fastest growing transit systems in the world, with 162 stations and over 225 km of track running both above and underground. On average, well over two million passengers use the system every day - with the future expansion plans set to see that number increase to over three million.

The latest addition to the network...

Line 7 was commissioned into service at the end of 2008, connecting the Baoshan District with the city centre and Pudong District. Significantly, it provided a vital link to the site of the World Expo, which was hosted by Shanghai in 2010.

Over the years, TDSi and its distribution partner have developed and supplied fully integrated access control solutions for Lines 6 and 9. Each Line is served by over 40 stations as well as its own Operational Control Centre (OCC), with around 2,000 doors secured and controlled by TDSi's systems on each line.

Commenting on the programme, TDSi's Managing Director, John Davies said: "The Shanghai Metro is a very significant and high profile infrastructure programme, representing one of the largest access control projects across the whole of China. With two lines having been in operation for over a year, we were delighted to be awarded the contract for Line 7 - a real demonstration of the performance and quality of our systems".

The access control solution for the project features TDSi's EXpert controllers, EXgarde Enterprise software platform and MIFARE® smart card readers. Specified for their proven performance in high capacity applications, EXpert delivers a fully featured and networkable system. Each controller has the capacity of up to 48,000 cards and provides fast and effective access control to projects such as the Shanghai Metro, which has consistently high volumes of users passing through multiple access points.

The OCC and each station's controllers are programmed via EXgarde Enterprise, TDSi's latest advanced access management software application. Each station is capable of operating independently of the server in cases where communications are lost - a key requirement in the specification for this particular project.

Featuring database replication for powerful disaster recovery capabilities and total peace of mind, EXgarde Enterprise allows all real-time events and system parameters to be stored both at the main server in the local OCC and at each individual station.

However, should communications be lost between the centre and any of the Individual stations, changes and events are stored at the local stations until communication to the main server is re-established, at which point, the databases are re-synchronised.

EXgarde Enterprise allows the system to be managed centrally, even where the Wide Area Network (WAN) may be of variable quality, effectively removing the risk of single point failures. TDSi MIFARE® smart card readers are employed throughout each line, providing true contactless technology. The readers also provide an extremely cost efficient, highly reliable solution that allows for straightforward expansion in the future - for example, allowing the same access control card to be used for cashless vending and car park management, offering users a true, one-card solution.