

# Bosch Solutions in the São Paulo subway



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## Industry:

Public Transport -Metro São Paulo

## End User:

### Metro São Paulo

The subway is the city's principal means of transportation, being responsible for the transportation of 3 million passengers per day. It consists of five different lines, 55 stations and extends to over 60 km of rail network. The subway system is relatively new, with the first subway line operating since 1974. The subway's monitoring control center was implemented at the same time with the original intention to monitor transport flows.

## Business Objective:

Metro São Paulo was looking for a sophisticated electronic monitoring solution to increase the security of its passengers - in a city where violence rates are high. In order to assure higher security levels, Metro SP decided to increase the number of cameras installed. Moreover, the customer wanted to introduce digital video recording technology which they had not been using before. The overall monitoring solution had to cover a widely spread network of locations.

## Solution:

The metro project was publically called for tenders. Trends, a Bosch certified integrator won the project, specifying its offer with Bosch products. A major reason for Metro SP to choose a Bosch solution is the fact that Bosch has gained a reputation for state-of-the-art monitoring solutions in the Sao Paulo region. Working together with Trends, Bosch had already supplied a similar monitoring system solution to the city of Campinas, which was recently assigned as a model for Urban Monitoring by the Brazilian Justice Department. In monitoring solutions, Bosch mainly differentiates from its competitors through performance, quality and state-of-the-art technology. In locations where human security is critical, Bosch solutions are a first choice for customers. "The successful partnership with Bosch Security Systems was a critical success factor for this project" commented Trends.

The subway's new monitoring system is equipped with a Bosch CCTV system including 138 cameras, whereof 121 are fixed and 17 are dome cameras. They are managed by ten DiBOS Digital Video Recorders and a BIS Video Engine. Built-in scripting and application programmer's interface (APIs) have allowed for easy enhancement with the existing monitoring system. The highly efficient video management system is monitored via the Security Control Center of the subway, which now serves as a model for transport monitoring in the



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region. The Control Center monitors altogether almost 200 cameras, using a ring gigabyte network. Two control posts are constantly monitoring the five metro lines via six monitors and two plasma screens. Using state of the art digital recording and communication technology, Metro staff can now retrieve vital images and share information faster than before! They can better access critical situations and take appropriate actions immediately.

## Result:

The total solution was very satisfying to the customer. The solution provides high levels of technology and system integration, offering an excellent monitoring solution for Metro Sao Paulo. The principal customer need - to increase the security of its passengers - has been fully met.

The Metro Security Control Center now serves as a model for state-of the art transport monitoring solutions in Brasil. The installation has risen significant media attention and press coverage. Metro SP as a public transport company has significantly benefited from the positive press coverage, showing that the company cares for the security of its passengers.

The overall project had a total financial volume of 3.8 mill. Real (2.1 million USD). Bosch Certified Installer Companies Trends and Ultrak concluded the project installation in 9 months.

## Installed by:

Trends  
[www.trendseng.com.br](http://www.trendseng.com.br)  
Ultrak  
[www.ultrak.com.br](http://www.ultrak.com.br)

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