



Cityval

Transportation Systems

SIEMENS



Cityval: for an expanded vision

Siemens high performance Cityval® is the latest generation of rubber tired middle capacity transport system for Unattended Train Operation



« Unrivalled flexibility in train operation »

Smart system for smart cities

Based on the Val system concept, Cityval is a medium capacity fully automated system bringing major innovations into the APM world and is designed to improve flexibility, performance and efficiency.

Application includes feeder lines required by megapole in connection to their main subway lines and backbone transportation link for small/medium cities.

Modular train configuration and design

Cityval smartly inserts into the city architecture, permits modularity of 1 to 6 cars train and can carry up to 30,000 pphpd (4 pass./m²). The proposed design solutions are based on market tendencies, inscribing Cityval as part of large scale contemporary urban or architectural projects.

The maximum flexibility for passenger cabin is offered with two possible widths (2,65 or 2,80 m), an inter-car gangway option and a high degree of personalization for the vehicle front, the surface of glasses and internal arrangement.

Optimized and sustainable infrastructure

Responding to new environmental requirements, Cityval rubber-tire solution minimizes noise and pollution. It also enables a drastic reduction of energy consumption through optimized traffic management.

The use of CBTC and of a simple and robust concrete track with a single central guidance rail allows a significant decrease of infrastructure and operation costs.

Siemens means turnkey delivery

By proposing a complete turnkey system from product design to full realization, Siemens reduces the specification time, limits risks, and optimizes over-all schedule. It commits to the overall system safety and performance. Customer can focus on system performance and end-user service rather than on technical issues.

Cityval: play with trains...

Flexible technology

Equipped with the latest generation of moving block automation system Trainguard MT CBTC® already operational in several cities, Cityval allows to dynamically adapt to the traffic demand while increasing system availability and reliability. The Airlink® high performance radio network supports ATC safe communication services and enables the smooth implementation of on-board communication services such as multimedia passenger information, CCTV and Internet.

Smooth implementation

The modular design of Cityval enables easy phasing of line construction resulting in smooth and progressive investment whilst





Cityval: a landmark for the future

extending the APM line without disruption to passenger service.

Freedom in operation

Cityval provides the Operator with the ability to adapt real time traffic to the actual demand for normal traffic as well as for unforeseen or exceptional events. Service is guaranteed with a very minimal staff. Full operation and maintenance package combined with 24/7 hotline, 48h centralized spares-house and extensive use of standard technologies optimize the overall Life Cycle Cost.

Consistent system engineering ensures the system safety, availability and maintainability. Station platform doors avoid intrusions on the tracks and ensure a smooth passengers transit.

Maximum passenger comfort and safety

Silent and comfortable

Passenger comfort and security is Cityval

first priority. Through attractive cabin arrangement, large windows, air conditioning, but also via dynamic passenger information and onboard Internet and CCTV the user really feels at home.

Accessible

Cityval takes care of families, aging people or disabled people with adequate facilities onboard and in the station.

Rapid and on time

Punctuality and high performance also enhance the attractiveness of Cityval system concept by providing the travelling public with shortest transit times.

Safe

Cityval fully benefits from the accumulated experience of the Val product line and CBTC technology. More than 2 billion passengers have been transported on Val systems since 1983 with an unrivalled safety record.

By implementing a modular, flexible and safe rubber tired middle capacity transport system, Siemens high performance Cityval is one key asset to successfully face rapid urbanization and traffic congestion of today's cities.



Cityval performances

Technical characteristics

Vehicule length	11.20 m	36'9"
Width of vehicle	2.65 m - 2.80 m	8'8" - 9'2"
Train consist (cars)	1 – 6	
Number of door per car per side - width	2 – 1,95 m	2 – 6'4"
Vehicle height	3.60 m	11'10"
Nb of seats	up to 24	
CBTC	✓	

Performances

Maximum operating speed	80 km/h	50 mph
Minimum horizontal curve radius	22 m	72'2"
Minimum vertical curve radius	200 m	656'2"
Maximum grade	12 %	
Superelevation	10 %	
Acceleration, service deceleration	1,3 m/s ²	0.13 g
Power distribution system	750 VDC	

Options

Passenger gangway, air conditioning, dynamic displays, multimedia
Onboard Internet, onboard CCTV, service on demand

Siemens Transportation Systems SAS is the international center of competence for fully automated metro systems and one of the world leaders in Automated Train Control systems.

Its great experience in the implementation of turnkey projects and in maintenance services effectively complements its range of expertise.

STS also carries out the marketing of all Siemens railway products and services in France.

A subsidiary of Siemens France, Siemens Transportation Systems SAS is functionally affiliated to the Transportation Systems Group of Siemens AG.

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