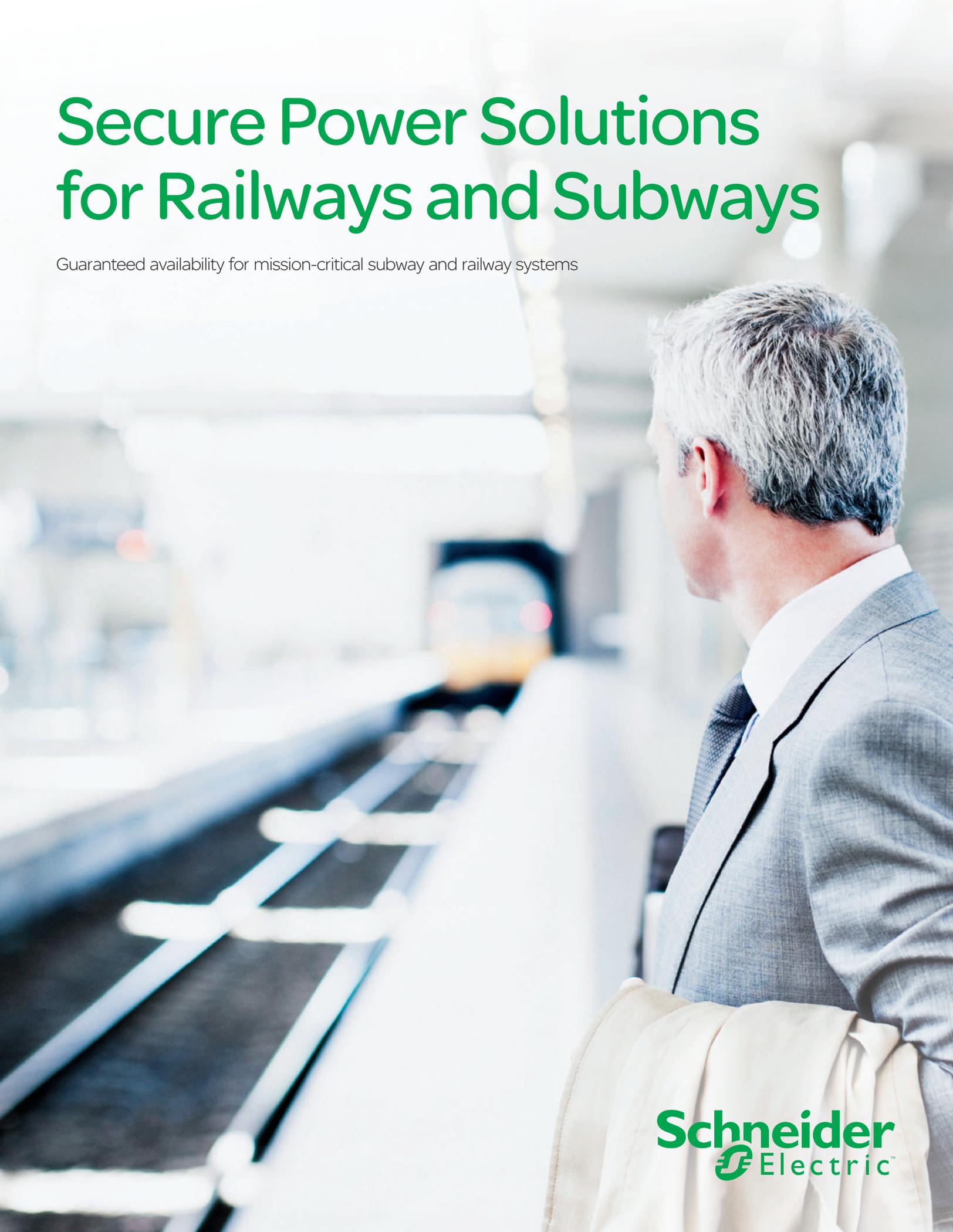


# Secure Power Solutions for Railways and Subways

Guaranteed availability for mission-critical subway and railway systems



**Schneider**  
Electric™

# Stay on track with the availability solutions you need

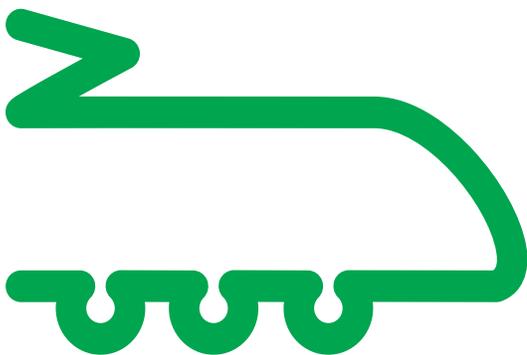
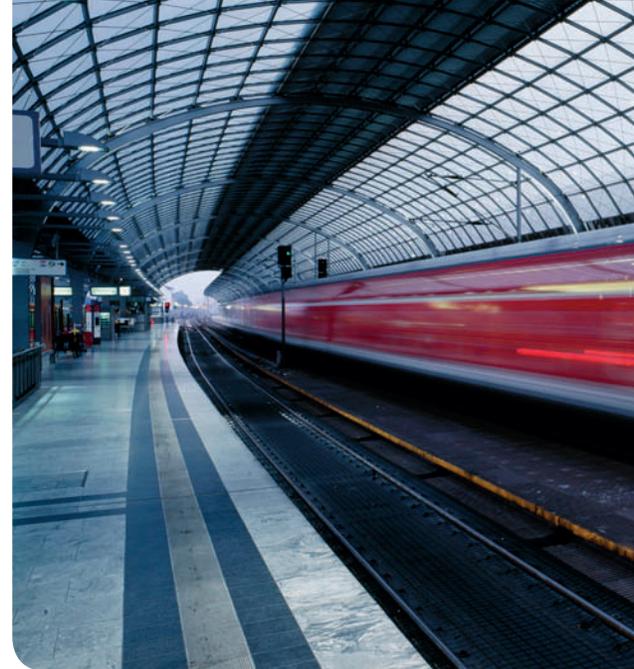
Today's subway and railway systems are more high-tech than ever. As these critical transportation systems continue to expand and modernize, new technologies such as digitalization and automated processes can mean faster service, safer travel, stronger security, and fewer unforeseen problems.

But at every moment, you face potential issues – security threats, changing environmental conditions, service disruptions due to track damage, accidents, and other unpredictable hazards – that can compromise your ability to deliver a safe and timely ride for your passengers.

While you can't control all of these possibilities, it's important to take steps to protect the most crucial aspect of your systems: availability.

In order to ensure the safety of a high volume of travelers, preserve the precise daily schedules your passengers rely on, comply with stricter security and safety regulations, and also achieve operational efficiency and profitability, uninterrupted power is critical. UPS protection, dependable power architecture, and intelligent power monitoring systems are necessary for safe subway and railway operations.

Add the rising cost of energy and environmental concerns into the mix, and it becomes essential to protect your power with solutions that not only meet your availability demands, but are energy efficient, too.





# The most complete global transportation solutions in the industry

Schneider Electric™ offers a long-standing reputation for reliability, a comprehensive range of products designed specifically for electrical environments and industrial applications, and a high level of services and service territory coverage. We can protect the business-critical equipment throughout your subway or railway systems, delivering power availability, increased performance and safety, efficient operation, and ultimately, lower TCO.



Our adaptable, right-sized solutions drive up efficiency and service levels across the systems through consolidation and standardization, and ensure the physical infrastructure is ready to handle the load, enabling you to achieve high availability of electronic equipment used in subway and railway environments, as well as in centralized operation center monitoring systems.

We not only supply the data center infrastructure you need, but also the critical power design, solutions, and services that enhance the availability of utility power for all types of applications. Our secure power solutions can be found in subways and railways worldwide, playing a vital role in the everyday safety and satisfaction of thousands of passengers by providing a continuous source of power for all stations and operations centers.



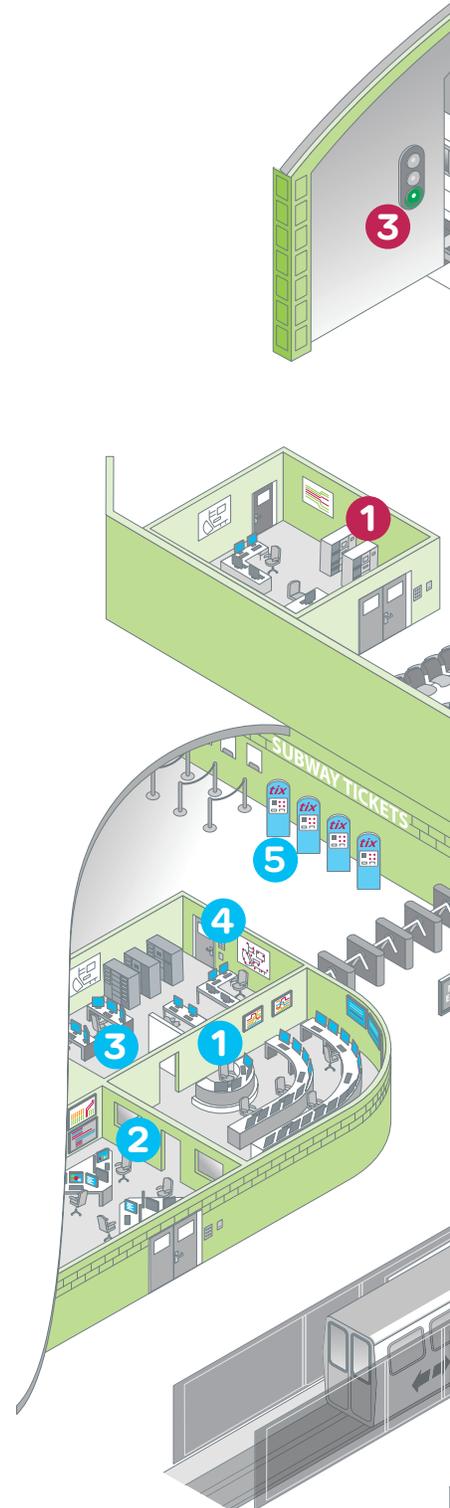
# Mission-critical subway and railway systems

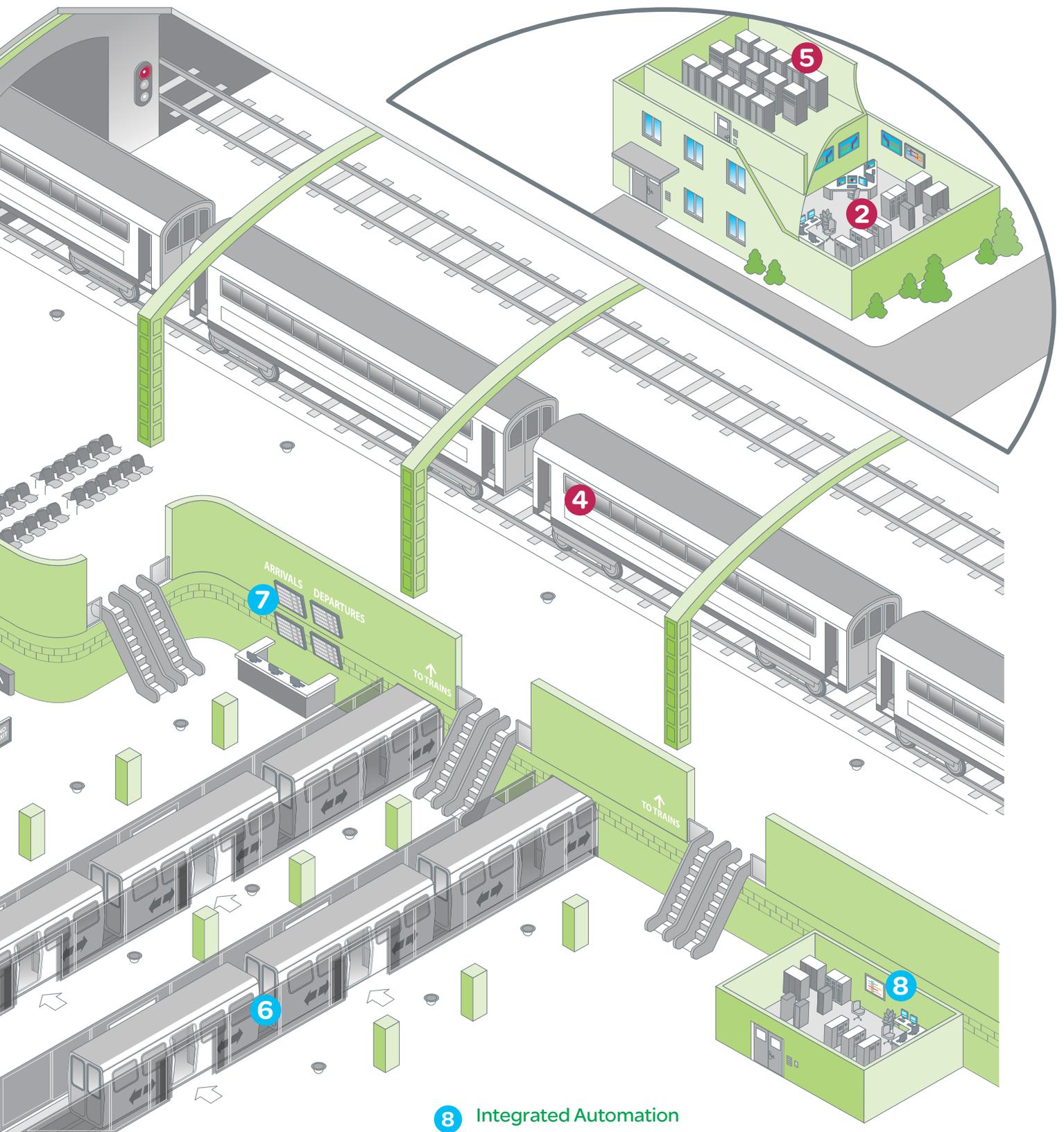
## Railway

- 1 Small to Large Railway Station Security and Operation**
  - > Server room/small data center and security, broadcasting, communication system, interlock system
  - > Secure power solutions: Smart-UPS™ On-Line, Symmetra™ PX, MGE Galaxy™ UPS, MGE EPS UPS
- 2 Railway Electrified Line Power Supply**
  - > Kiosk
  - > Secure power solutions: Smart-UPS and Smart-UPS On-Line
- 3 Signaling and Communication System**
  - > Lamp, communication base station, line track change control
  - > Secure power solutions: Smart-UPS On-Line, MGE Galaxy 3500
- 4 Vehicle Communication and Measurement System**
  - > Communication and control system and measurement system
  - > Secure power solutions: Smart-UPS On-Line
- 5 Regional and Nationwide Datacenter**
  - > Monitoring and information storage
  - > Data center solutions: infrastructure, Symmetra, MGE Galaxy 7000, MGE EPS, cooling, distribution and management

## Subway

- 1 Telecommunication System and PIS: Passenger Information System**
  - > Specialized, civil, and police telecom
  - > Solution may be distributed power protection (2 to 80 kVA) or centralized power distribution (20 to 200 kVA)
  - > Secure power solutions: MGE Galaxy 3500/5000, Symmetra PX, Smart-UPS VT
- 2 Integrated Monitoring**
  - > Solution may be distributed power protection (2 to 80 kVA) or centralized power distribution (20 to 200 kVA)
  - > Secure power solutions: MGE Galaxy 3500/5000, Symmetra PX, Smart-UPS VT
- 3 BAS: Building Automation System**
  - > Secure power solutions: Smart-UPS On-Line
- 4 FAS: Fire Alarm System**
  - > Secure power solutions: Smart-UPS On-Line
- 5 AFC: Automatic Fare Collection and Data Storage Server Room**
  - > Solution may be distributed power protection (2 to 80 kVA) or centralized power distribution (20 to 200 kVA)
  - > Secure power solutions: MGE Galaxy 3500, Smart-UPS VT, Smart-UPS On-Line, Symmetra LX
- 6 PSD: Platform Screen Doors**
  - > Secure power solutions: MGE Galaxy 3500, Symmetra PX, Smart-UPS On-Line





### 7 SIG: Signaling System

- > Signaling systems, lighting, monitoring
- > Secure power solutions: Smart-UPS On-Line, MGE Galaxy 3500/5000

### 8 Integrated Automation

- > Power substation and industrial computer
- > Solution may be distributed power protection (2 to 80 kVA) or centralized power protection (20 to 200 kVA)
- > Secure power solutions: Smart-UPS On-Line, MGE Galaxy 3500/5000/7000

# On time, all the time – with secure power solutions from Schneider Electric

With our unique skills and deep expertise, your subway or railway can be outfitted with the best in automation and energy management — all from the world leader in electrical distribution, power, and control: Schneider Electric.

Our complete catalog of power solutions, featuring our leading brands such as APC™ by Schneider Electric and Gutor™ by Schneider Electric, offers an unmatched range of single- and three-phase UPS units, rectifiers, inverter systems, active filters, and static transfer switches from 1 kVA to several MVAs. With flexible, adaptable designs that strengthen your overall availability with longer backup time and battery life, safe shutdown capability, and efficient operation, we have a solution that will work for you.

Choosing the right combination of products and services from Schneider Electric gives you the convenience of a total solution – systems, software, and services from a single source.

**APC™**

by Schneider Electric

**GUTOR™**

by Schneider Electric

## Single-Phase UPS

1 – 16 kVA, APC Smart-UPS, Smart-UPS On-Line, Back-UPS™, Symmetra LX

- > Performance power protection with adaptable runtime for space-constrained server rooms and voice and data networks
- > Rack/tower convertible and optimized form factor for easy integration



## Three-Phase UPS

10 – 4800 kVA, MGE Galaxy 3500, 5000, 7000, MGE EPS 7000 and 8000, Symmetra MW, Symmetra PX

- > Performance three-phase power protection with high adaptability to meet the unique requirements of data centers and mission-critical environments
- > Reduced footprint for easy installation in reduced space



## Three-Phase Static Transfer Switch

30 – 2000 A, MGE Upsilon™ STS, MGE Epsilon™ STE

- > Supplies power to a range of equipment from two independent and redundant sources
- > Automatically transfers power to a stable alternate source in less than four milliseconds
- > Detection and transfer times up to 10 times faster than many other switches



## InfraStruxure™ HD-Ready Architecture

10 – 500 kVA

- > Integrated power, cooling, racks, and electrical distribution
- > Built-in N+1 redundancy for higher availability
- > Standardized parts make for quick, easy installation and streamlined maintenance



# Schneider Electric Critical Power & Cooling Services

## Dedicated teams with experience you can trust

The worldwide dedicated service team at Schneider Electric Critical Power & Cooling Services enables your transportation solution to operate smoothly, ensuring an optimized facility plan and streamlined project management, as well as speedy and safe deployment of the key critical applications for your subway or railway.

With Schneider Electric Critical Power & Cooling Services, you can concentrate on protecting the safety and security of your passengers while we take care of the details on the back end. Your solution can be safely and efficiently implemented with installation and startup performed by our certified field service engineers. Project services – such as project management, installation management, and site coordination – help you to implement your solution on time and on budget. Our trusted Remote Monitoring Service acts as a second set of eyes, with secure 24-hour monitoring to detect and resolve problems before they become critical.

For hassle-free maintenance that minimizes downtime and protects your investment, choose one of our Advantage Plan comprehensive service packages. Advantage Plans include technical support, preventive maintenance, quick on-site response, and remote monitoring, providing you with the peace of mind that your solution is receiving the care it needs.



# Schneider Electric

## A Total Transportation Solution

Adaptability, experience, reliability — there are a dozen reasons for any business to choose Schneider Electric for an innovative, integrated solution.

But for those in the transportation industry, Schneider Electric offers a more complete solution than any other player in the field. More than 100 000 employees in more than 130 countries are on staff to make sure you have the help you need, when you need it. And since almost five percent of turnover is reinvested in R&D, you can rest assured you're getting an efficient and innovative product.

Schneider Electric has the ability to provide a solution for railways and subways anywhere in the world, with a single point of contact. We're the global specialist you need to ensure both maximum energy efficiency and highest availability throughout your critical facilities and systems.

### Service Awards

- > Beijing Subway Service Award
- > Contractor Safety Performance
- > Contractor Partnering (Hong Kong)
- > LAR Operation Top 10 Performances Recognition Award (Hong Kong)

### Schneider Electric Secure Power References In The Transportation Industry

- > French Railways
- > Marseille Subways
- > Lyon Subways
- > Madrid Subways
- > Australian Railways
- > South Mediterranean Railways
- > WMATA Railways
- > Ministry of Railway
- > Beijing Railway Bureau
- > Xi'an Railway Bureau
- > Beijing City Subway
- > Shanghai City Subway

To learn more about Schneider Electric solutions visit [www.schneider-electric.com](http://www.schneider-electric.com)

Try our FREE, web-based applications to experiment with virtualization, efficiency, and more at [tools.apc.com](http://tools.apc.com)

Make the most of your energy<sup>SM</sup>

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