

Airport secure power solutions

Guaranteed availability for mission-critical systems



Schneider
Electric

Because airports never close

From their daily hustle and bustle to the quiet whirl of overnight operations, airports truly are 24/7/365 facilities. Passengers rely on smooth-running systems, whether they are checking in for a flight, retrieving their baggage, or stopping for a quick coffee. If there is down time, it is noticeable. And you'll certainly hear about it from frustrated customers.

Changes and upgrades throughout the industry are placing even greater demands on airports' round-the-clock availability. Advanced scanning technologies, high-tech access controls, baggage security, and security-related lighting, for example, have made guaranteed availability as critical as airports' mission-critical systems themselves. Without it, down time could halt operations as quickly as a blizzard or tropical storm.

When the stakes are high

Today, securing power for airfield ground lighting is more critical than ever. Recent ICAO regulations stipulate that the runway light transfer time must be less than one second, with the electrical change over time, from the main source to the emergency source, less than 0,4 to 0,5 sec. Power protection therefore means protected safety.

And when it comes to security systems, the stakes are just as high. Now, 100 percent of baggage is automatically checked and screened by high-tech EDS (explosive detection systems); closed-circuit television security is essential in terminals and parking areas; and super-secure access control is fundamental to overall airport security. These systems must be up and running round-the-clock for optimal safety and security – not to mention adherence to the latest industry regulations.





Guaranteed availability for mission-critical systems

No company knows how to protect critical airport systems from expensive and debilitating down time as well as Schneider Electric™. For more than 25 years, companies such as Microsoft®, Toyota Motor Sales, and IBM® have turned to Schneider Electric to protect their mission-critical networks. After all, Schneider Electric has pioneered the development of power and cooling technologies and now is also leading the way in energy-efficient physical infrastructure solutions.

Today, airports and airlines across the globe, including Air France, American Airlines®, British Airways, Newark Airport, and Beijing Capital International Airport, also are tapping the Legendary Reliability™ of Schneider Electric for guaranteed protection of their most critical systems. Whether safeguarding technical platforms or passenger terminals against down time and power-related security lapses, Schneider Electric has the right solution for ensuring always available, seamless operations. What's more, solutions by Schneider Electric include backup protection to optimize performance, safety, and efficiency across the facility's electrical energy infrastructure. Monitoring your infrastructure from a centralized management system is possible as well.

Enabling energy-efficient, "green" airports

In addition to maintaining uptime of critical systems, airports face the challenge of complying with carbon emission reduction standards. After all, reduced energy consumption makes sense from both an environmental standpoint and a financial one. Schneider Electric can help airports renovate their existing infrastructure to increase the energy efficiency of facilities. Specifically, our solution results in energy savings across lighting, building, power, and cooling systems. And our energy monitoring and management capabilities help you continue to realize reduced operating costs through efficiently run operations now and in the future.



What are the most mission-critical airport systems?

1 Airfield ground lighting, runway

- > Lighting, control automation
- > APC solutions: MGE™ Galaxy™ 3500/5000/7000, MGE EPS 6000/7000

2 Air traffic control

- > Control tower, radars, communication and IT systems
- > APC solutions: MGE Galaxy 5000/7000/PW, MGE EPS 6000/7000

3 Passenger boarding, access security and building security

- > Access control, screening systems, CCTV and cameras, fire alarm
- > APC Solutions: APC Smart-UPS™ RT, MGE Galaxy 3500

4 Parking management and security

- > Payment systems, cameras, emergency call stations, IT systems
- > APC solutions: APC Smart-UPS RT, MGE Galaxy 3500

5 Passenger-facing terminal systems (e.g., ticketing, information display, shops)

- > IT network and data center, information screens, telecom systems
- > APC solutions: Smart-UPS VT, Symmetra™ PX, InfraStruxure™, MGE Galaxy 5000/7000, MGE EPS 7000

6 Control room, command center and BMS

- > Control automation, monitoring and supervision systems, communication systems
- > APC solutions: APC Smart-UPS RT, MGE Galaxy 3500

7 Luggage screening

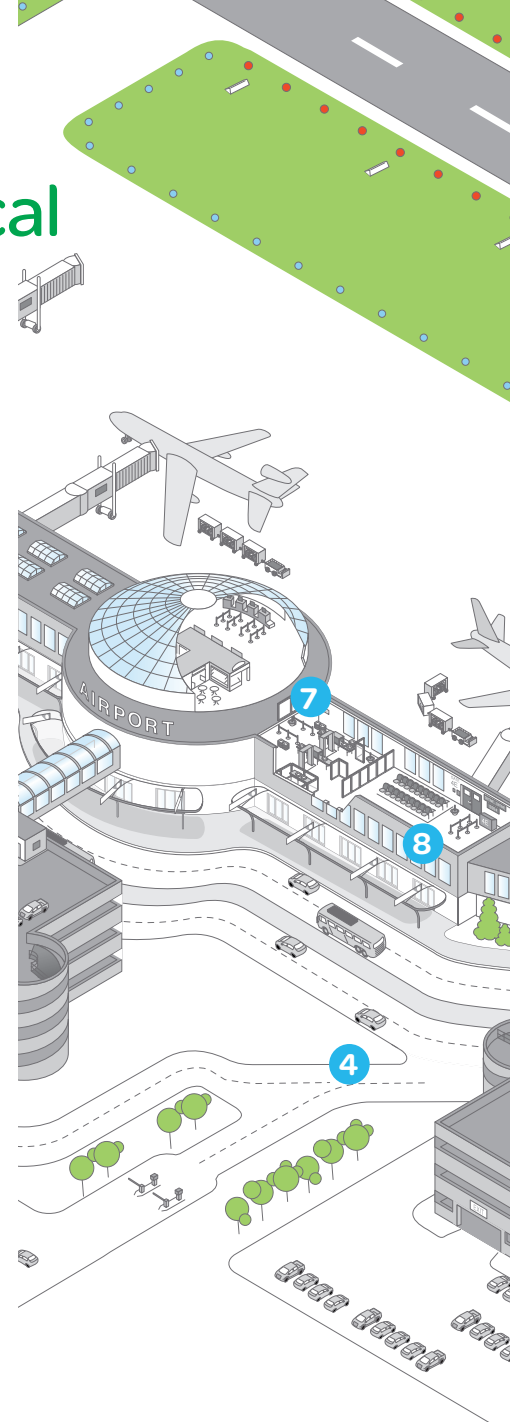
- > Console and work station, EDS (scanners), process automation
- > APC solutions: APC Smart-UPS, APC Smart-UPS RT, MGE Galaxy 3500/5000/7000, MGE EPS 7000

8 Emergency lighting

- > Emergency lighting
- > APC solutions: MGE Galaxy 3500, MGE Galaxy PW 1000

9 MV electrical network automation

- > Process and control automation
- > APC solutions: APC Smart-UPS RT



Single-Phase UPS

1-16 kVA, APC Smart-UPS, Smart-UPS RT, Back-UPS™, Symmetra LX

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

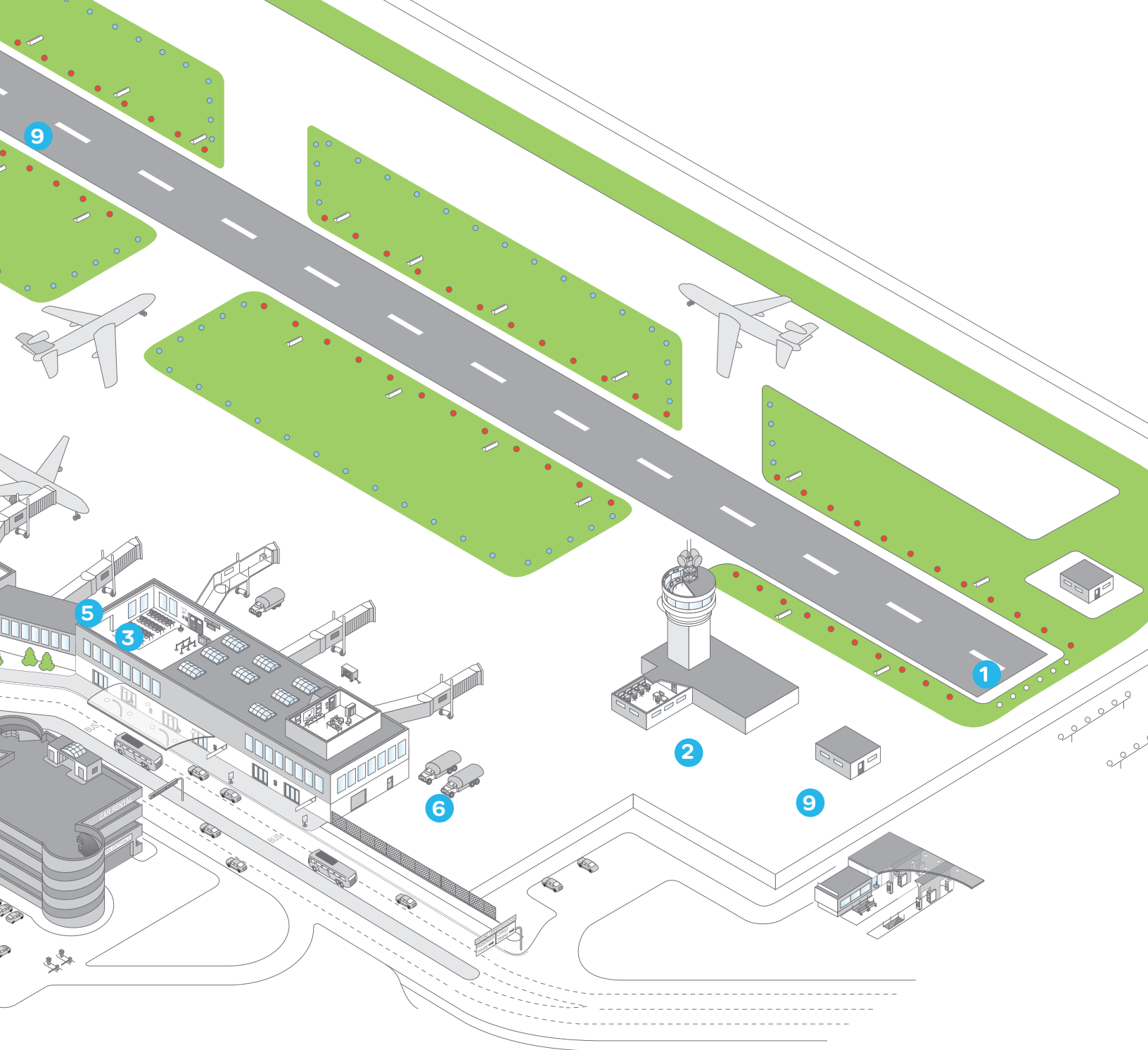


Three-Phase UPS

10 - 4800 kVA, MGE Galaxy 5000, 7000, 9000, MGE EPS 7000 and 8000, Symmetra MW, Symmetra PX, MGE Galaxy 3500

- > Right-sized three-phase power protection for any size high-density power zone or data center
- > High power quality to ensure optimum operation of applications
- > 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, and electrical distribution
- > Built-in N+1 redundancy for higher availability
- > Standardized parts make for quick, easy installation and streamlined maintenance



A safe, efficient electrical energy infrastructure

Continuity of energy supply is essential to seamless airport operations. Power availability depends on the highly automated and remote-monitored power substations that compose the electrical energy infrastructure. The Smart-UPS RT by Schneider Electric provides secure power to this critical infrastructure, ensuring continuous operation of each substation's automation and control systems.

Airports know that emergency lighting also is absolutely essential for safe, efficient, and effective operations. Our solution includes the MGE Galaxy UPS which provides backup power from 10 kVA up to 100 kVA, to guarantee the availability and performance of emergency lighting.

Your partner for end-to-end secure power availability and reliability

Schneider Electric is

- > Both your global and local partner, with a worldwide dedicated coordination with local intimacy and proximity regardless of your location
- > A solutions provider with proven "know-how" in an airport environment; wide range of solutions matching the various needs of the different types of critical applications
- > A company that works in compliance with international standards
- > Your trusted adviser for power availability and energy-efficient solutions, from design stage to the implementation
- > A single-source for solutions to optimize overall equipment operation and increase safety and security levels
- > The company with energy-efficient solutions for a better global ROI
- > A long-term partner with tailored services for ongoing maintenance and enhanced performance over the life cycle of your critical systems



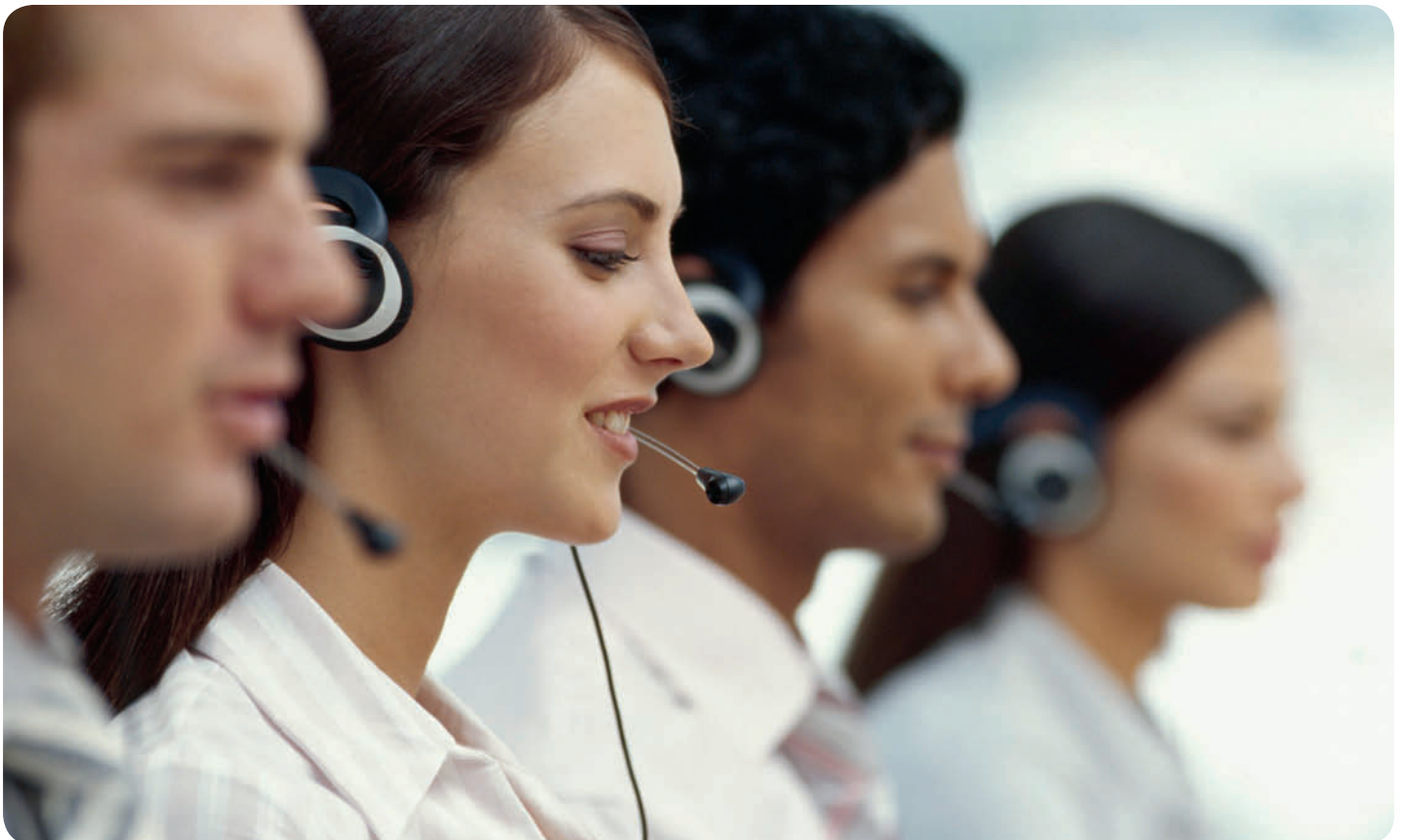
Schneider Electric Critical Power & Cooling Services

Dedicated teams with experience you can trust

The worldwide dedicated service team at Schneider Electric Critical Power & Cooling Services enables your airport solution to operate smoothly, ensuring an optimized facility plan and streamlined project management, as well as speedy and safe deployment of your solution.

Our broad portfolio of dedicated services ensures reliable implementation and operation of the key critical applications of your airport, allowing you to fully concentrate on protecting the safety and security of your passengers. Our certified field service engineers will safely and efficiently get your solution operating with an installation and startup service. Project services – such as project management, installation management, and site coordination – help you to implement your solution on time and on budget. Our Remote Monitoring Service can act 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 down time 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 peace of mind in knowing your solution is receiving the care it needs.



Schneider Electric

A total airport solution

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

But for those in the airport profession, Schneider Electric offers a more complete solution than any other industry player. 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 5 percent of its 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 global airport solution anywhere in the world. And we uniquely provide solutions with a single point of contact. We're the global specialist you need to ensure both maximum energy efficiency and highest availability throughout your airport's critical facilities and systems.

Schneider Electric secure power references in the airport industry

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|---------------------------|-----------------------|---------------------------|
| > Air France | > Cathay Pacific | > Qantas® |
| > American Airlines | > Dublin Airport | > Singapore Airlines |
| > Bangkok Airport | > Guangzhou Airport | > Singapore Airport |
| > Beijing Capital Airport | > Hong Kong Airport | > Shanghai Pudong Airport |
| > Berlin Airport | > KLM | > Stuttgart Airport |
| > British Airways | > Newark Airport | |
| > Cairo Airport | > Northwest Airlines® | |

To learn more about Schneider Electric solutions visit www.schneider-electric.com

Try our FREE, web-based applications to experiment with virtualization, efficiency, and more at tools.apc.com

Make the most of your energySM

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