EFFICIENT AND SAFE LANDINGS IN ALL-WEATHER CONDITIONS

Honeywell Airfield Ground Lighting Solutions



Honeywell

THE AIRSIDE OPERATIONS OF TODAY

The aviation landscape has transformed dramatically over the past decades. Following years of steady growth and a period of disruption during the COVID-19 pandemic, the industry is now entering a new era of recovery, modernization, and sustainability. Airport operators are navigating rising passenger volumes, evolving safety and compliance standards, and increasing pressure to reduce operational costs and environmental impact. Despite these challenges, one priority remains unchanged - safety and reliability can never be compromised.



HONEYWELL AIRFIELD GROUND LIGHTING SOLUTIONS PORTFOLIO

Airports are under constant pressure to keep operations running without disruption while meeting strict safety and regulatory requirements. At the same time, they need to move increasing amounts of aircraft, reduce downtime and control operating costs.

Honeywell has been supporting these demands for more than a decade with proven airfield ground lighting solutions that help airports maintain safe operations, improve uptime and manage costs more effectively.

SAFETY AND COMPLIANCE

Everything starts with compliance and when your lighting systems falls short, the impact shows up immediately in your operations. Honeywell airfield ground lighting solutions meet **ICAO, FAA and IEC standards**, and integrate into the constant current systems used across most airfields, keeping your lighting compliant and your operations free of unnecessary risk and rework.

IMPROVED UPTIME

Lighting doesn't fail all at once. It loses output over time as rubber builds up, debris settles in and systems take repeated impact from daily operations. That's what turns into downtime.

Honeywell airfield ground lighting solutions are built to address those conditions head on by reducing rubber deposits, limiting water and dust buildup inside the light assembly and maintaining structural integrity under daily operational impact like snow removal and sweeping. When failures do occur, faster fault detection and rapid replacement ensure issues are resolved quickly instead of compounding into larger disruptions.

OPTIMIZED COSTS

CapEx and OpEx Optimization

Upgrade your lighting without taking on unnecessary cost, either upfront or over time. By working with your existing infrastructure, avoiding duplicate systems, replacement and reducing the need for **excess spares, replacements and energy use**, your investment stays focused on performance, not on rebuilding or maintaining what shouldn't be required.

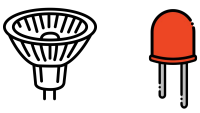
KEEP TRAFFIC MOVING

Honeywell Airfield Ground Lighting is designed to support efficient aircraft movement in complex airfield environments with:

- 40% larger optical area for improved light output and visibility
- Optimized light distribution with TIR-based optical design
- <600 ms start-up for rapid response to operational changes
- Integrated control and monitoring to support advanced guidance systems
- Upgradeability to A-SMGCS Level for future-ready operations



Retrofit without rebuild



One system for LED and halogen



Fewer parts, lower cost

A-SMGCS LEVEL 4 SCALABLE SOLUTIONS



Traditional ground traffic management relies on manual processes that can lead to inefficiencies, including:

- Underutilized taxiway infrastructure
- Excessive controller-to-pilot radio communication
- Reactive conflict detection and holding commands
- Manual, condition-based control of airfield lighting

HONEYWELL SOLUTIONS CAN HELP

- Optimize taxi routing to reduce delays and CO_2 emissions
- Reduce voice communication between tower and pilots
- Enable automated routing, guidance, and surveillance through the Advanced Surface Movement Guidance and Control System (A-SMGCS)
- Improve airfield efficiency in congested and low visibility environemnts



HONEYWELL NAVITAS™ LIGHTS MANAGER

Honeywell NAVITAS™ Lights Manager transforms airfield lighting from isolated systems into coordinated operations. NAVITAS™ enables airports to manage individual lights, support coordinated aircraft movement and align air traffic control, engineering and field teams around a single real-time view of the airfield.

ROLE-BASED WORKING POSITIONS

From tower to field, NAVITAS™ supports role-based working positions that give each team control of lighting, visibility into system status and real-time response.

CONTROLLER WORKING POSITION (CWP)

The CWP supports changes in runway operations and stop bar control. The system is able to automatically monitor the serviceability of AGL field equipment through differentiated user interfaces.

- Airfield lighting control (On/Off, Intensity)
- Change runway category, direction and stop bar control
- Monitor ancillary systems and NAVAIDS
- Area of responsibility (AOR) assignments
- Contingency panel/operations
- Provide guidance through routing functionality
- Maintenance approvals

TECHNICAL WORKING POSITION (TWP)

The TWP provides insights into individual AGL field equipment health status enabling predictive and preventive maintenance.

- Monitor and manage alerts/faults
- Equipment hierarchy and substation views
- Airfield map navigation
- Centralized user management
- Maintenance workflows
- Advanced maintenance reports

MOBILE ENGINEERING MANAGER

Enables digitized paper less maintenance and airside inspection tool for preventive and predictive maintenance activities. Monitor and manage alerts/faults

- Supports work order dispatch functionality
- Digitized inspection check lists
- Real-time, faster fault locating (Fitting/ Manhole location)
- Full airfield view with navigation functionality
- Provides near real-time safety alerts from approaching aircrafts and vehicles



HONEYWELL AIRFIELD GROUND LIGHTING

As airports continue to prioritize energy efficiency, cost reduction and improved reliability, LED technology has become the standard for airfield ground lighting. Honeywell addresses this shift with a portfolio of low-wattage, LED-based lighting solutions, designed to reduce energy consumption, lower maintenance and extend asset life.

8-inch Inset Lights (Uni and Bidirectional)

Engineered to lower operating costs, maintain consistent runway visibility and simplify maintenance and retrofits across airfield applications.

APPLICATIONS

Runway Centerline | Touchdown Zone | Rapid Exit Taxiway Indicator | Taxiway Centerline | Stop Bar | Intermediate Holding Position | Runway Entrance Light Stand Stop

BENEFITS

Cuts operating costs by lowering energy demand and reducing the burden of spare parts management.

Keeps runway visibility dependable in all conditions, giving pilots and operators greater confidence during landing and taxing.

Limits rubber and debris buildup, so lights stay in service longer without frequent cleaning interruptions.

Built to withstand demanding runway conditions while maintaining consistent light performance.

Integrates with existing shallow base infrastructure, enabling upgrades and replacements without added complexity

FEATURES

- 8-inch (0.2 m) inset light with 6-window optical design
- Fail/Open (FO) technology in case of light failure aligned with FAA guidelines
- Patented internal toe that allows optical engines to be reused across different applications
- Thermal insulation system designed to control internal heat during sustained use
- Compatible with multiple third-party shallow bases (Eaton Crouse Hinds, TKH, Ocem, and ADB Safegate)

Compatible with low current technology



HONEYWELL AIRFIELD GROUND LIGHTING

As aircraft and ground movement converge across taxiways, intersections and apron areas, airports require clear guidance from every direction. Honeywell addresses this need with omnidirectional lighting that provides consistent visibility regardless of approach.



8 inch Omnidirectional

Engineered for high-traffic taxiway and apron operations where uniform light distribution and structural strength under aircraft loads are critical.

APPLICATIONS

Taxiway Edge | Taxiway Intersection | Stand Maneuvering Guidance

BENEFITS

Helps reduce operating costs through lower energy use and fewer parts to manage

Requires less maintenance with longer LED life and fewer replacement events over time

Reduces repair frequency from aircraft loads and ground traffic

Preserves existing infrastructure during upgrades, avoiding full replacement of fixtures and infrastructure.

Shortens upgrade timelines by fitting into existing installations with minimal disruption to operations

FEATURES

- Omnidirectional optical design
- High structural stability under aircraft load
- Integrated prism protection against vehicle impact and apron traffic stress
- Compatible with standard 6.6A and low current power supply
- Fail-open (FO) technology aligned with FAA guidelines

Compatible with low current technology



HONEYWELL AIRFIELD GROUND LIGHTING

12 inch Uni and Bidirectional

Engineered for approach lighting systems that require durable performance, stable light output and reliability in harsh operating conditions

APPLICATIONS

Approach Centerline | Approach Crossbar | Approach Side Row

BENEFITS

Extends service intervals and reduces replacement cycles over time

Maintains performance under heavy loads, shock and vibrations, limiting repair and service interruptions

Delivers clear light output in sand, water and debris, preventing building on optical surfaces

Operates within 3 and 5-step CCR intensity levels with IEC and FAA compliance



FEATURES

- 3-light window output design for configurable light output across applications
- Auto-adapts to 50 Hz / 60 Hz input frequencies
- Flat front profile designed to limit sand and snow building near the prism

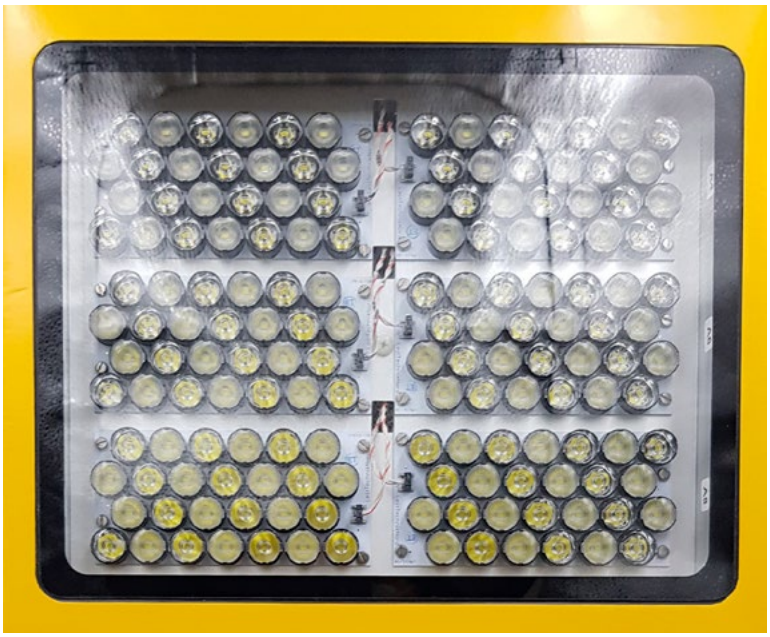


HONEYWELL SEQUENTIAL FLASH LIGHTING SYSTEM

Approach lighting systems are critical to safe aircraft guidance during landing, particulary in low-visbility conditions where clear sequencing and consistent light output directly impact pilot decision-making. The Honeywell Sequential Flash Lighting System is designed to deliver reliable, configurable performance that supports precise approach guidance across airfield environments.

BENEFITS

- Strengthens pilot approach guidance with sequenced flashing cues that improve runway alignment during landing
- Improves visibility and recognition of the approach path in low-visibility and night operations
- Reduces troubleshooting time with individual lamp addressing and faster fault identification
- Simplifies deployment across airport-specific approach layouts with configurable operating nodes



WHY AIRPORTS CHOOSE IT

Clearer pilot guidance during landing

Flexible configuration for airport-specific layouts

Faster fault identification and maintenance response

Reliable performance in low-visibility conditions

VHO

- Bgddcpc I rg_rcb dc_rspcq

HONEYWELL POWER AND CONTROL SOLUTIONS

Addressable Switching Devices (ASD)

The Honeywell Addressable Switching Devices (ASD) c l _`jc g l bgtgbs_j am l rpmj _l b k m l grmpg l e md _gpdgcjb epms l b jge f rg l e &?EJ' j_ k nq* f cjng l e _gpnmprq g k npm t c mncp_rgm l _j tgqg`gjgrw _l b pcqnm l b k mpc cddgagc l rjw rm jge f rg l e d_sjrq, Sqg l e nmucp jg l c am k k s l ga_rgm l rcaf l mjmew* c_af bctgac qsnnmprq pc_j+rg k c qugraf g l e _l b d_sjr bcrcargm l dmp m l c mp rum ?EJ j_ k nq,

BENEFITS

- **Individual lamp control:** E l _`jcq npcagqc qugraf g l e _l b k m l grmpg l e md individual _gpdgcjb lights rm qsnnmpr _bt_ l acb esgb_ l ac _nnjga_rgm l q* g l ajsbg l e Dmjjmu r f c Epcc l q,
- **Faster Fault Detection:** Helps maintenance teams locate lighting faults and prioritize repairs, minimizing time spent troubleshooting.



Compatible with low current technology

FEATURES

Control and Safety

- Supports mechanical or software/electronic pulse fail-open (FO) methods
- Configurable fail-safe mode: On, Off, or previous status. For enhanced airside safety in case of communication or power failure.
- Switching time of less than 1 second

Compatibility

- Supports halogen and LED lights with high starting impedance
- Backward compatible with previous ASD and SLCM versions
- Compatible with most CCRs and LED lighting manufacturers
- Supports operation at the lowest non-illuminated step of 1.3 A

Communication and Reliability

- Communication established within four seconds of energizing the series circuit.
- Communication reactivation within 2 seconds following a series-circuit power interruption lasting less than one second.
- Supports stable communication over circuits up to 15 km with 115 ASDs. Longer circuits or additional ASDs require engineering review.
- Mean time between failures (MTBF): 200,000 hrs
- Maintains communication when primary circuit insulation resistance drops to 5 MΩ

HONEYWELL POWER AND CONTROL SOLUTIONS

Honeywell PECS low current power supply

Honeywell PECS is a low-current power supply designed to support energy-efficient LED airfield ground lighting systems. Operating at currents up to 3 A, it helps reduce energy losses while maintaining precise current control. It's compatibility with existing infrastructure supports efficient lighting operations and provides flexibility for future upgrades.



BENEFITS

- **One power supply:** A single Honeywell PECS model supports multiple circuit configurations, simplifying operations and reducing inventory complexity
- **Modern, intuitive user interface:** Designed to simplify commissioning and maintenance, with a user-friendly layout for onsite and remote teams
- **Web interface:** Enables convenient configuration and access to fault and warning logs and historical data
- **Flexible for any power scenario:** Supports standard grid-connected and battery-backed systems to accommodate different operational requirements

FEATURES

- Up to seven configurable intensity levels for tailored lighting control
- Status indicators for quick diagnostics
- Optional advanced functions:
  - Earth fault detection
  - Circuit selection
  - Open secondary fault detection
  - Circuit direction switching

HONEYWELL PECS SPECIFICATIONS

Feature	Description
Technology	Microprocessor controlled IGBT based power supply
AC Input	3-phase 400 V AC +/- 10 %, 6,5 Arms nominal, 50/60 Hz
Optional DC Input	DC supply possibility build-in. Available on request
Output	Maximum 990 V AC, 0 Arms to 3,0 Arms, 3,0 kVA, continuous power signal
User interface	Touch display, local maintenance web pages, status indication color theme
Remote control	Dual Modbus TCP/IP, parallel relay interfaces (14 inputs, 30 outputs), and Profibus DP
Unit	Dimensions: 448 mm x 724 mm x 1552 mm, (W x D x H) | Weight: 180 kg | Protection Rating: IP20 | Maximum installation altitude: 1,000 m (3,281 ft) above sea level

HONEYWELL POWER AND CONTROL SOLUTIONS

Constant Current Regulator (CCR 30)

The Honeywell Constant Current Regulator (CCR 30) delivers precise current regulation for airfield ground lighting systems, helping airports maintain consistent lighting performance and operational reliability. Its advanced control technology monitors and adjusts circuit output to support efficient, dependable operation.

BENEFITS

- Flexible power ratings to support capital investment planning
- Energy-efficient operation with a 1.3 A non-illuminated setting and 48 output tap configurations
- Compact design with integrated SLCM functionality
- Stable current regulation when input voltage remains above 80% of nominal
- Automatic restart within one second of input power restoration
- Supports airfield safety and operational efficiency through Follow the Greens capabilities



FEATURES

Power and Regulation

- Nmucp p_rg l eq dpm k 0.5 KVA to 30 KVA
- Available in two regulatim l technologies: rhyristor based (nhase-aut) and IGBT based (qine wave)
- Rum am l dgesp_`jc jctcjq dmp j_k n d_sjr bcrcargm l
- Rum am l dgesp_rgm l jctcjq dmp agpasgr g l qsj_rgm l pcqgqr_l ac bcrcargm l

Mncp_rgm l_j Pcjg_`gjgrw

- Fail-safe function_jgrw g l r f c ctc l r md communication failure
- B_r_ l cw dmp pcqrmpg l e mp rp_l qdcppg l e AAP am l rm pcqrmpc mp q f gdr AAP am l dgesp_rgm l g l a_qc md AAP D_gjspc mp pcnj_ac k c l t

C l tgpm l k c l r_j Specifications

- Operating temperature range - 40 C° to +55 C° with monitoring.
- Relative humidity: 10% to 95%
- Operating altitude: 0 m to 2,000 m

HONEYWELL GUIDANCE SIGNAGE

Honeywell Guidance Signage helps airports improve airfield safety, pilot awareness, and operational efficiency through durable, highly visible airfield signage solutions. Designed to support applicable ICAO and FAA requirements, Honeywell signage delivers reliable performance in demanding airport environments while helping reduce maintenance requirements and lifecycle costs.

BENEFITS

- Improves pilot situational awareness and airfield safety
- Supports regulatory compliance requirements
- Reduces maintenance and lifecycle costs
- Delivers long-term reliability in harsh environments
- Integrates with Honeywell's end-to-end Airfield Ground Lighting portfolio



FEATURES

Amlqrpsargml

- Corrosion and UV-resistant materials
- Bcjgtcpcb npc+_qqc k `jcb
- ?lrg+rfcdr bctgacq
- Long-life LED lighting
- Bird spikes
- Designed and manufactured in Germany

Electrical

- Power supply via series circuit transformer (6.6 A)

Dimensions and Specifications

- Sign height: 650 mm or 850 mm
- Sign width: 800 mm to 3000 mm
- Weight: approx. 19 kg to 73 kg (depending on type)
- Suitable for runway visibility < 800 m (RVR)

AIRSIDE MAINTENANCE

Safety and compliance are the foundation of Honeywell Technologies Airside Services. Our maintenance programs help airports improve reliability, extend asset life, and keep critical airfield systems operating efficiently. Through industry best practices, regulatory alignment, OT expertise and dedicated field support, Honeywell Technologies helps airports identify issues, minimize operational disruptions and restore critical equipment when failures occur.

BREAKDOWN MAINTENANCE

Restore unservicable equipment and systems

Breakdown maintenance focuses on rapidly identifying, isolating, and correcting faults to restore airside equipment and systems to operational condition with minimal disruption.

Benefits

- Help improve restoration of service
- Targeted repairs to restore equipment functionality
- Improved asset reliability through root cause resolution

PREVENTIVE MAINTENANCE

Planned maintenance aligned with manufacturer recommendations and applicable ICAO guidance

Honeywell Technologies' preventive maintenance programs help extend equipment life, improve reliability, and reduce unplanned outages through scheduled inspections, testing, adjustments, and component replacement activities.

Program Includes

- Periodic inspections
- Preplanned maintenance activities
- Corrective actions identified through testing and inspections

Benefits

- Extended asset life
- Reduced risk of equipment failure
- Improved airfield availability

CORRECTIVE MAINTENANCE

Timely resolution of deficiencies identified during inspections and operations

Honeywell's corrective maintenance approach provides precise, airfield-specific remediation services designed to maintain compliance and restore operational performance quickly.

Benefits

- Timely correction of identified deficiencies
- Improved runway and airfield availability
- Maintained regulatory compliance
- Enhanced operational reliability



OPERATIONAL CYBERSECURITY

Airport operational technology networks power critical airside infrastructure, from airfield lighting and power systems to monitoring, communication and control platforms. Honeywell Technologies combines airport operational expertise with advanced cybersecurity technologies to help protect critical assets, strengthen operational resilience and support safe, continuous operations airfield operations.

AIRPORT OT CYBERSECURITY ASSESSMENT

Evaluate airport OT systems against recognized cybersecurity frameworks and industry best practices to identify vulnerabilities, operational risks and opportunities for improvment.

Outcomes

- Comprehensive risk assessment report
- Prioritized remediation roadmap
- Established cybersecurity baseline

SECURE OT CONFIGURATION

Implement cybersecurity best practices across airport OT infrastructure to harden physical, network, and application layers while supporting operational performance and reliability.

Outcomes

- Reduced attack surface
- Improved compliance posture
- Hardened OT infrastructures

CYBERSECURITY SOLUTIONS AND SYSTEM DESIGN

Design, deploy and support cybersecurity technologies tailored to airport OT environments. Solutions may include next-generation firewalls, endpoint protection, network segmentation, backup and recovery and secure remote access.

Outcomes

- Help reduce cybersecurity risk exposure
- Enhanced network protection
- Improved operational resilience

CYBERSECURITY MONITORING AND REMOTE MANAGEMENT

Maintain continuous visibility across airport OT systems with remote monitoring and proactive cybersecurity management.

Outcomes

- Continuous OT monitoring and visibility
- Faster threat detection

INCIDENT RESPONSE READINESS

Prepare for and respond to cybersecurity incidents with expert advisory services that help assess impacts, establish response procedures and accelerate recovery.

Outcomes

- Faster incident recovery
- Improved business continuity

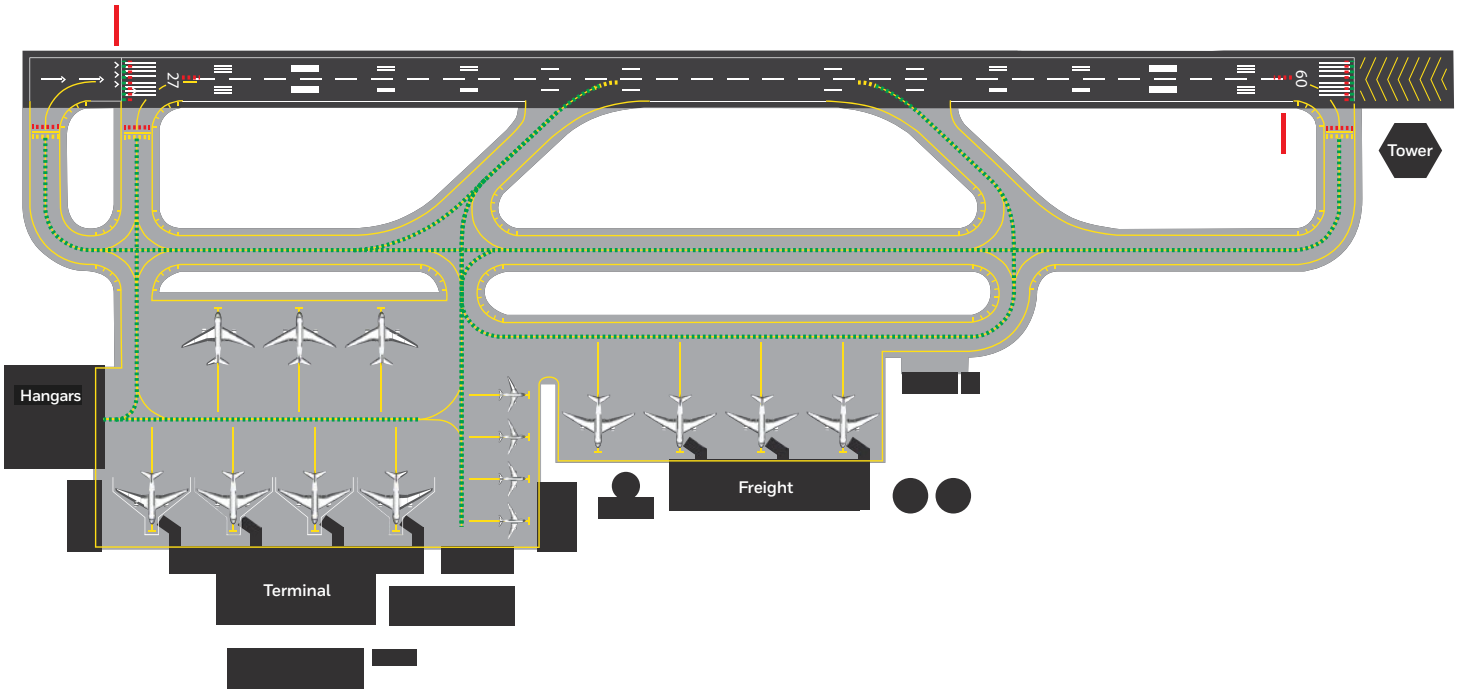
WHY AIRPORTS CHOOSE HONEYWELL TECHNOLGIES

Protecting airport operations requires both cybersecurity expertise and a deep understanding of critical airside infrastructure. Honeywell Technologies brings these capabilities together to help airports identify vulnerabilities, strengthen OT security and improve operational resilience across the airfield.



ALL-WEATHER SAFETY LIGHTS THE WAY

Find out what your business can achieve when you have Honeywell Airport Ground Lighting solutions working for you.



- Honeywell Lights
- Honeywell NAVITAS™ Lights Manager
- Honeywell Addressable Switching Devices
- Honeywell Power Constant Current Regulators
- Honeywell Taxiway Guidance Signage
- Airside Service, Maintenance and OT Cybersecurity

Building Automation
715 Peachtree St NE
Atlanta, Georgia 30308
Buildings.Honeywell.com

Airfield Ground Lighting BRO | Rev B | 10/25
© 2025 Honeywell International Inc.

THE FUTURE IS WHAT WE MAKE IT

Honeywell