



INDUSTRY BRIEF

Airports

Airside and terminal control systems that keep an airport safe and open.

[::]MATRIX



What matters most

Keeping flights moving

Airports run to slot times. Lighting, boarding bridges, fuel and utilities must stay available, with faults found and fixed before they delay aircraft or passengers.

Airfield lighting you can trust

Ground lighting must show the right pattern, report failures at once and meet CAA requirements, including while circuits, regulators or control rooms are being changed.

Working on a live airport

Airside work needs passes, escorts and permits, and has to fit short night-time windows. Cut-overs on a busy airport cannot cost lighting, power or passenger services, even briefly.

Cyber security

Airports are high-profile targets. Larger ones have NIS duties overseen by the CAA, and the operational technology behind the airfield and terminal is part of that.

The standards that shape your project

Standard	What it covers
CAP 168 Licensing of Aerodromes	CAA requirements for licensed aerodromes, including visual aids and ground lighting. Certificated airports follow the equivalent UK aerodrome rules.
IEC 61820 series	Design and installation of constant-current series circuits for aeronautical ground lighting.
BS EN 12312-4	Safety requirements for passenger boarding bridges, part of the aircraft ground support equipment series.
NIS Regulations 2018	Cyber security duties for airports designated as operators of essential services, with the CAA overseeing aviation.
IEC 62443	Security of industrial automation and control systems across their lifecycle, for asset owners, integrators and suppliers.
BS EN 60204-1	Electrical equipment of machines, such as boarding bridges and other airside plant.

The standards listed are those most often relevant to control-system work in this sector. Which apply to your project, and how, is agreed with you at specification stage.

From specification to long-term support



An airport cannot close for an upgrade. We plan work around the flying programme, airside access and night-time windows, keep existing systems running until new ones are proven, and test logic against a simulation before it reaches site. You receive the design, code and records to operate the systems and support your regulatory evidence.

Systems we engineer

- Aeronautical ground lighting control
- Passenger boarding bridge controls
- Fuel farm and hydrant systems
- Power distribution and utilities SCADA
- Terminal building and infrastructure SCADA
- Drainage pumping and pollution control

PLATFORMS WE WORK WITH

Siemens TIA Portal, S7 and PCS 7 • Rockwell • ABB • Schneider • Mitsubishi • Beckhoff • Emerson DeltaV • Honeywell • GE • WinCC, Ignition, AVEVA (Wonderware), FactoryTalk, iFIX and Citect SCADA

The evidence you receive at handover

✓ Functional design specification

✓ I/O list and cause-and-effect

✓ Alarm list and HMI interface

✓ FAT and SAT records

✓ As-built drawings and source code

✓ Method statements for common faults

Why customers choose us

Standards first

An ISO 9001 certified quality system, designing to the standards your sector demands, plus any you specify.

You own the system

Clear structure, open interfaces and complete documentation, so you can support it yourself or with any vendor.

Tested before site

Control code is version-controlled and tested against a simulated plant before factory and site acceptance.

Multi-vendor

Siemens, Rockwell, ABB, Schneider, Mitsubishi, Beckhoff, Emerson, Honeywell and GE platforms.

In it for the long term

For us a project is not finished until the control system is decommissioned. 24/7 support is available under a support agreement.

OUR PROMISE

Standards-led, fully documented control systems that you own and can support.

GET IN TOUCH

Talk to us about your project

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