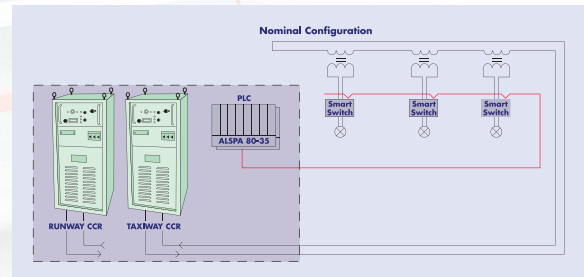


SmartSwitch



Remote intelligent lamp switching & monitoring unit

Features (safety)

- Unmatched communication reliability
- High communications speed typical stopbar/lead on back indication within 2 seconds (actual 500ms)
- User configurable fail safe modes
- Onboard microprocessor is constantly monitored by Independent watchdog chip to ensure safe operation
- Communications completely independent of primary loop equipment
- Communications signals have no effect on existing CCRs
- No shield required on primary cable
- No insulation resistance requirements on primary cable
- No special primary loop cable routing requirements to avoid high frequency pick-up or radiation
- No special performance requirements for existing isolating transformers
- CCR circuits can freely accommodate SmartSwitched and non-SmartSwitched fittings
- PVC compound K32LT to BS 6746 T12. Finish colour is congo red
- Switching and monitoring of LED lighting

Compliance with standards

- CAP 168
- ICAO Annex 14

Application

The [atg airports](#) SmartSwitch offers full individual lamp control with true back indication for safe monitoring of runway, taxiway stopbars and lead-ons. Capable of providing adjacent lamp fault detection for ICAO category 3 systems, it has been designed to be an essential component in Surface Movement Guidance Control Systems (SMGCS) for the full range of airports from regional hubs to major internationals.

Description

The [atg airports](#) SmartSwitch offers full real time individual lamp control and monitoring via a multi-drop serial link. Lamp monitoring includes lamp status, lamp blown open circuit and short circuit detection and secondary RMS current measurements. The [atg airports](#) Smart Switch is capable of controlling either a single lamp or a group of lamps.

The security and reliability of communications is ensured by utilising a RS485 standard data link operating over ordinary fieldbus cable. This benefits from a mature and proven technology with a worldwide base in excess of hundreds of thousands of communications links. Such communications links are widely used in other safety related applications.

Functions (control)

- Control and monitoring in real time
- Switch on and off on serial link command
- Monitor and report lamp status on a regular basis
- In the event of open circuit, the unit short circuits lamp transformer secondary
- Failsafe modes: on, off, freeze/on, freeze/off. Including options for different modes high VIS / low VIS
- Flash option to support fully monitored inset runway guard lights or non-monitored (in conjunction with the TSU).

Communications

- Communications are base upon ESP, asynchronous half duplex (2-wire), using RS485 signal levels with a data rate of up to 19.2kb
- Up to 200 elements may be multi-dropped on a single link
- Communications cable is a screened single twisted pair fieldbus, optionally insulated up to 5kv
- Full isolation between communications and power circuits.

Environmental

- The **atg airports** SmartSwitch is of rugged construction, encapsulated to IP68
- Resistant to chemicals associated with airports
- Capable of being installed in FAA - 868 deep bases
- Ambient operating temperature is -20°C to +65°C
- EMC rated to individual standard EN 50 081-2.

Power requirements

- Power supply is from the secondary side of the lamp transformer
- Power consumption less than 2W (lamp on condition)
- Minimum current 2A RMS
- Power connection is by FAA L-823 style connectors so that it can safely be run in primary circuit ducts.

Packing data

| | |
|---------------------------------|-----------------------|
| Net Weight | 2kg per switch |
| Gross Weight (48 switch carton) | 122kg |
| Carton Size | 710mm x 410mm x 535mm |



atg airports ltd
Lowton Business Park | Newton Road
Lowton St. Mary's | Warrington
WA3 2AP | United Kingdom

atg airports inc
7857 Drew Circle #11
Fort Myers | Florida 33967
USA



📞 UK: +44 (0) 1942 68 5555 | USA: 001 (239) 985-9406

🌐 www.atgairports.com ✉ products@atgairports.com ✉ sales-usa@atgairports.com

SmartSwitch