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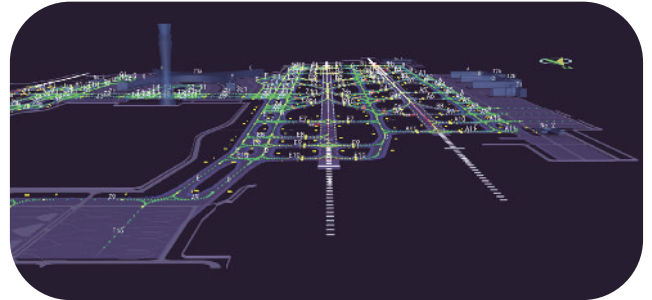
Airfield Lighting Systems (UK) Limited



ALCMS-C Airport Lighting Control and Monitoring System



- ICAO • Aerodrome Design Manual Part 5
• Annex 14 Vol. 1
- CAAC • AC-137-CA-2019-08
- FAA • AC 150/5345-56
- EASA • CS-ADR-DSN



FEATURES

SAFETY

Prevention of intensity control errors

- Commands will be resent automatically in case of failure
- Verification of commanded step and delivered step
- Verification of intensity steps on the circuits of the same designation

Anti-misoperation

- Screen lock
- Double confirmation of key operations
- Voice prompt on important operations

RELIABILITY

- Distributed and modularized system structure
- Redundant hardware and software providing swapping with no disturbance
- 1000M LAN
- Multiple fail-safe modes
- Dedicated Industrial-grade substation equipment
- 48 months data storage minimum
- Intelligent event analysis and processing
- Choice of 300+ airports worldwide

FRIENDLY HMI

- Multi-view 2D/3D display
- 100% representation of actual location of lights in the flight zone
- 360-degree vector zooming in and out
- Alarm classification
- Human voice prompt
- Customized to the specific needs of users
- Multilingual interface

TECHNICAL DATA

Operating Temperature • 0°C~+40°C

From command input until acceptance or rejection < 0.5s

From command input until control signal output to regulator or other controlled unit < 1s

For system to indicate that a control device has received the control signal < 2s

Back indication to tower display of regulator initiation < 1s

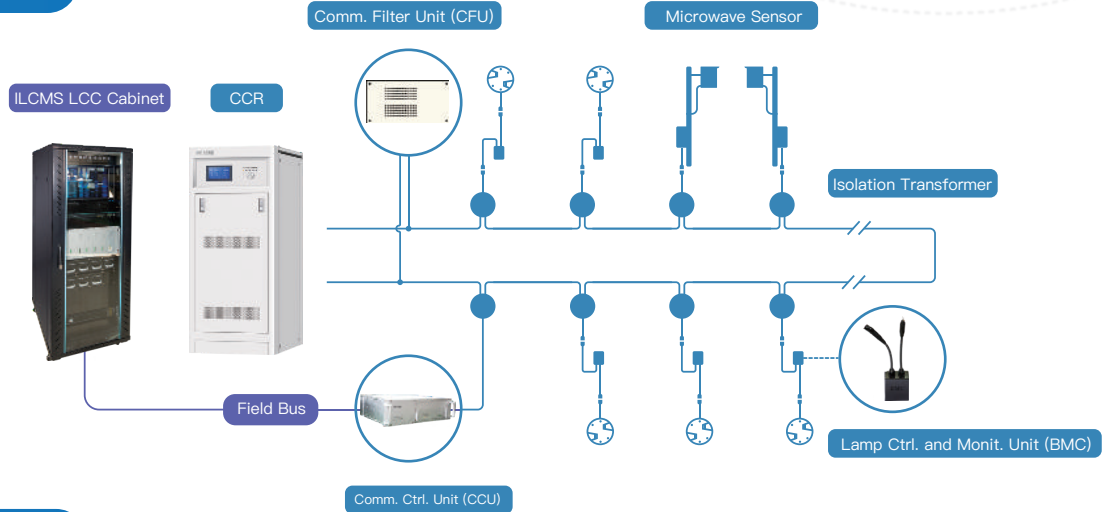
Humidity • 0~90%

Switch-over time to redundant components in event of system faults < 0.5s

Automatic detection of failed units and communication lines of the monitoring system < 10s

INDIVIDUAL LAMP CONTROL AND MONITORING SUBSYSTEM

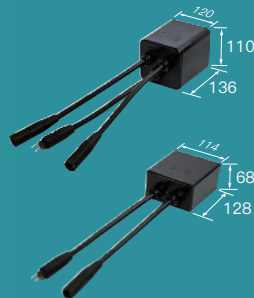
ARCHITECTURE



FEATURES

- A-SMGCS oriented design
- Power line carrier communication, no dedicated cabling required
- Response time < 2s
- Detection and control accuracy $\geq 99.98\%$
- High fault tolerance communication with lower rate of false alarms
- Military-grade components and strong environmental adaptability
- No special requirements for isolation transformers
- Compact Lamp Ctrl. and Monit. Unit, fitting in the isolation transformer box
- Clear indication of Lamp Ctrl. and Monit. Unit fault or lamp fault
- Multiple interfaces of international compliance
- 10000+ nodes application in a single project

Lamp Ctrl. and Monit. Unit (BMC)



Lamp power (@6.6ARMS)	$\leq 300W$
BMC power (@6.6ARMS)	< 4.5W (single output) / < 9W (dual output)
Operating temperature	-40°C ~ +85°C
Weight	1.5kg (single output) / 2.9kg (dual output)
Protection class	IP68

Stop Bar Control

