

ILCMS PATHFINDER

Individual Lamp Control & Monitoring System



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FAA AC 150/5345-56 • AC 150/5340-30

EASA CS-ADR-DSN

EN 50499

NATO STANAG 3316/AATMP-07 (AGL)

FEATURES

- Power line carrier communication for AGL series circuits, no separate cabling required
- Extreme small remote unit, low power consumption, IP68 rating
- Continuous operation at high temperature up to 85°C
- Redundant hardware and software with seamless failover
- 17,000+ remote units deployed in single project
- Suitable for A-SMGCS in CAT I/II/III conditions
- Up to 300 lights per series circuit
- Up to 20 km series circuit length
- Up to 128 control groups per circuit
- 64 groups switchable in one command

BMC REMOTE UNIT

Operating Temp	-40°C to +85°C
IP Rating	IP68
Input	1.8-8.3A, 50/60Hz
Power (Max)	5W (1-ch) / 8W (2-ch)
Dimensions	145 x 65 x 65 mm
Connection	FAA L-823 2-pin plug
MTBF	>80,000h @6.6A, +85°C
Weight	0.9kg (1-ch) / 1.0kg (2-ch)

CPC & CPU

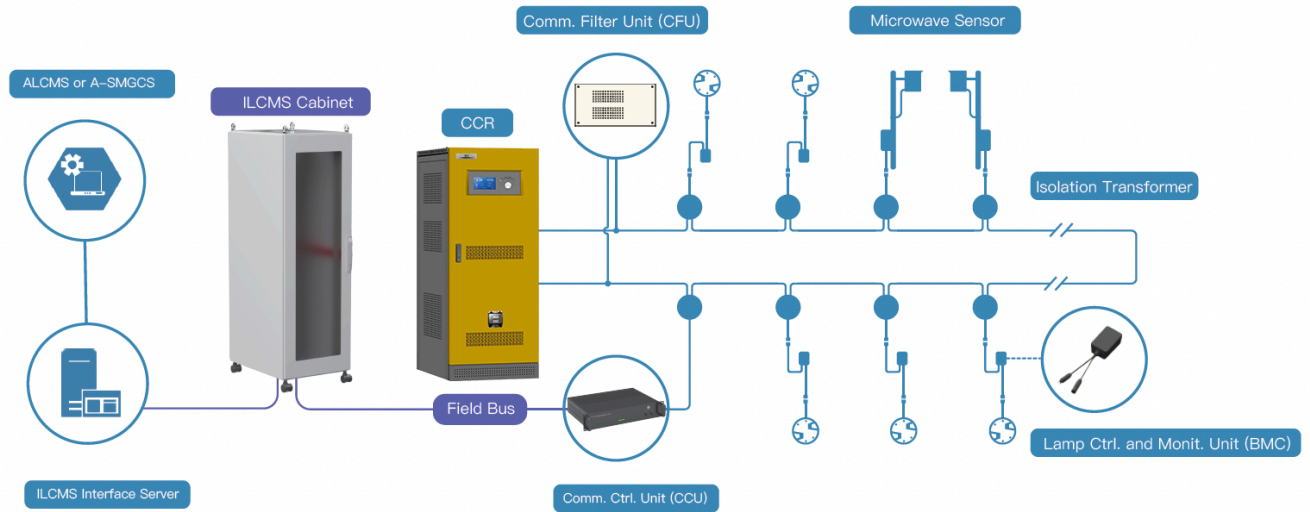
Central PC & Interface Server

Operating System	Linux
CPU	Intel Xeon Processor
Storage	Redundant SATA HD
Power	Max 600W @220V
Installation	Rack-mounted on 19" rack
Communication	10/100/1000 Mbps Ethernet

CCU CONTROLLER

Operating Temp	-10°C to +55°C
Humidity	10-95%
Input	24Vdc
Power (Max)	90W
Installation	19" rack or integrated to CCR
Communication	RS-485 or Ethernet

SYSTEM ARCHITECTURE



BMC REMOTE UNIT



3-Channel BMC

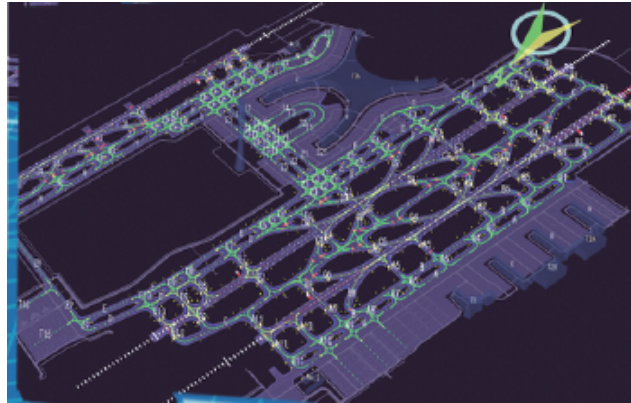


2-Channel BMC

SYSTEM CAPABILITIES

Max Lights Per Circuit	300
Max Circuit Length	20 km
Max Control Groups	128 per circuit
Group Switching	64 groups per command
Deployed Scale	17,000+ remote units
A-SMGCS Support	CAT I/II/III
Communication	Power line carrier
Redundancy	Full HW/SW failover

SYSTEM OVERVIEW



The ILCMS Pathfinder is an advanced Individual Lamp Control and Monitoring System designed for airfield ground lighting. Using power line carrier communication technology, it eliminates the need for separate communication cabling while providing precise control and monitoring of up to 300 lights per series circuit. The system supports A-SMGCS operations in CAT I/II/III conditions with redundant hardware and software ensuring continuous operation.

CPC & CPU SPECIFICATIONS

Operating System	Linux
Processor	Intel Xeon
Storage	Redundant SATA HD
Power Supply	Max 600W @220V
Rack Mount	19" standard rack
Network	10/100/1000 Mbps Ethernet

CCU & BMC SPECIFICATIONS

CCU Temp Range	-10°C to +55°C
CCU Power	Max 90W, 24Vdc input
CCU Interface	RS-485 or Ethernet
BMC Temp Range	-40°C to +85°C
BMC Protection	IP68
BMC Connection	FAA L-823 2-pin

NOTES

[Additional specification notes, installation guidelines, or warranty information can be added here]