

ARC Area Controller

Twelve programmable lighting outputs with power conversion, local control and Ethernet connectivity in one compact 1U platform.

ARC 121

ARC 8141



12 channels | 1,200 W total | 24-57 VDC input

Area-level lighting power and control

ARC moves programmable LED drivers and control out of the luminaire and into an accessible networked controller. Each output can serve a constant-current, constant-voltage or constant-power load.

12

INDEPENDENT OUTPUTS

1,200 W

TOTAL OUTPUT

100 W / 4 A

MAX PER CHANNEL

1U

RACK FORMAT

WHY ARC

- One controller for power and control**
 Combines remote LED driving, dimming, scheduling and local device communications.
- Programmable output by channel**
 Configure each output for constant current or constant voltage and set the required level.
- Networked for building-scale deployment**
 Connect multiple ARCs through 10/100 Ethernet and integrate through the RESTful API.
- Fine dimming performance**
 16-bit control supports 0.01% dim-to-dark performance with compatible loads.

CHOOSE THE POWER ARRANGEMENT

ARC 121

Single-input configuration

One 24-57 VDC input powers all 12 lighting outputs. Best for areas served by one normal power source.

ARC 8141

Dual-input 8 + 4

Input 1 powers eight outputs. Input 2 powers four outputs and supports a separately sourced normal or emergency-capable lighting group.

Emergency configurations require project-specific engineering, applicable listings and AHJ approval.

APPLICATIONS

HOSPITALITY

COMMERCIAL OFFICES

HIGH-END RESIDENTIAL

WAREHOUSE + FLEX

ENTERTAINMENT

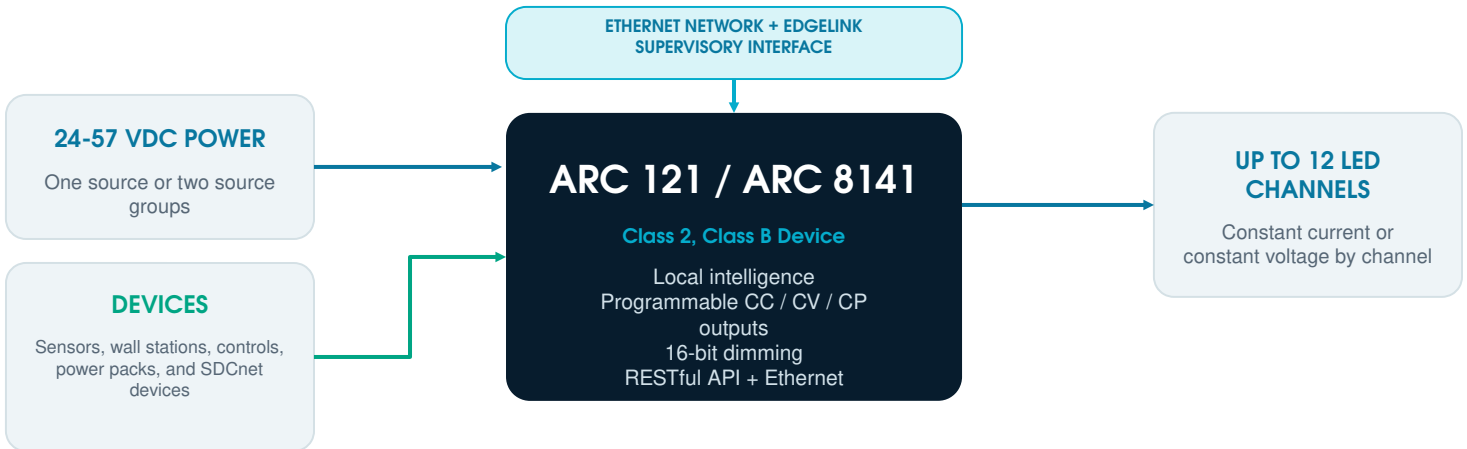
Add ARC to your next SmartDC lighting package.

Ask a SmartDC representative for design support, project review and integration guidance.

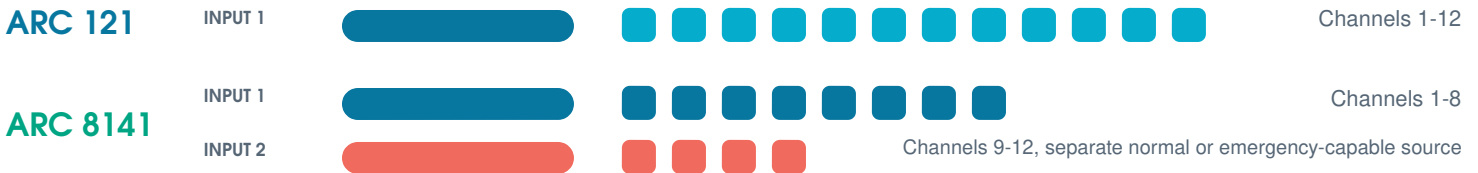
Power, control and networking at the area level

One networked controller between building systems and the lighting loads

ARC receives low-voltage DC power, communicates with local control devices and drives up to 12 LED channels. Ethernet connects each ARC to the facility network and supervisory interfaces.



POWER INPUT ARRANGEMENTS



Emergency system design, listing and use remain subject to final engineering, applicable codes and AHJ approval.

TECHNICAL OVERVIEW

INPUT

24-57 VDC

OUTPUTS

12 independently configurable CC or CV or CP channels

OUTPUT VOLTAGE RANGE

Programmable 12-55VDC

OUTPUT CURRENT RANGE

Programmable Up to 4A in 100mA increments

POWER

1,200 W total, up to 100 W (VA) per output

LED OUTPUT CURRENT TOLERANCE

+/-1%

CERTIFICATIONS

ETL LISTED TO UL 2108, UL 1310, UL 8750, CSA C22 and CE

DIMMING

16-bit control with 0.01% dim-to-dark capability

NETWORK + API

10/100 Ethernet, SmartDC control and RESTful API

PROTECTION

Automatic resetting overload and short-circuit protection

ENVIRONMENT

0-45 C, 0-95% RH non-condensing, dry location

INSTALLATION

Standard 1U rack opening or wall mountable with removable mounting brackets



Meets the requirements of federal procurement law under the Buy America Act (FAR 52.225-9)