

Inverter systems

A complete guide to powering your existing lights as emergency lights



by ABB

- Benefits of using existing lights
- Benefits of using existing wiring
- Eliminate manual maintenance for testing and audit trails
- Comply with life safety codes

Lumacell®

Providing optimal light in an emergency
with our mini-inverter systems

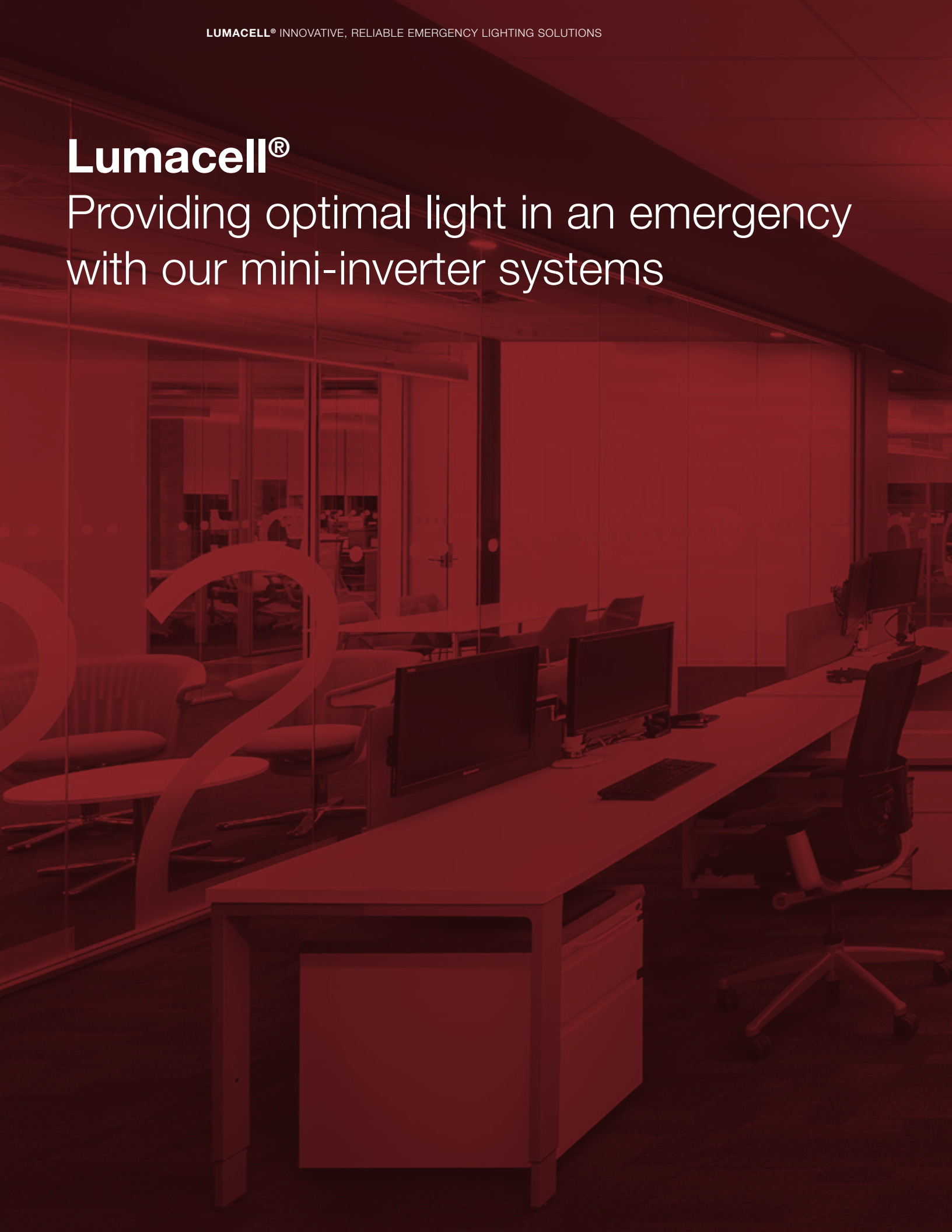


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Benefits of using existing lights as your emergency lights

We all know the feeling of walking in a large building and having no idea where to go. Roaming through hallways, taking wrong turns or trying to find your way out of a building can be difficult, especially in the event of an emergency.

Emergency lighting and exit signs are essential for commercial buildings, where individuals need to evacuate quickly and safely.

Now imagine if your normal electrical supply is interrupted by an emergency, but instead of just emergency lights and pictogram signs, your existing lights worked in conjunction with your emergency lights to illuminate and direct occupants to the nearest exit. Using your existing lights as emergency lights could provide dual support, allowing individuals in the building to see clearly, avoid obstacles and confidently find to the nearest exit during a power failure.

Use your existing lights as an emergency lighting solution

Keep building aesthetics in place

Maintain the look of existing lights without adding separate emergency lighting units. Ideal for rooms with specific architectural designs, reception areas and lobbies, as well as in commercial and retail spaces.

Comply with life safety codes

As emergency lighting is directly linked to life safety, codes and regulations demand strict compliance in the design, installation and maintenance of a fixture and other emergency lighting equipment.

Reduce initial and ongoing costs

By eliminating the need for separate emergency lighting units, initial installation costs are significantly reduced. Using inverters instead of self-powered emergency lights simplifies maintenance and testing.



Mini-Inverters

For multiple luminaires requiring up to 1440W at a distance of up to 1000 feet





The most versatile, flexible emergency power option

- Delivers 100% power/lumen output of the fixture
- Ideal for locations with limited space to house power systems



Mini-Inverters

Product matrix

	Mini-Inverter Series	Mini-Inverter 1000W/60 Min.
		
Certification		
Housing	Heavy-duty 14-gauge steel cabinet	Heavy-duty 14-gauge steel cabinet
Application	NEMA 1	NEMA 1
Testing	Non-Audible self-diagnostic (Standard) Advanced-diagnostic, audible (Optional) Manual Test Switch (Optional) nexus (Optional)	Non-Audible self-diagnostic (Standard) Advanced-diagnostic, audible (Optional) Manual Test Switch (Optional) nexus (Optional)
Battery	Lead-Calcium	Lead-Calcium
Mounting	Surface mount	Surface mount
Load capacity/ wattage output	300W, 600W, 1000W, 1440W	1000W/60 Min.
Voltage	120/120 VAC or 347/347 VAC, 60Hz Input	120/120 VAC, 60Hz Input
Lumen output	Full Brightness Output	Full Brightness Output
Options	*15min Time Delay *Service Alarm contact	*15min Time Delay *4 output circuits *Service Alarm contact
Compatibility	Lamps: LED, Incandescent and Fluorescent	Lamps: LED, Incandescent and Fluorescent
Warranty	1 year	1 year
Operation	Normally-on, normally off or switched loads	Normally-on, normally off or switched loads
Electronics	Pure Sine wave Inverter	Pure sine wave Inverter

Mini-Inverters 300W, 600W, 1000W and 1440W

Power multiple lighting units, single output circuit

Mini-Inverters offer single-point maintenance, Advanced Diagnostics and Nexus® compatibility.



Heavy-duty steel cabinet;
scratch and corrosion resistant
white semi-gloss powder-coat paint finish

- Allows remote mounting up to 1,000 feet from emergency lighting fixtures; ideal for powering an entire floor in a building
- Provides pure sine wave output to meet the specific requirements for emergency lighting
- Operates incandescent, LED, fluorescent and ballast combinations, including 0-10V dimmers
- Supplies 100% lumen output with less than 1 second transfer time
- Runs switched, normally-on, or normally-off fixtures
- Minimizes maintenance with standard self-diagnostics, and optional Nexus® compatibility
- Meets or exceeds all Canadian Electrical Code and National Building code Emergency Lighting Requirements; cUL924 Listed
- 1-year warranty and 9-year pro-rata battery warranty



Mini-Inverter

1000W/60 min. with 4-output circuit for mixed loads of multiple lighting units

High-capacity Mini-Inverters include a 4-output circuit to offer an extremely versatile solution for many applications.



Heavy-duty 14-gauge steel cabinet
in white semi-gloss powder-coat paint finish

- Optional 4-output circuit, each with a fuse breaker and 0-10V dimming control capability to easily connect multiple circuits of mixed loads
- Runs switched, normally-on, and normally-off fixtures
- Operates incandescent, LED, fluorescent and ballast combinations, including 0-10V dimmers
- Allows remote mounting up to 1,000 feet from emergency lighting fixtures; ideal for powering an entire floor in a building
- Small footprint; accommodates wall mounting
- Provides pure sine wave output to meet the specific requirements for emergency lighting
- Supplies 100% lumen output with less than 1 second transfer time
- Minimizes maintenance with standard auto-diagnostics, and optional Nexus® compatibility
- Meets or exceeds all Canadian Electrical Code and National Building Code Emergency Lighting Requirements; cUL924 Listed
- 1-year warranty and 9-year pro-rata battery warranty



Nexus[®]Pro

Intelligent emergency lighting management system

Mini-Inverters – now compatible with Nexus[®]Pro 300W, 600W, 1000W, 1000W/60 min. and 1440W



Nexus[®]Pro is designed to enable building owners and managers to easily maintain and test emergency lighting, without the need to visually verify performance or disrupt the power supply.

With digital solutions, building owners now can have peace of mind knowing their buildings are safer than ever. All operations can be managed remotely, giving building owners and managers complete control wherever they are, whenever they need it most while preventing any human error in the process.

Global connectivity

Platform



The Nexus[®]Pro intelligent emergency lighting management system uses IoT connectivity to optimize safety using an app and web interface



Set up

Easily install and add new devices through your smart device



Maintain

Defective devices are automatically detected and reported on your interface in addition to push notifications



Test

Run test instantly or program them to ensure that all your devices are working properly



Share

Easily share the results of tests with team members, maintenance staff and technicians



Cost effective

- Reduce labor costs for maintaining emergency lighting
- Saving on cost and labour on manual collection and recording of emergency lighting data
- 200 emergency lighting units on one gateway
- Reduce monitoring costs by simply receiving notification once there is defective device



User friendly

- Monitor remotely anywhere at anytime
- Fast and easy testing with a smart device
- Interactive 2D floor plan layout showcasing emergency lighting positioning
- Software updates automatically applied
- Easily go from one building to many with our scalable system



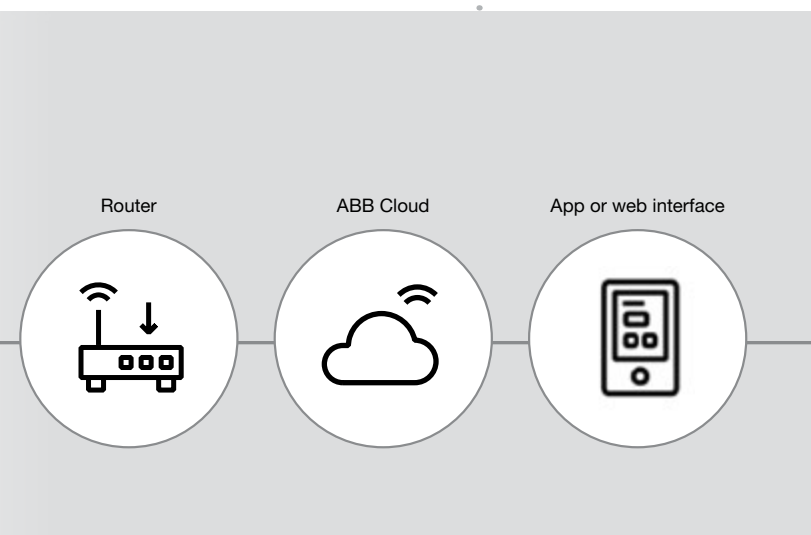
Enhanced safety and protection

- Comply with Building and Life Safety Codes and other North American regulations
- Real-time self-monitoring and maintenance alerts if units stop functioning
- Holds all emergency lighting testing and maintenance data in a secure ABB cloud
- Ownership of maintenance data input, quick testing and device monthly and annual scheduling



Improve installation efficiency

- Quick and flexible commissioning
- Ease of use due to app configuration
- Get diagnostics and part number recommendations during failures



Please scan the QR code to download our Nexus®Pro app and to view our complete Nexus®Pro brochure.



IOS



Android



Nexus®Pro brochure

Nexus[®] real-time automated monitoring

Eliminate manual maintenance for testing and audit trails

Connect Mini-Inverters to Nexus[®]
for a system that monitors itself.

- Manages the status of an entire emergency lighting system from a central control unit
- Reduces testing/service time for minimal maintenance costs
- Ensures code compliance with automated testing and record-keeping
- Provides extremely high levels of system reliability and performance
- Accommodates single buildings or a group of properties with wired and wireless system options
- Protects network integrity with robust software, enhanced cyber security, a strong signal, and superior penetration through building materials; ideal for industrial applications
- Supports green building initiatives and LEED certification





Lumacell®

Your partner in success

Satisfaction at every step
of the process

Our North American team works with you to make sure you have the most efficient solution that meets your specifications. Lumacell® products are designed for durability, reliability, and ease of use.

With Lumacell®, our solution is:

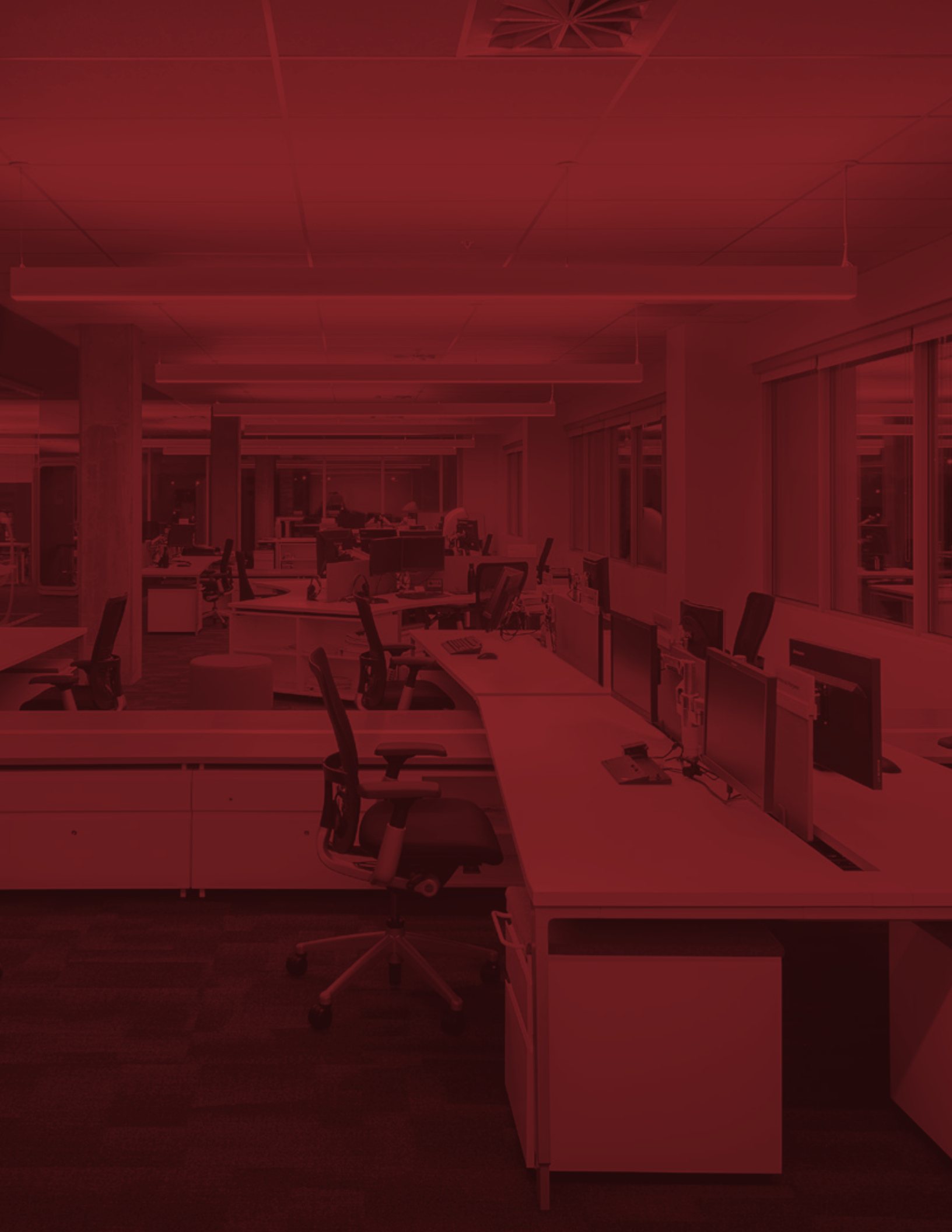
- Easy to install and maintain
- Compliant with codes, regulations and standards – certifications available
- High quality and reliable for maximum safety

Expect fast shipping, prompt
service, and ongoing support

Not only can we provide extremely short lead times, we also offer product customization at our North American manufacturing center. Our engineering team and product designers work together to create innovative new products and unique solutions that continuously help you become more efficient.

With Lumacell® you have peace of mind that your life safety equipment will perform when you need it.





LUMACELL

ABB Installation Products Ltd

lumacell.ca

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