

Designed to...

ADAPT



BALDUR

LED light line system

New. Innovative. And yet experienced.

Nordeon is a new, innovative manufacturer of LED luminaires and lamps with over 100 years of experience. Founded in October 2012 with the acquisition of the Philips development and manufacturing facility in Springe, Germany, the company expanded operations in December 2012 with the acquisition of the Philips production site for fluorescent lamps in Chalon sur Saône, France.

Nordeon combines the experience of professional engineering of LED luminaires with the speed and flexibility of a newcomer. Springe is one of the largest LED fixture manufacturing facilities in Europe, with the latest industrial equipment and lean production processes. We strive to achieve high energy savings for our customers by rethinking the way lighting products are developed, produced, and sold. Our objective is a two year payback, always with German quality, assembled in the USA! Currently Nordeon shares a manufacturing facility with HessAmerica in Gaffney, SC. Products are assembled there for the North American market.

02

Nordeon. A member of the Nordeon Group



Nordeon LED luminaire development and manufacturing site in Springe, Germany.



Nordeon and HessAmerica production site in Gaffney, South Carolina.



DEVELOPED IN GERMANY
ASSEMBLED IN THE USA

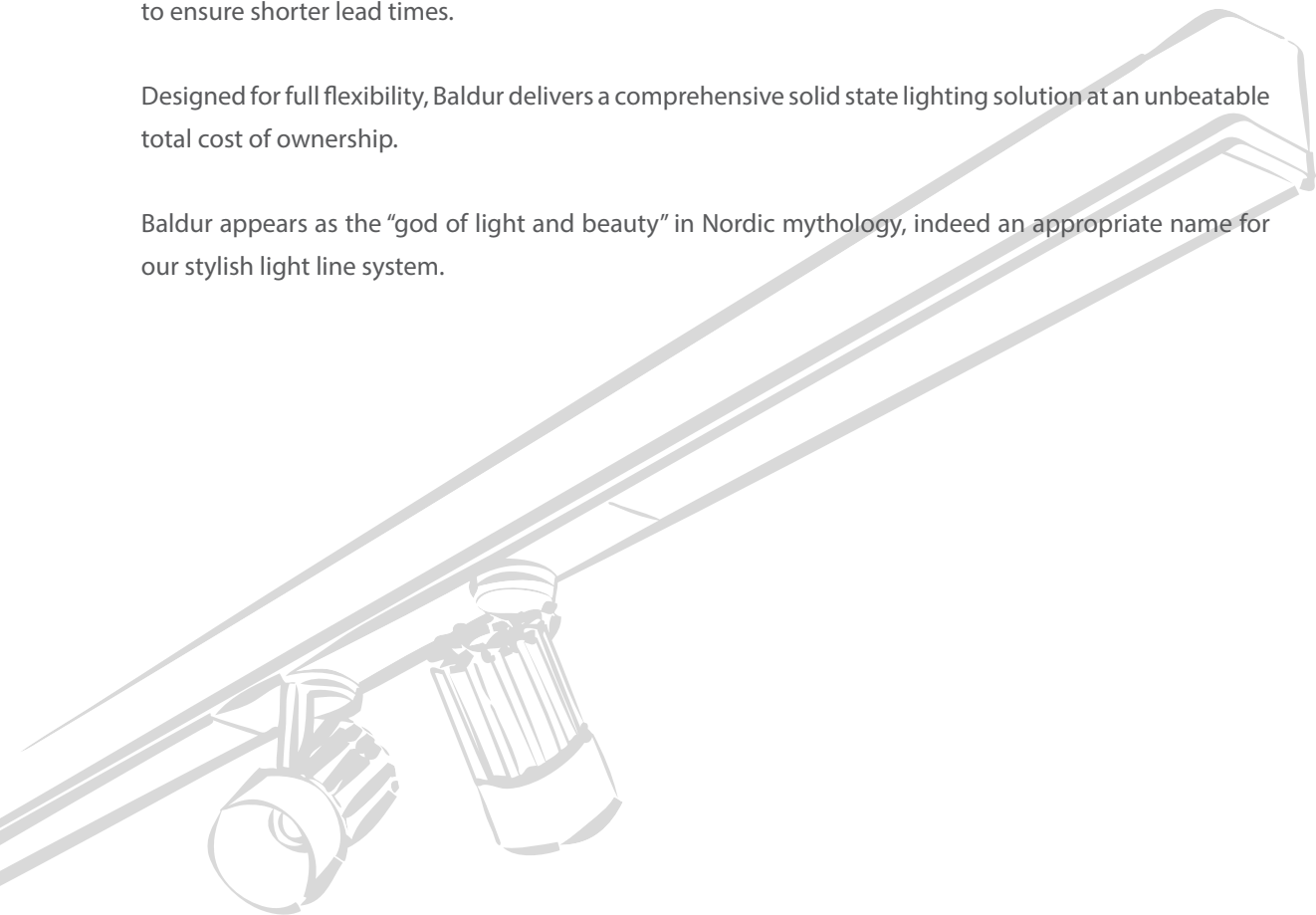
Baldur - developed by the inventors of the light line system

Since 1974, high quality light line systems have been developed and produced successfully in Springe, Germany. It started with AEG branded Gealux, the world's first light line system. The Gealux was succeeded by a second generation system developed during Philips ownership and is currently one of the most widely sold light line systems ever. Under Nordeon, the third generation system is now available as Baldur. Baldur follows the tradition and creates a new benchmark for LED light line systems through a thorough knowledge of customer requirements and quality demands in retail, office, and industry.

Now available in the US, Baldur has been adapted to American standards and is assembled domestically to ensure shorter lead times.

Designed for full flexibility, Baldur delivers a comprehensive solid state lighting solution at an unbeatable total cost of ownership.

Baldur appears as the "god of light and beauty" in Nordic mythology, indeed an appropriate name for our stylish light line system.





BALDUR CONFIGURATIONS



04

INTEGRATED SKADI LED SPOTS



*BALDUR SURFACE OR
PENDANT MOUNT*



Aesthetic design

One system for both general lighting and accenting

- Visually attractive continuous light line
- Stylish design with minimized dimensions, cross-sectional area is only 25% of conventional trunking systems
- Streamlined appearance through modular components and integrated drivers
- Elegant trunking system provides electrical and mechanical infrastructure for general lighting and accenting, even in recessed models

05





2 year payback

Nordeon's objective is to reduce the total cost of ownership and improve the customer's lighting experience. By introducing lighting solutions designed for a 2 year payback, the penetration of LED technology is accelerated through substantial energy savings and better lighting while contributing to a sustainable planet. This is achieved by rethinking the way lighting products are developed, produced, and sold. Lower maintenance costs and quick installation play an important role in our approach.

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Baldur, with its remarkably high luminous efficacy of up to 125 lumens per watt, provides up to 50% reduction in energy consumption compared to conventional solutions. Energy savings of 70% or more can be achieved when combined with daylighting controls or occupancy sensors.



Perfect flexibility

- Easy installation and configurability
- Wide variety of optics and lumen packages
- Adaptable wiring options and positioning of units
- SKADI spots or easy integration of track lighting from other manufacturers
- Wide variety of mounting options
- Quick installation and effortless adapting

Easy installation and configurability

- Full flexibility in placement of general lighting units, spots, lighting controls, and emergency lighting units at any position along 2-foot increments. Blind covers complete the system.
- Easy to reconfigure as needed, no technical skills required.
- Easy installation of lighting units into trunking line with the Nordeon *ClickFast* system.





Wide variety of optics and lumen packages

Seven lighting distributions for a wide variety of applications.

A Narrow beam for high halls and tall rack areas

Installation height: 20 - 40'

Glare rating: $UGR_R 22$

B Medium beam for general lighting in open areas

Installation height: 16 - 23'

Glare rating: $UGR_R 19$

C Wide beam for low installation heights

Installation height: 10 - 16'

Glare rating: $UGR_R 22$

D Batwing distribution for shelf lighting in retail

Installation height: 10 - 12'

aisle width: 6 - 7'

approx. 7' height of the shelves

Glare rating: $UGR_R 22$

E Asymmetrical wallwasher for highlighting and illumination of vertical surfaces

Installation height: 9 - 16'

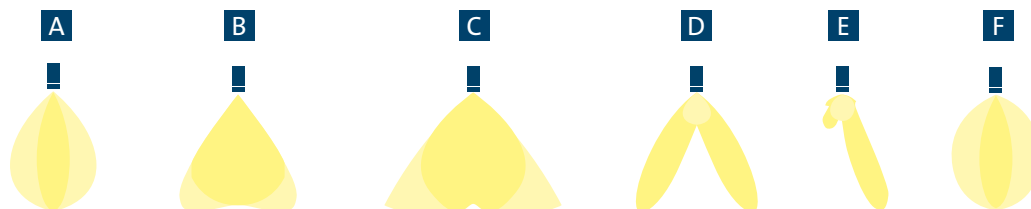
Glare rating: $UGR_R 22$

F Diffused Optics for commercial applications and offices

Installation height: 9 - 12'

Glare rating: $UGR_R 22$

o8



Adaptable wiring options and positioning of units

The number of wires and spacing between connectors are designed to provide optimal flexibility.

The standard 7 wire configuration allows lighting units with optional 0-10V dimming and emergency lighting to be combined in a single run. The 9 wire option accommodates lighting units equipped with DALI combined with emergency lighting. Connectors are located every 2 feet in the trunking system, giving customers optimal flexibility to connect modules anywhere along the run.

FLEXIBILITY IN WIRING: 7- OR 9-WIRES

7-WIRES	L1,L2,L3,N, PE, EL+- (emergency lighting)
9-WIRES	L1,L2,L3,N, PE, DA+-, EL+- (DALI and emergency lighting)

ELECTRICAL CONNECTORS

2FT-PITCH	Distance between electrical connectors : 22 1/4"
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Integration of track spots

The track module can be easily integrated into the trunking system to allow use of spots from other manufacturers.

Wide variety of mounting brackets



Ring-tail suspension



Surface mount



T-profile



Aircraft cable



Eye

Quick installation and effortless adapting

- The Nordeon *ClickFast* system enables safe and easy click-in installation of lighting units into trunking line.
- Quick installation is facilitated by trunking sections up to 11 ft and suspension point distances up to 11 ft



A Connect trunking sections



B Select electrical phase at the unit



C Click lighting unit into trunking line



D ... all units can be removed and easily placed at other positions when desired

Baldur uses the latest state-of-the-art components available.





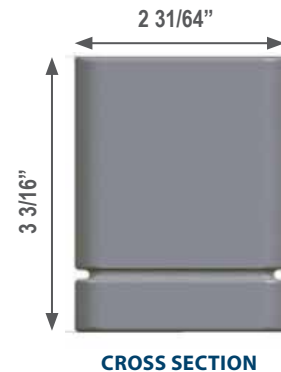
Baldur lighting units - range overview

DELIVERED LUMENS	CCT / CRI	LED DRIVER	OPTIC	NOMINAL LENGTH LIGHT UNIT	COLOR OF HOUSING	DIMMING (optional)
4000 LM	3000 K / CRI 80	UNV (standard) 120 - 277V	WB (wide beam)	3.7 ft (3' 8 1/4")	WHITE (RAL9016)	DIM (0-10V)
6000 LM	3500K / CRI 80		MB (medium beam)		5.5 ft (5' 6 3/8")	SILVER (RAL9006)
6000 LM	4000 K / CRI 80	NB (narrow beam)	DA20 BATWING (double asym. max. at 20°)			
9000 LM	5000K / CRI 80 (optional)	347V (optional) (4000 and 6000 LUMENS ONLY)	WW (wallwasher)		BLACK (RAL9005)	
			DF1 (NB diffused)			
			DF2 (classic diffused)			

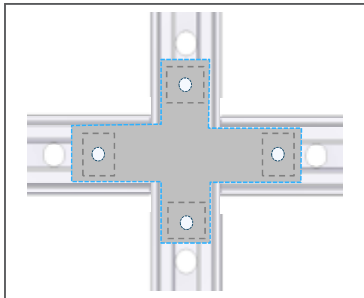
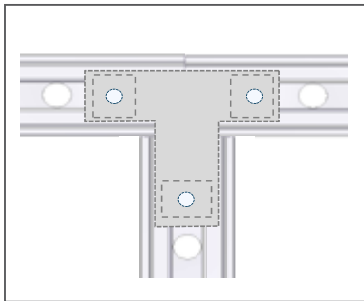
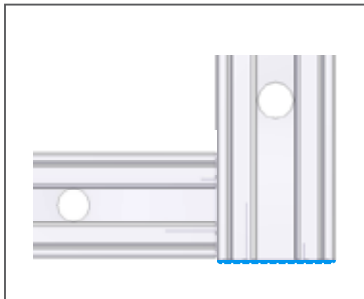
Lighting units are available with optional 0-10v dimming, occupancy sensors, or emergency lighting.
Blind covers are available in metal or plastic with finishes to match the system.

Baldur trunking sections - range overview

WIRING	DISTANCE BETWEEN ELECTRICAL CONTACTS	LENGTH	COLOR OF HOUSING
7	2 ft (1' 10 1/8")	3.8 ft (3' 8 1/4")	WHITE (RAL9016)
9 (optional)		5.6 ft (5' 6 3/8")	SILVER (RAL9006)
		7.4 ft (7' 4 1/2")	BLACK (RAL9005)
		11 ft (11' 3/4")	



L, T and X Connectors



Specifications

LUMINOUS EFFICACY (LM/W)	up to 125 lm/W on system level
LED MODULE	Philips Fortimo LED Line 1R
LIFETIME (L70)	50,000 hours
COLOR TEMPERATURE	3000K (warm-white), 3500 (neutral white), 4000K (neutral white) and 5000K (cool-white) For other color temperatures, contact factory.
COLOR RENDERING (CRI)	Ra > 80
LED DRIVER	Philips Xitanium 0-10V, 347V optional, 120-277V DALI optional
OPTICS	Optics from PMMA available in the following options: narrow beam, medium beam, wide beam, batwing, wallwasher, narrow beam diffused and diffused architectural
DELIVERED LUMENS	4000 or 6000 lm for 3.7 ft units, 6000 or 9000 lm for 5.5 ft units
MOUNTING OPTIONS	Brackets for suspension with aircraft cable, chain, or surface mounting
MATERIAL, COLOR	lacquered steel in white (RAL9016), silver (RAL9006) or black (RAL9005)
CERTIFICATIONS	CSA, CE, ENEC
PROTECTION CLASS	I
PROTECTION LEVEL	IP40

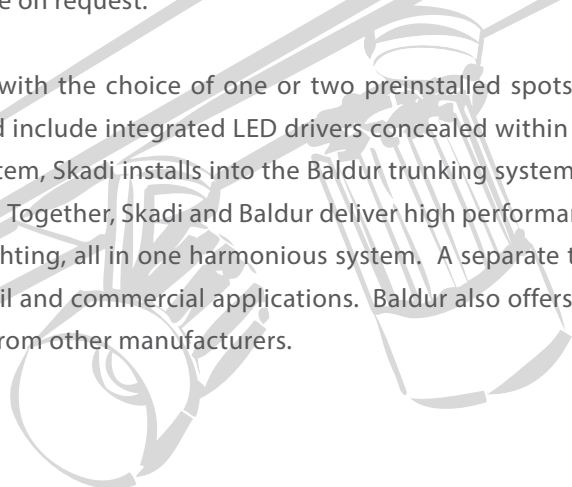


Skadi for bright accent lighting - LED spot designed for Baldur system

The arrow of Skadi, the “bow hunting goddess” in Nordic mythology, hits the target like the light beam of our spot hits the goods in the shelves.

Skadi spots blend perfectly with the Baldur system through consistent stylish design and minimized dimensions. The luminaires provide high performance LED accent lighting with a selection of three beam spreads in narrow, medium, and wide distributions and lumen packages up to 3000 delivered lumens. Color rendering up to CRI 90 satisfies even the most demanding interior applications. Skadi is available in three colors; white (RAL9016), silver (RAL9006) or black (RAL9005). Optional 0-10V dimming is available on request.

Skadi units are available with the choice of one or two preinstalled spots. The modules have a nominal length of 2 ft and include integrated LED drivers concealed within the trunking rail. With the Nordeon *ClickFast* system, Skadi installs into the Baldur trunking system with the same ease as the general lighting units. Together, Skadi and Baldur deliver high performance and high efficiency for general and accent lighting, all in one harmonious system. A separate track lighting system is no longer needed for retail and commercial applications. Baldur also offers an option to integrate track lighting luminaires from other manufacturers.



Skadi LED spot for Baldur - range overview



MODEL	DELIVERED LUMENS	CCT / CRI	LED DRIVER	OPTIC	COLOR OF HOUSING	DIMMING (optional)
BALDUR 1xSK (2' unit with 1 Skadi spot)	1600 LM (per spot)	822 (2200K, CRI>80) 827 (2700K, CRI>80) 830 (3000K, CRI>80)	UNV (standard) (120 - 277V)	NB (narrow beam)	WHITE (RAL9016)	DIM (0-10V)
BALDUR 2xSK (2' unit with 2 Skadi spots)	3000 LM (per spot)	835 (3500K, CRI>80) 840 (4000K, CRI>80)		MB (medium beam)	SILVER (RAL9006)	DALI 120-277V (optional)
		930 (3000K, CRI>90, only in 16W) 935 (3500K, CRI>90) 940 (3500K, CRI>90)		WB (wide beam)	BLACK (RAL9005)	



Retail

In retail lighting, three things are important: enhancing the attractiveness of retail spaces; ability to adapt the lighting system to seasons, promotions or layout changes; and reduction of operational costs.

Developed in close collaboration with our customers, the new Baldur system delivers all three elements: modularity and unobtrusive design, ease of lighting system reconfiguration, and a unique cost of ownership.

16

Baldur delivers:

- High quality illumination - homogenous general lighting and performance accents to highlight merchandise with good color rendering and glare control
- Up to 50% lower energy consumption compared to non LED solutions for general lighting and lower investment costs compared to "spots-only" solutions
- Best total-cost-of ownership, 2 year amortization time
- Stylish design in perfect scale
 - cross-sectional area is only 25% of conventional trunking systems
 - SKADI spots for Baldur with LED drivers concealed in the trunking rail
- Wide range of lighting distributions for diverse retail applications



Industry and Office

For industrial customers, it is important to reduce energy consumption and optimize the total cost of ownership. Energy efficient lighting solutions can make the difference.

At the same time, improvement of well being and productivity of employees is key in achieving better working results and a safer workplace. The Baldur LED light line system is the answer. It offers:

- Up to 50% lower energy consumption compared to non-LED solutions and 70% or more reduction in energy consumption when combined with daylighting controls or occupancy sensors
- Full range of optics ranging from batwing distribution for high rack areas in logistics to narrow beam distribution to replace high-bay luminaires
- Breakthrough in payback time: two years only, depending on the application
- Full flexibility in wiring options for DALI, lighting controls, or emergency lighting



Nordeon's Baldur Crowned \ \ The 28th Annual GIO Awards

Nordeon's Led Light Line System – Baldur was honored at the star-studded ceremony of the 28th Annual GIO Awards at the Dutch Cacao Factory in Helmond, Netherlands. The GIO Awards (Goed Industrieel Ontwerp-GIO) is one of the premier awards programs recognizing design excellence in the Netherlands.

Baldur, named after the Nordic "God of Light and Beauty", has an attractive aesthetic design, excels in adaptability, and provides the best light for every application.

Special attention was paid to the use and ease of installation of the system.

18

GOED INDUSTRIEEL ONTWERP | good industrial design awards



Nordeon \ \ LED lightline system BALDUR wins "reddot award"

With its outstanding and innovative design Nordeon's LED light line system Baldur convinces in one of the most prestigious international design competitions - the "red dot".

Within the category "product design" a top-class jury of design experts award the light line system Baldur in combination with the LED Spots Skadi for high design quality.



reddot design award





Aesthetic
design

2 year
payback

Perfect
flexibility



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