# LEDTEC



# REFRIGERATION LED SOLUTIONS

Perfect Lighting for Refrigerated and Frozen Products



# cooler POS

Perfect lighting for fresh products

LEDTEC provides powerful LED lighting solutions for refrigerated and freezer cabinets. Whether it's meat, cheese, or ready-made meals – your products are attractively staged, clearly illuminated, and optimally rendered in color. At the same time, you save energy and benefit from long-lasting technology that's easy to integrate.

# LINEAR LIGHTING

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# MANTUA

MANTUA is a powerful and efficient replacement for traditional T5 fluorescent tubes. Special mounting clips allow adjustment of the light emission angle to match the cabinet's layout ensuring ideal product presentation.

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### **SPECIFICATIONS**

24 V DC Voltage:

up to 2,500 mm Length:

■ Dimensions: 16 mm Material: PMMA clear, white Surface: Ra>80 CRI:



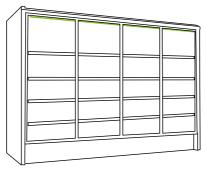
Lengths Color Temperatures. 4100 K. 6500 K. Fresh Red 930mm + 1230mm

**Custom lengths and other color** temperatures available upon request.





**Typical Application: Top lighting** 





# SIENA

Thanks to its simple mounting options and ultra-slim height of just 8 mm, the SIENA LED light is ideal for shelf lighting in wall-mounted refrigerated displays. The high-quality plastic profile ensures optimal heat dissipation, supporting SIENA's long lifespan.

### **SPECIFICATIONS**

Voltage: 24 V DC

Length: up to 2,500 mm Dimensions: 17 x 8,7 mm Material: PMMA Surface: clear, white CRI: Ra>80



Lengths	Color Temperatures.
930mm + 1230mm	4100 K. 6500 K. Fresh Red

**Custom lengths and other color** temperatures available upon request.





**Typical Application:** Horizontal shelf lighting

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# NIZZA

Linear LED light without visible hotspots. NIZZA features a special diffuser that evenly distributes the pinpoint LED sources. Ideal for wine coolers or applications where direct LED points on products should be avoided.

### **SPECIFICATIONS**

24 V DC Voltage: Length: up to 2,500 mm Dimensions: 11 x 12 mm Material: PMMA Surface: clear, white

CRI: Ra>80

Lengths



930mm + 1230mm 4100 K. 6500 K. Fresh Red

Color Temperatures.

**Custom lengths and other color** temperatures available upon request.





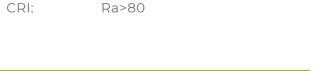
# MILANO SLIM

MILANO SLIM is ideal for vertical lighting in wall-mounted refrigeration and freezer units. A special lens optic ensures uniform light distribution up to 60 cm on both sides.

### **SPECIFICATIONS**

■ Voltage:: 24 V DC

Length: up to 2,500 mm
Dimensions: 28,8 x 24 mm
Material: Aluminium
CRI: Ra>80



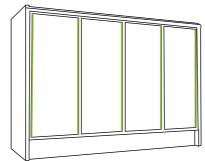
Standard Lengths and Color Temperatures:		
Lengths	Color Temperatures	
930mm + 1230mm	4100 K, 6500 K, Fresh Red	

Custom lengths and other color temperatures available upon request.





Typical Application: Vertical lighting



# MILANO SLIM CORNER

MILANO SLIM CORNER is perfectly suited for use in wall-mounted refrigeration and freezer units. Unlike symmetrical lighting, it emits light in only one direction – into the unit. Its specialized lens optic creates uniform illumination up to 60 cm.

### **SPECIFICATIONS**

■ Voltage: 24 V DC

Length: up to 2,500 mm
Dimensions: 28,8 x 24 mm
Material: Aluminium
CRI: Ra>80



Typical Application: Vertical lighting

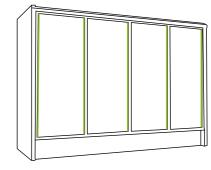


Lengths	Color Temperatures.
930mm + 1230mm	4100 K, 6500 K, Fresh Red

Custom lengths and other color temperatures available upon request.







# **ENERGY EFFICIENCY**

Our LED solutions for refrigerated and freezer units impress not only with their high luminous efficacy but also with outstanding thermal efficiency. Compared to conventional light sources, LEDTEC luminaires produce significantly less excess heat. That means: less energy required for cooling – both in open and closed refrigeration systems.

The generated cold stays where it belongs – with your products. This helps you reduce electricity costs for lighting and ease the load on your refrigeration systems in the long term.

# SAVINGS POTENTIAL

With LED lighting, you can save up to 80% energy compared to conventional lighting systems. This reduces operating costs and actively contributes to environmental sustainability.



# **COLOR RENDERING**

At the point of sale, first impressions matter. LEDTEC luminaires provide not only uniform illumination but also bring out colors authentically and with strong sales impact. With color temperatures tailored to specific product groups – such as baked goods, meat, cheese, or dairy – your products are always showcased in the best possible light. This enhances shelf appeal and actively supports purchasing decisions.

# **EXAMPLES OF OPTIMAL LIGHTING**

### **Product Category**

Baked goods
Cheese and dairy
Fresh fruits and veggies
Meat and cold cuts
Fish and seafood

# **Recommended Color Temperature**

1800K - 2700K (Warm White) 2700K - 3000K (Warm White) 3500K - 4100K (Neutral White 5000K - 6500K (Cool White)





# CANNES

The elegant CANNES LED luminaire features a delicate quarter-circle profile and is available in frosted or clear versions. It integrates seamlessly into your refrigeration or freezer display and can be used for both horizontal and vertical lighting applications.

### **SPECIFICATIONS**

CRI:

■ Voltage: 24 V DC

Length: up to 2,500 mm
Dimensions: 10 x 10 mm
Material: PMMA
Surface: clear, white



Ra>80

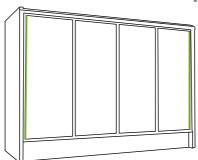
Lengths	Color Temperatures
930mm + 1230mm	4100 K, 6500 K, Fresh Red

Custom lengths and other color temperatures available upon request.





Typical Application: Vertical side lighting



# DUOCANNES

The DUOCANNES LED luminaire is equipped with two powerful LED strips. The special arrangement of the LED modules within the PMMA profile creates a 180° beam angle – ideal for efficient and homogeneous illumination of top loaders as well as refrigerated and freezer units.

### **SPECIFICATIONS**

■ Voltage: 24 V DC

Length: up to 2,500 mm
Dimensions: 18,4 x 10 mm
Material: PMMA
Surface: clear, white
CRI: Ra>80



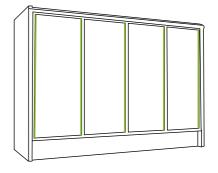
930mm + 1230mm 4100 K, 6500 K, Fresh Red

Custom lengths and other color temperatures available upon request.





Typical Application: Vertical center post lighting



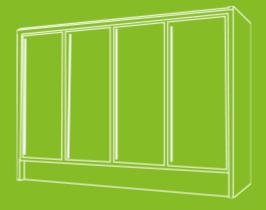
# INDIVIDUAL REQUIREMENTS



Refrigerated and Fresh Food Counters



Refrigerated and Freezer Chests



Refrigerated and Freezer Cabinets

# **CUSTOM LED SOLUTIONS**

No two refrigerated cabinets are alike – which is why LEDTEC focuses on maximum flexibility. Whether you need custom dimensions, specific light colors, or matching accessories: with our modular system of LED strips, profiles (aluminum or PMMA), and diffusers, we configure lighting to match your exact needs. The result: a solution that fits your project both functionally and aesthetically. We're happy to advise you personally on the best combination for your application.

# CUSTOM-FIT FROM A BATCH SIZE OF 1



# **LEDTEC Components:**

Diffuser
LED strip
Light color
Luminous flux and power
Connector cables



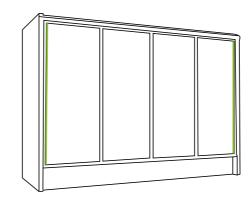
# LED POSITIONING

Our products are suitable for vertical side and center post lighting as well as horizontal shelf and top lighting in modern refrigeration and freezer units.

Precise positioning within the cabinet ensures optimal product illumination. Innovative lens optics, slimline design, and excellent thermal performance provide a durable and energy-efficient LED solution.

# **Vertical Side Lighting**

- Homogeneous illumination of front-facing shelves
- No distracting light reflections on glass doors
- Simple installation via clips or magnetic adhesive strips
- Special light colors available for chilled meat, cheese, and dairy products

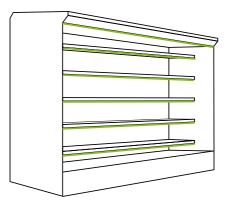


# **Vertical Center Post Lighting**

- Slim design, barely visible
- Innovative lens technology directs light evenly onto both shelf fronts
- No distracting reflections on glass doors
- Easy installation with clips or magnetic adhesive strips
- Special light colors available for chilled meat, cheese, and dairy products

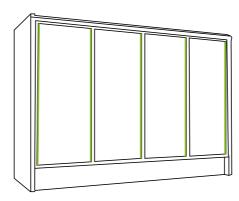
# Horizontal Shelf Lighting

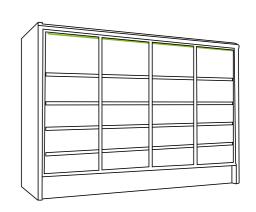
- Even and full-depth illumination of shelves in refrigerated and freezer displays
- Easy mounting with clips or magnetic adhesive tape
- Special light colors available for chilled meat, cheese, and dairy products

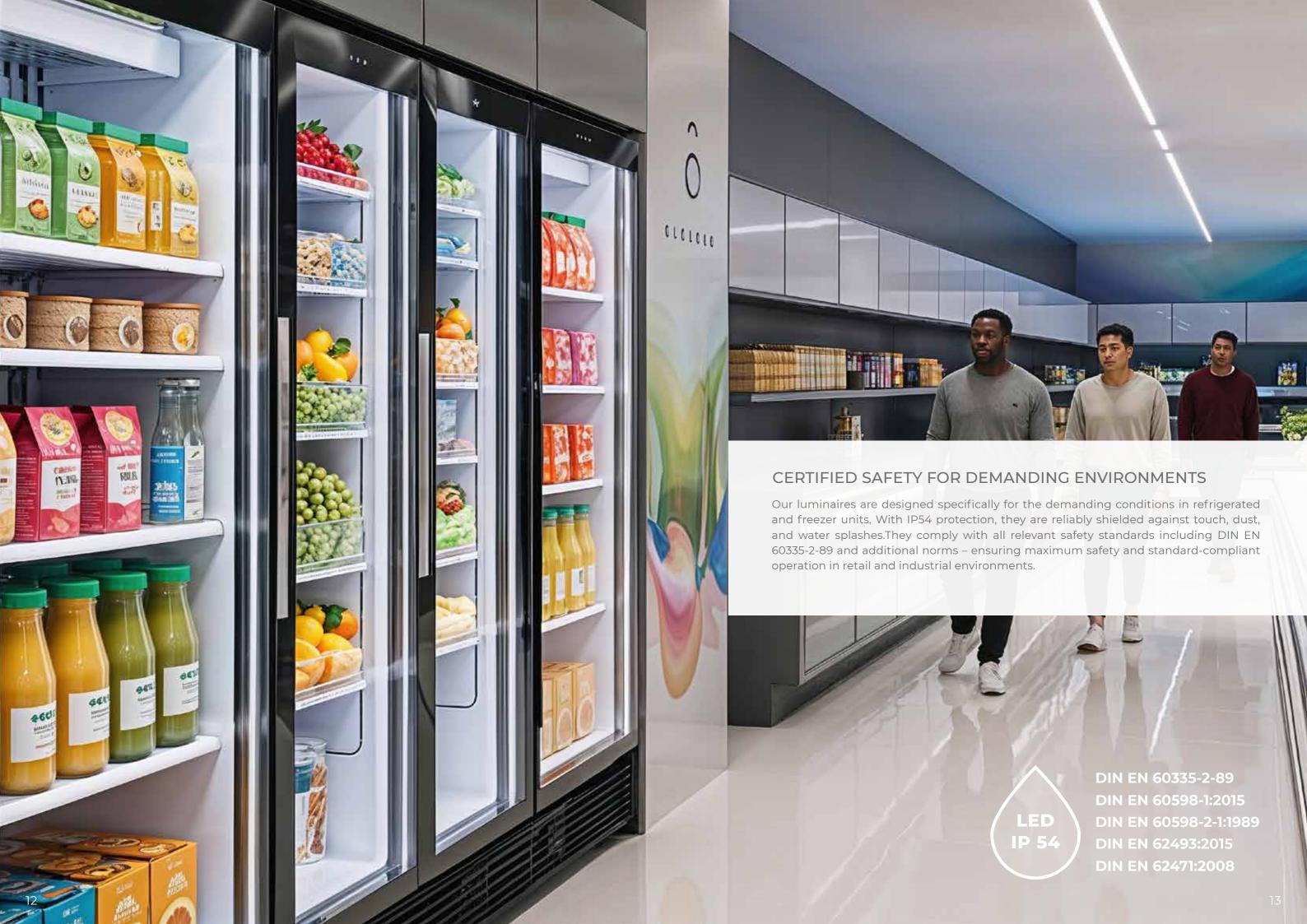


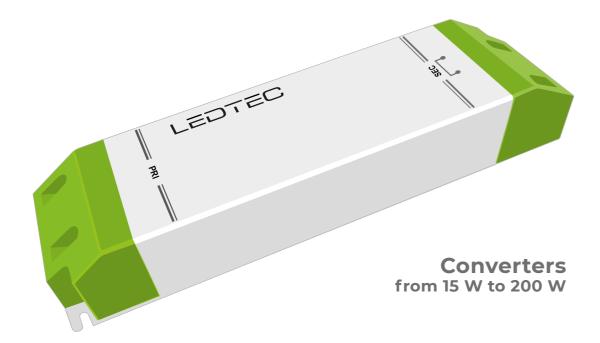
# **Top Lighting**

- Uniform and deep illumination of the top shelf
- Easy installation with metal clips
- Adjustable alignment using mounting clips
- Special light colors available for chilled meat, cheese, and dairy products









# APPROPRIATE POWER CONVERSION

# Reliable power supply for the perfect presentation of your frozen products

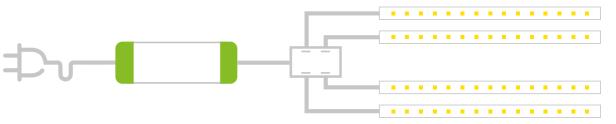
Whether vertical side lighting, shelf lighting, or top lighting – every LED application in refrigerated or freezer units requires the right power supply. LEDTEC offers a complete range of LED converters from 15 W to 200 W, tailored to your system's power needs, application, and environmental conditions.

## Your Benefits at a Glance:

- Precisely matched power:
  - From compact 15 W converters for individual modules to 200 W solutions for large-scale systems
- Optimized sizing:
  - Calculated based on actual demand + 20% safety reserve for longer lifespan
- Compact design:
  - Easy to integrate into or onto the refrigeration unit.
- High operational safety:
  - Protection against short-circuit, overload, overheating, and overvoltage.
- **■** For demanding environments:
  - IP54-rated models suitable for damp rooms and freezer areas
- Globally deployable:
- UL-certified versions available for international use.

# PROPER POWER SIZING

Correctly matching your LED converter to the system ensures trouble-free operation, long service life, and high energy efficiency.



# Step-by-Step Sizing Guide:

- 1. Determine power consumption per meter
  Use manufacturer specs in W/m
- 2. Calculate total system power LED length in meters × W/m
- 3. Add safety margin
  Recommended: 20% reserve
- **4. Choose appropriate power class**Select next available converter size above the calculated value

# Formula:

$$P_{\text{Converter}} = \left( P_{\text{LED/m}} \times L_{\text{LED}} \right) \times 1,2$$

# Beispielrechnung:

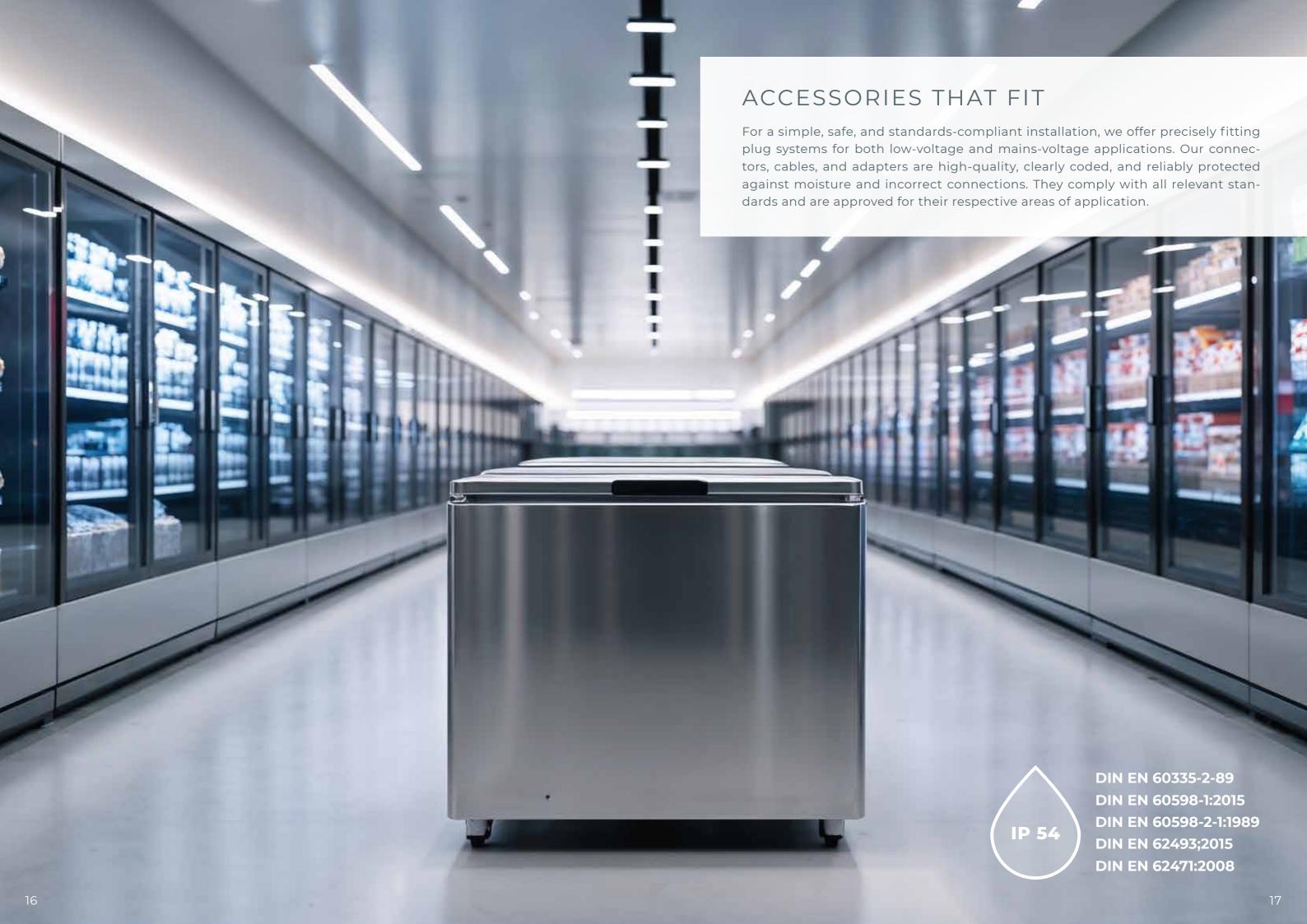
- LED-Streifen: 9,6 W/m
- Length: 2 m

- **PConverter** = recommended minimum power of the converter (in watts)
- PLED/m = power consumption per meter of LED strip (in W/m)
- LIFD = total length of the LFD installation (in meters)
- Faktor 1.2 = 20% power reserve

$$P_{\text{Converter}} = (9,6 \times 2) \times 1,2 = 23,04 \text{ W}$$

→ Choose a 30 W Converter





# MINI 8/50 PLUG SYSTEM Always the Right Connection

The MINI 8/50 plug system from LEDTEC is specifically designed for low-voltage applications (12 V / 24 V DC) and is ideally suited for use in refrigerated and freezer units.

It provides a secure, moisture-protected, and reverse-polarity-safe connection between LED luminaires, converters, and distribution systems.

# **Product Highlights:**

- **IP54 protection:** Protected against internal dust deposits and splashing water from all directions ideal for damp and cold environments.
- **Round design:** 8 mm bore diameter for discreet integration into fixtures
- Load capacity up to 10 A: Suitable for longer, higher-performance LED installations.
- Color and mechanical coding: Prevents incorrect connections
- Reverse polarity protection: Safeguards LED electronics
- Comprehensive accessories: Including connection cables in various lengths, extensions, Y-splitters, 7-way distributor boxes, and built-in sockets

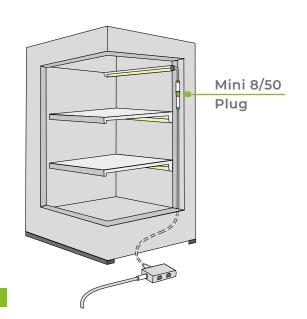
IP54 socket (female contacts) for connection to LED converter



IP54 plug (male contacts) for connection to LED luminaires and LED modules







# Benefits in Refrigeration Applications:

- Fast installation: Pre-assembled connections significantly reduce installation time in retail environments
- Service-friendly: Individual LED modules or complete runs can be easily disconnected and replaced during maintenance
- **Reliable operation:** IP54 protection minimizes risk of failure due to condensation or cleaning processes.
- Flexible configuration: Multiple luminaires can be powered from a single converter using splitters – ideal for shelf or door lighting.









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