



ERCO Minirail 48V track and singlets – Small cross section, large flexibility

The elegant infrastructure for lighting in the digital age

With Minirail, ERCO offers a miniaturised alternative to the classic ERCO track as the basis for flexible space-saving lighting systems. Minirail is operated with 48V. The system requires only two conductors and features a profile with a width of just 22mm: ideal for all situations requiring the smallest possible system dimensions, whether for aesthetic or technical reasons. In combination with correspondingly compact luminaires for Minirail, lighting designers can install high quality lighting in the

smallest of spaces. The 48V operating voltage represents an optimum in terms of safety and efficiency. Minirail is suitable for ceiling recessing or surface-mounting and, with appropriate accessories, for suspended mounting. A wide range of configurations can be created with the various connectors, couplers and feeds.

ERCO Minirail 48V track and singlets



Structure and characteristics

The features described here are typical of products in this range. Special versions may offer additional or varying features. A comprehensive description of the features of individual products can be found on our website.

1 Aluminium profile

- White (RAL9002), black or silver
- Powder-coated or anodised

2 Contacts

- Two isolated copper conductors, 4.15mm²
- One 10A circuit

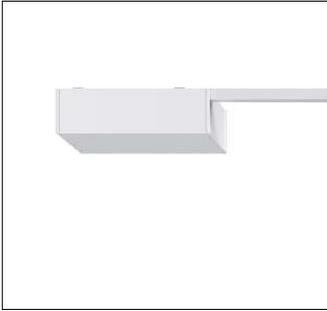
Variants on request

- Housing: 10,000 further colours
- Please contact your ERCO consultant.



Design and application:
www.erco.com/minirail-48V

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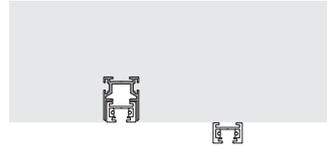
48V technology

Low voltage technology achieves very good energy efficiency which leads to low operating costs.



Compact profile

The small dimensions of the track profile of only 22mm is highly discreet, thus directing the focus on the light. Compact profiles are particularly advantageous in small rooms.



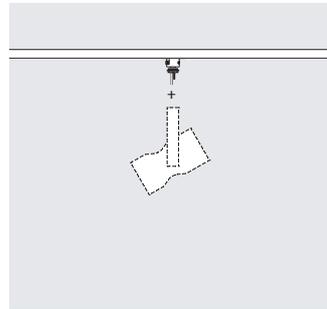
Recessed and surface-mounted

A plaster trim profile is available as an accessory for flush mounting in the ceiling or wall. As a surface-mounted variant, track can simply be mounted on the ceiling, on the wall or on furniture.



Suspension equipment

Track can be simply suspended from the ceiling. Wire suspensions are ideal for sloping ceilings and pendant tubes are suitable for high loads.

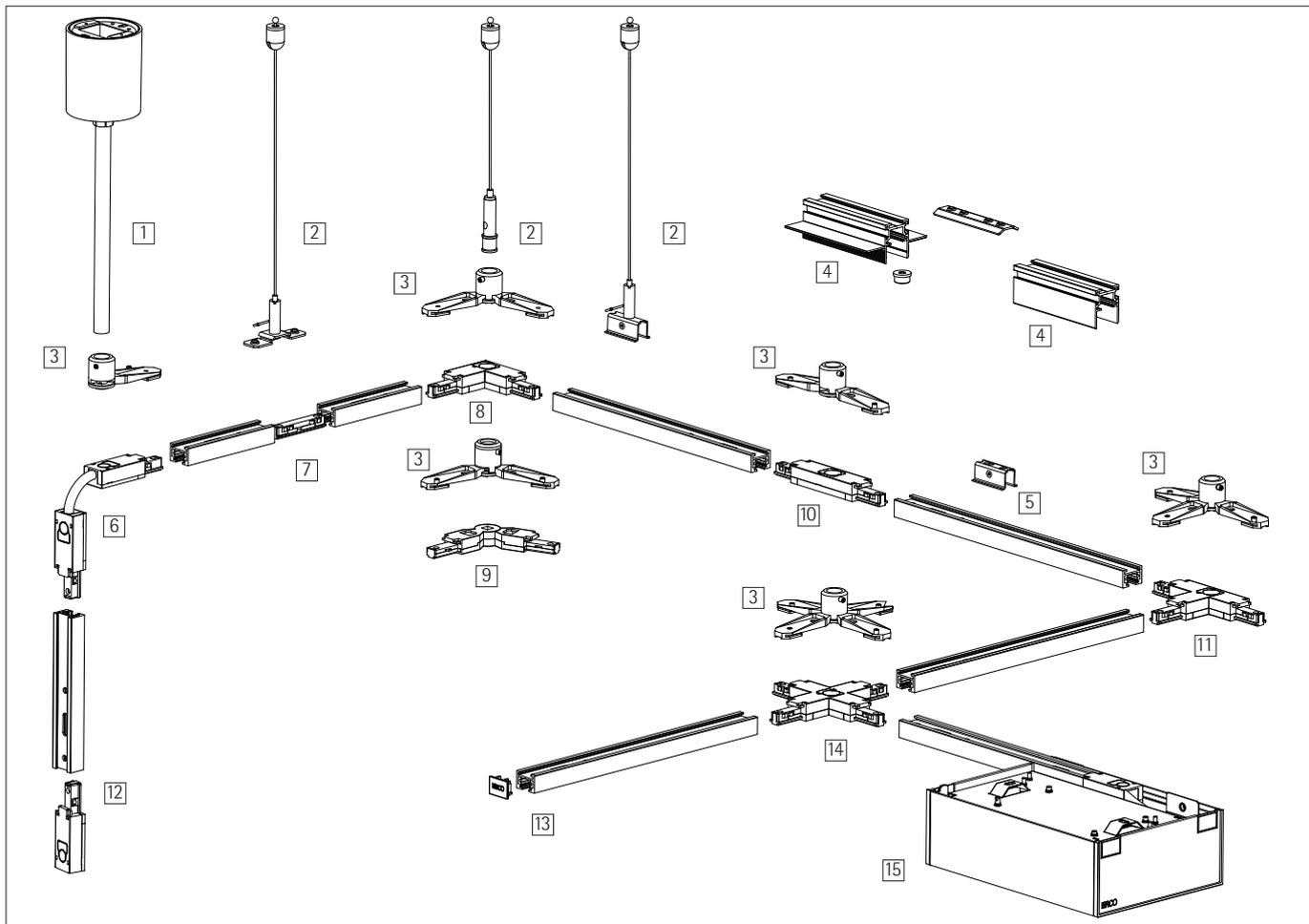


Open system for luminaires from other manufacturers

Utilise our track as high quality infrastructure for your lighting design, also in combination with luminaires from other manufacturers. We provide the suitable adapters as OEM components.

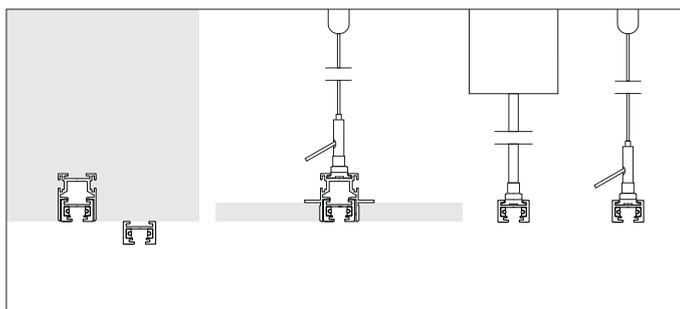
Special characteristics	
48V	48V technology
	Compact profile
	Recessed and surface-mounted
	Suspension equipment
OEM	OEM components

- Various housing colours
- Various construction sizes
- Easy installation
- Accessory for mounting variants

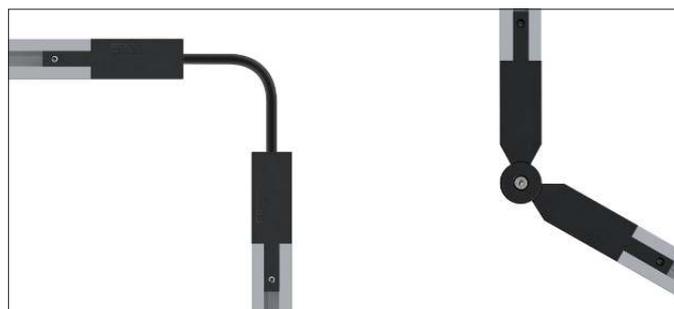


Accessories enable mounting in a wide variety of structural situations.

- | | | |
|---------------------------|---------------------------|----------------------|
| 1 Pendant tube suspension | 7 Coupler | 13 End plate |
| 2 Wire rope suspension | 8 Corner connector | 14 Cross connector |
| 3 Mounting device | 9 Flexible connector | 15 Power supply unit |
| 4 Plaster trim profile | 10 Longitudinal connector | |
| 5 Fixing clip | 11 T-connector | |
| 6 Multiflex connector | 12 Live end | |



Different mounting options
The system design of Minirail 48V track enables different types of mounting: recessed, surface-mounted, with mounting accessories for ceiling panels or for suspension with wires or pendant tubes.

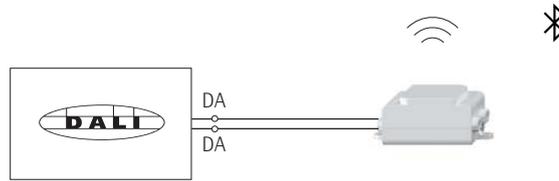


Simple mounting with connecting parts
The track can be mounted with connecting parts to form right-angled structures. Height differences in the ceiling and non-rectangular angles are solved by Minirail 48V with connectors that are flexible horizontally and even vertically.



Expandable power supply

Parallel switchable power supply units ensure the necessary power supply. You can double the performance of your system with an identical power supply unit of the same power. The power supply can also be mounted at another location, for example in the ceiling – the distance to the Minirail track must then not exceed 10m.



Integration into DALI systems

The DALI to Casambi Gateway ensures that the 48V luminaires with Casambi Bluetooth can also be controlled wirelessly via DALI systems.

Mechanical information

Horizontal ceiling mounting: all luminaires approved for the ERCO Minirail 48V track system can be used.

Horizontal mounting on walls: only luminaires with a maximum weight of 1.0 kg including accessories may be used. Follow the mounting instructions of the luminaire.

Vertical mounting on walls: only luminaires with a maximum weight of 1.0 kg including accessories may be used.

Other mounting positions: see the product documentation for information on the limited use of luminaires.

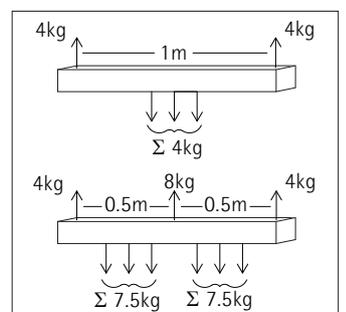
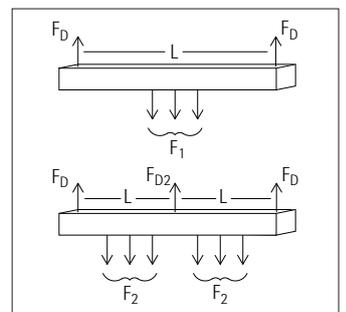
Permissible loading is calculated from the max. permissible profile deflection and the max. permissible mechanical loading of the suspension devices. Load distribution takes both the weight of the system and the equally distributed point loads into consideration.

- L (mm) length
- f₁ (mm) deflection due to weight of profile
- F₀ (kg) max. loading of suspension device
- F₁ (kg) weight of the profile
- F₁ (kg) maximum permissible load for two-point suspension and permissible deflection (L/250) of 4mm per metre length
- F₂ (kg) maximum permissible load for series suspension and permissible deflection (L/250) of 4mm per metre length

ERCO Minirail 48V

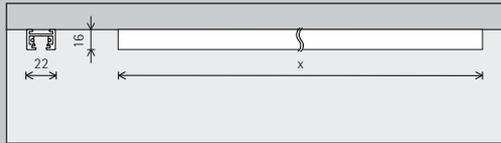
L (mm)	500	1000	1500	2000
F ₀ (kg)	0.25	0.50	0.75	1.00
f _e (mm)	0.02	0.29	1.48	4.69

F _D	= 4 kg (F _{D2} = 8 kg)		
F ₁ (kg)	7.50	4.00	1.50
F ₂ (kg)	7.50	4.00	1.50



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ERCO Minirail 48V track



Type of mounting

	Surface-mounted
	Recessed (via accessories)
	Pendant (via accessories)

Length

1000mm	3000mm
2000mm	Special length *

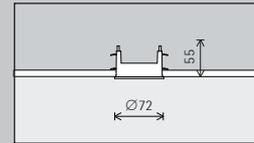
Application

1-circuit ✓ Switchable ✓ DALI (via Casambi Gateway) ✓ Casambi Bluetooth ✓ Zigbee

Colour (housing)

	White		Silver
	Black		10,000 colours *

ERCO Minirail 48V singlets



	Recessed
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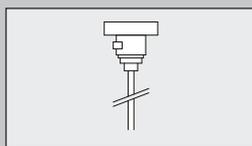
1-circuit ✓ Switchable ✓ DALI (via Casambi Gateway) ✓ Casambi Bluetooth ✓ Zigbee

	White		10,000 colours *
	Black		

Accessories

	Connectors		Suspension equipment		Power supply units
	Plaster trim profiles		Mounting components		DALI Casambi Gateway

ERCO OEM Minirail adapter 48V



1-circuit
✓ Switchable
✓ DALI (via Casambi Gateway)
✓ Casambi Bluetooth
✓ Zigbee



* available on request

Article numbers and planning data:
www.erco.com/019305

Design and application:
www.erco.com/minirail-48V





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