PHILIPS

LED tubes

Real pros have the perfect LED tube for every job

Discover our wide portfolio of efficient LED tubes for every application area, demand and budget.

philips.com/ledtube

REAL PROs REAL QUALITY

An LED tube for every application

Simplicity and ultra-efficiency make Philips LED tubes the quickest and easiest way to upgrade to LED for immediate energy savings over a long and reliable lifetime.

We have an LED tube for every application: bright easy-to-fit tubes that last and last. All our LED tubes have the industry's lowest failure rates for ultra reliable operation and lifetime.

Choose CorePro LEDtubes for everyday replacement of fluorescent tubes in general applications. The MASTER Value range offers strong performance in more demanding applications with intense usage, while the MASTER range is the right choice for every project that calls for best in class performance. MasterConnect LEDtubes are Interact Ready and can be integrated into smart lighting systems for personal and automated light control.

Fast installation, long reliable life

Philips LED tubes offer 100% safe and hassle free installation with a simple tube-for-tube replacement. Our EM/Mains, InstantFit HF and universal tubes fit straight into existing luminaires.

Our range has the widest ballast compatibility in the market, including the great majority of 600, 1200 and 1500mm versions.

LED tubes have more than double the life of fluorescents to halve the cost of maintenance. Even with installation and maintenance costs, our tubes pay for themselves within a few months for permanently lit sockets.

High quality professional tubes

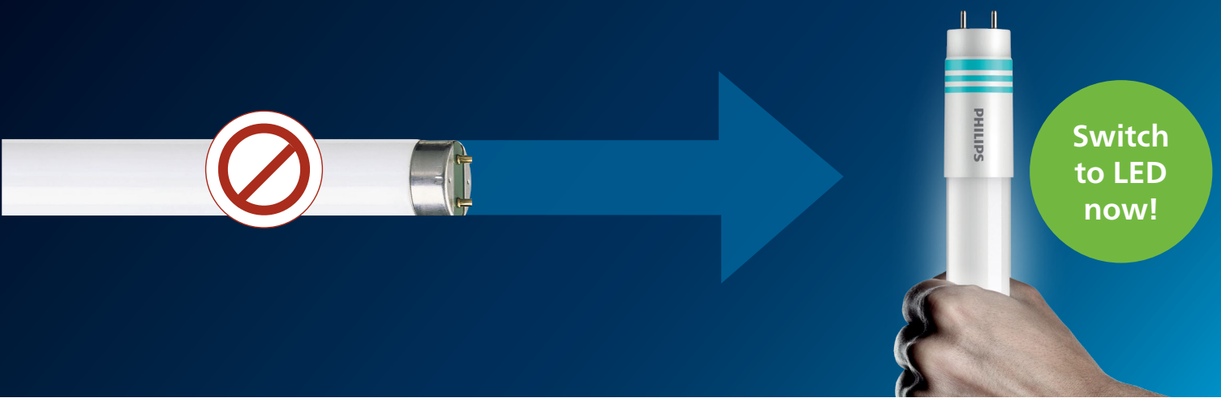
Our LED tubes won't flicker or cause glare. They switch on instantly with excellent and uniform color consistency. Defined tube/ballast combinations can be dimmed. And rotating end caps can direct the light where needed.

Switch to LED now

LED tubes are the future. They have no start-up delay, have a long lifetime of up to 100,000 hours compared to fluorescent tubes which have a life of 5,000 - 20,000 hours. Though LED tubes seem more expensive in the start, they end up paying for themselves in the first year due to their lower energy consumption. Make the switch to LED tubes now at **https://www.lighting.philips.com/main/products/led-conversion**

Fluorescent lights are soon going to be a thing of the past. The Reduction of Hazardous Substances (RoHS) directive of the European Union restricts the use of certain hazardous substances in electrical and electronic equipment, such as the use of mercury in lighting products. In addition, due to the Single Lighting Regulation (SLR), products that fail to meet efficiency requirements are being phased out August 2023.

Discover our attractive energy-saving alternatives to fluorescent tubes now and get all the info you need on: **philips.com/LEDtubes**



LEDtube wins in every way

Light quality

LEDtube

- Very high light quality
- Instant 100% brightness without start-up delay or flickering
- Optically efficient – emits light only towards usage direction

Fluorescent

- Optically inefficient – light needs to be reflected and redirected
- Flicker upon power-up

Efficiency androbustness

LEDtube

- Highest efficacy up to 210lm/W
- Up to 75% less energy compared to fluorescent
- Low failure rate
- Up to 10 years warranty
- Long lifetime of up to 100,000 hours

Fluorescent

- Lower system efficiency due to losses associated with omnidirectional light output
- Broken tubes release a small amount of toxic mercury as a gas
- Lifetime between 5,000 to 20,000 hours

Cost of ownership

LEDtube

- Relatively high initial costs – but low lifetime costs
- Less maintenance needed – low frequency to change a tube after installation
- Payback time typically within a year with great reduction of energy consumption

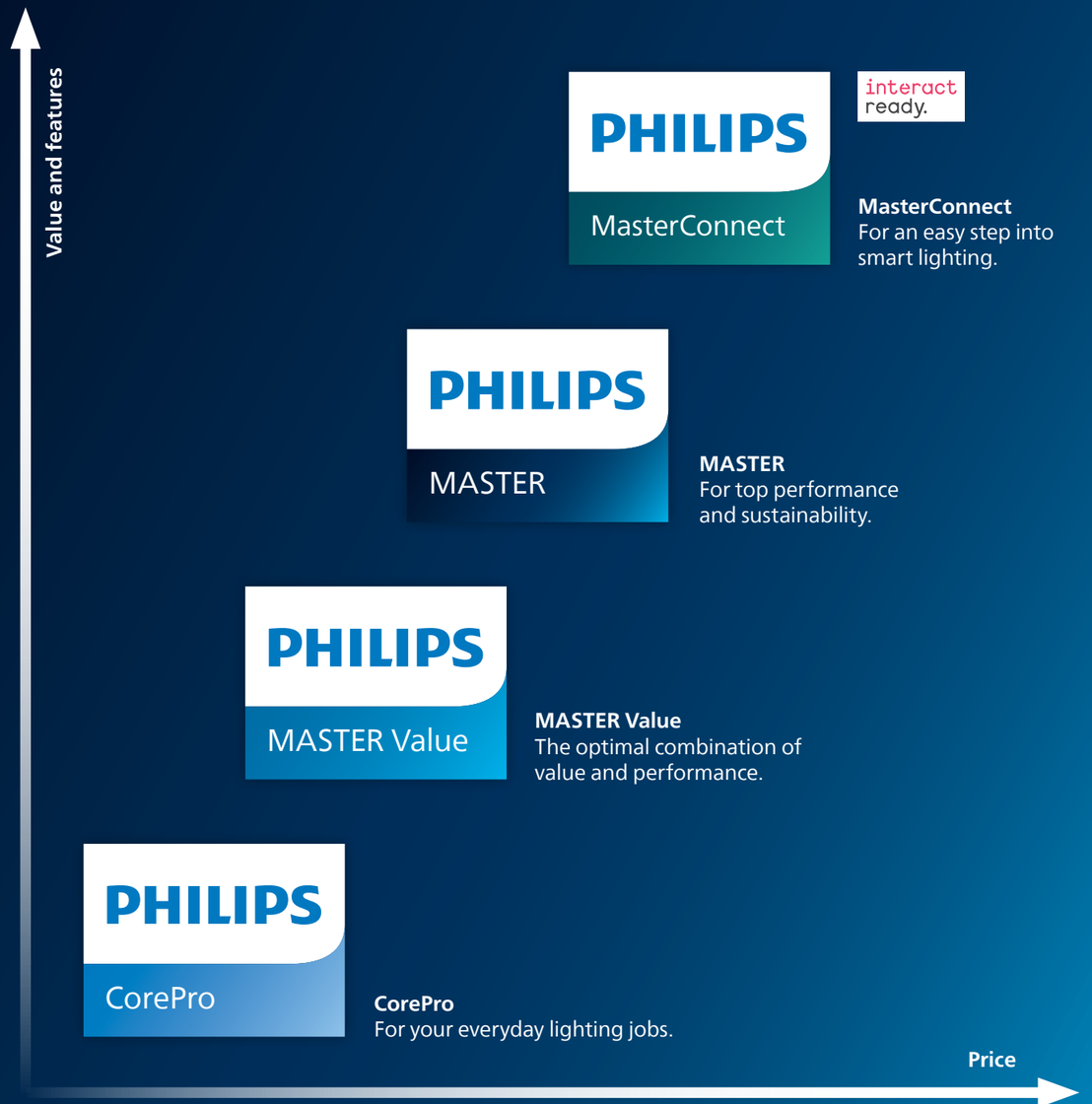
Fluorescent

- Cheap to purchase, but much shorter service life
- Will require several replacements plus monitoring and replacing aging or expired components within the lifetime of a single LED alternative

https://www.lighting.philips.com/main/products/led-conversion

Range tiering

Finding the right LED tubes for different plans, needs and budgets is easy with the extensive Philips portfolio. It ensures that you always have a quality solution at the price you want.



Real pros choose Philips LED tubes for:

Fast and easy installation
Philips LED tubes are true retrofit, making it the fastest-to-install solution.

Hassle-free compatibility
- No wires to replace or drivers to change
- InstantFit solutions work with HF electronic ballasts
- Universal LED tubes available – compatible with all ballast types

Philips LEDtube T5
- has industry leading ballast compatibility performance that supports:
- fixed output ballast
- intelligent/multi-watt ballast
- dimming ballast (DALI, 1-10V)

Philips LEDtube T8
- Breakthrough design with >10 IPs that give best-in-class compatibility with High-Frequency ballast
- >45 compatible ballasts per product

Pin safety
- Safe to touch the end cap when installing
- Integrated driver isolated from touchable parts
- Meets UL and IEC pin safety requirements

Trusted performance
- Low early failures
- Warranty up to 10 years
- High resistance to switching cycles

Product overview

CorePro

Value and features:

CorePro LEDtube EM/Mains T8

- Best value for money solution to upgrade to LED
- Truly retrofit, safe and hassle-free installations
- Up to 110lm/W efficacy
- Glass platform that optimizes the usage of luminaire optics

Click here to see all products

CorePro LEDtube Universal T8

- Best value for money solution to upgrade to LED
- Universal compatibility: one fits for all
- Up to 110lm/W efficacy
- Glass platform that optimizes
- the usage of luminaire optics

Click here to see all products

MASTER Value

Value and features:

MASTER Value LEDtube EM/Mains T8

- High efficiency of up to 160lm/W
- Glass platform with a wider beam angle for better lighting uniformity
- Reduced maintenance cycle thanks to the longer lifetime

Click here to see all products

MASTER Value LEDtube Universal T8

- Unbeatable universal compatibility with HF, EM ballasts and direct mains
- High efficiency of up to 160lm/W
- Glass platform with a wider beam angle for better lighting uniformity
- Reduced maintenance cycle thanks to the longer lifetime

Click here to see all products

MASTER

Value and features:

MASTER LEDtube EM/Mains T8

- Best-in-class energy saving with up to 210lm/W
- Truly shatterproof thanks to plastic design according to IEC 61549
- Rotatable end-caps for maximized installation flexibility
- Higher flux through smaller beam angle

Click here to see all products

MASTER LEDtube Mains T5

- Optimized glass design to reduce glare
- Up to 155lm/W energy efficiency
- Operates on direct mains

Click here to see all products

MASTER LEDtube InstantFit HF T8

- Industry-leading HF ballast compatibility
- Up to 155lm/W energy efficiency
- Shatterproof solution thanks to plastic design according to IEC 61549
- Rotatable end-cap for various applications
- Higher flux through smaller beam angle

Click here to see all products

MASTER LEDtube InstantFit HF T5

- Optimized glass design to reduce glare
- Up to 155lm/W energy efficiency
- Unbeatable HF ballast compatibility, with support of dimming ballast

Click here to see all products

MasterConnect

Value and features:

MasterConnect LEDtube EM/Mains T8

- Smart retrofit LED solution that brings wireless connectivity to existing luminaires
- Up to 90% of energy savings than fluorescent lamps via advanced lighting controls
- Works seamlessly with Interact Pro system
- Scalable and upgradable from stand-alone to cloud-based solutions

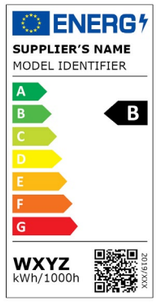
interact ready.

Click here to see all products

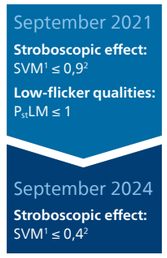
Always compliant, always up-to-date

New regulations for more sustainability

As of September 2021, the EU is implementing two updated regulations, both with the goal of further expanding the lighting industry's lead in sustainability by delivering significant energy savings for lighting products and systems.



- **The Ecodesign Regulation (SLR):** Aims to improve product performance and sustainability
- Products that fail to meet requirements will be phased out
- **The Energy Labelling Regulation:** Introduces a new consumer-friendly energy label to empower end users to choose energy efficient products
- The new scale reflects how efficient a product is – the definition of A to G is changed based on the new efficacy requirements



The RoHS1 ban

- The RoHS1 directive of the European Union restricts the use of certain hazardous substances in electrical and electronic equipment, such as the use of mercury in lighting products. The directive included exemptions for a series of products that have now been revised by the European Commission – with great impact on fluorescent lighting products.
- The EU is convinced of the many benefits of switching to more environmentally friendly, energy efficient LED lighting: With the implementation of EU Ecodesign (SLR) Regulation on September 1st, 2021 and with the amended RoHS (Reduction of Hazardous Substances) directive at the start of 2022, EU countries will phase out numerous light sources, for example CFL-ni, linear fluorescent lamps (T5/T8) may no longer be placed on the market in the European Union from February 24, 2023 and August 24, 2023 respectively.

New regulation for optimized light quality

The Single Lighting Regulation (SLR) also aims to optimize the functional requirements for light quality – above all the stroboscopic effect and flicker of mains voltage light sources. Starting from September 1, 2021 the low-flicker qualities and stroboscobic effect will be governed and further regulated until 2024. With Philips LED tubes you are well prepared for the upcoming regulations: all our MASTER LEDtubes meet the 2024 requirements already!

Click here and learn more about the new regulations and how the Philips LED portfolio offers you everything you need for the upcoming changes: philips.com/ledconversion

Finding the right output

For ultra-output applications, our solutions meet lighting industry standards (EN12464-1) by providing high light levels without causing discomfort or glare[3].

Lux

Working, typing reading and data processing require sufficient light with a minimum lux level.

Sufficient light

› Key parameter for minimum required light is indicated in EN12464-1 in lux (lumens per square meter).

› EN12464-1 prescribes minimum lux values, uniformity of illumination, and color rendering index, depending on the task.

Unified Glare Rating (UGR)

The amount of glare, annoyance or reflection created by high or non-uniform brightness must be kept to a minimum.

Discomfort glare

› Sensation of annoyance or reflection caused by high or non-uniform brightness (e.g. on computer screen).

› Amount of glare is indicated in EN 12464-1 standard by Unified Glare Rating (UGR).

[1] SVM = stroboscopic effect visibility measure
[2] Exemptions: light sources for outdoor, industry and other uses with a color rendering CRI ≤ 80
[3] Final light quality, besides the LED tube, also depends on application circumstances like e.g. type of luminaire used and amount of daylight.

Product highlight

Real pros choose

light that looks good on camera

Introducing the new camera friendly feature for MASTER LEDtube EM/Mains T8[1] and InstantFit HF T8[2]. This innovative product design ensures no visible flicker on camera, giving you assurance of a dependable light source when working with cameras[3]

New camera friendly feature in detail

You may have experienced this occasionally -- the light looks perfect to your eyes but flickers on the screen when filming a video. In high power factor LED product, the ripple current through LEDs brings fast change in light, which will not be detected by human eyes. However in case the light and camera shutter are out of sync, it might be captured on the screen.

The use of cameras (phone/digital camera/webcam/security camera etc.) has become part of our daily lives and now more than ever, means that we need light that also looks good on camera. Perfect for use in office, retail, industry or education. The Philips MASTER range brings light quality to a next level. With this update you can still rely on the top performance features for this range.

Key Benefits:

- Up to 3700lm ultra light output with best-in-class energy efficiency
- Truly shatterproof according to IEC 61549 thanks to plastic design
- Rotatable end-caps for maximized installation flexibility
- Higher flux through smaller beam angle
- Up to 75,000 hrs lifetime which greatly reduce replacement cycles

[1] Including MASTER LEDtube EM/Mains T8 High Output, Ultra Output.
[2] Performance is ballast dependent. More details can be found in published ballast compatibility list.
[3] Tested in Signify lab with most commonly used consumer phone, PC and CCTV cameras with frequency<=2kHz*

For warranty conditions, visit www.lighting.philips.com/main/support/support/warranty

Real pros help their customers realize ultra energy savings

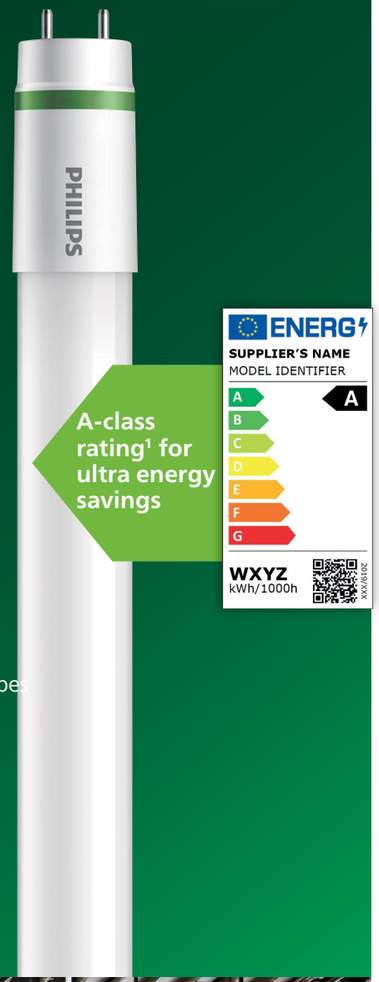
Our ultra efficient light

Introducing the Philips MASTER LEDtube Ultra Efficient T8: our most energy efficient LED tube yet.

Are your customers worried about their energy costs?

With energy cost going through the roof, many companies are more aware of their energy consumption than ever. Lighting on average represents up to 25% of electricity consumption in buildings2, so there is much to gain. Did you know there is great potential to save energy, even if you already have LED lights?

With the new Philips Ultra Efficient LEDtube you have the perfect retrofit lamp to help your customers save energy and money with high-quality, long-lasting and ultra energyefficient LED.



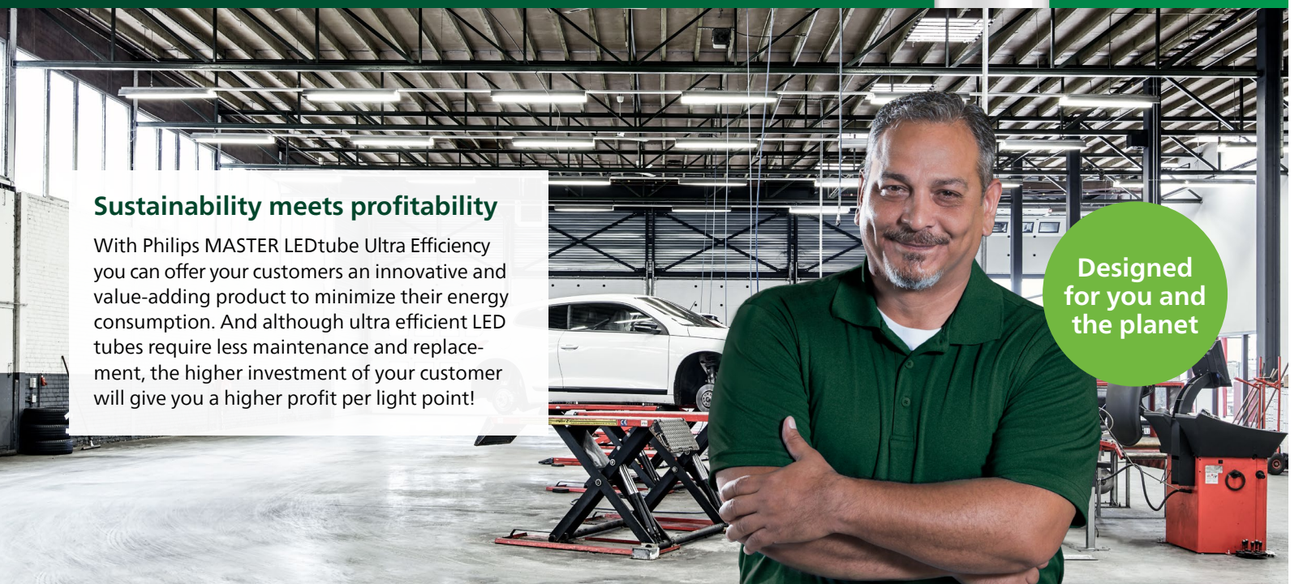
A-class rating[1] for ultra energy savings

Unbeatable arguments for your customers

- Saves up to 44% in energy costs compared to standard LED tubes3
- Ultra long lifetime of 100,000 hours – more than 3× longer than standard LED tubes
- Less than 5 months payback time compared with fluorescent tubes
- 10 years warranty

The Philips MASTER LEDtube Ultra Efficient is also available with a class B energy rating1. To learn more visit: www.philips.com/ledtube

1 According to the updated European Energy Labelling Regulation (09/2021)
2 According to Signify modeling and market intelligence data
3 Standard LED tubes' refers to Philips CorePro LEDtube EM/mains Ultra Output operating on direct mains



Sustainability meets profitability

With Philips MASTER LEDtube Ultra Efficiency you can offer your customers an innovative and value-adding product to minimize their energy consumption. And although ultra efficient LED tubes require less maintenance and replace-ment, the higher investment of your customer will give you a higher profit per light point!

Designed for you and the planet

The Philips MASTER LEDtube Ultra Efficient

All the benefits of LED lighting and more.

Rotatable end cap that gives light where needed

Plastic design makes it true shatterproof according to IEC 61549 standards

210lm/W ultra efficiency achieve an incredible class A energy efficiency rating*

Reliable performance with 10 years warranty

*According to the updated European Energy Labelling Regulation (09/2021)

Cost and CO_2 savings right from the start

When updating from fluorescent tubes, your customers can expect a full return on investment in only 5 months. A a typical small warehouse will save 13.661 Euro by replacing 100 x 58W fluorescent tubes with 17.6W Ultra Efficient A-class LED tubes.[1]

	Standard LED tube[2]	MASTER LEDtube UE	Fluorescent tube	MASTER LEDtube UE
Lifetime	30,000 hrs	100,000 hrs	20,000 hrs	100,000 hrs
Lamp wattage	31.5W	17.6W	58W	17.6W
Total savings/year		**3,544 €**		**13,661 €**
Payback period		**1.5 years**		**0.4 years**

Number of lamps	100	Energy costs	0.29 €/kWh[3]	Lamp cost/year	4.65 €	Total costs/year/lamp	49.80 €
Burning hours per year	8760 hrs[2]	Replacement cost/year/lamp	0.44 €	Energy costs/year/lamp	44.71 €		

Compared to a fluorescent tube, a new Philips MASTER LEDtube UE can reduce CO_2 emissions by up to 2,285 kg over its lifetime[3] – equivalent to the emissions absorbed by more than 103 trees.[4]

Compared to a standard LED tube, a new Philips MASTER LEDtube UE can reduce CO_2 emissions by up to 584 kg over its lifetime[3] – equivalent to the emissions absorbed by more than 26 trees.[4]

[1] Calculation for a typical warehouse based on 100 x 58W fluorescent lamps with a lifetime of 20000 hours vs 100 x 17.6W Ultra Efficient A-class LED tubes with a lifetime of 100.000 hours; 0.29 Euro energy cost/hour; 5 euro replacement cost per lamp; 8760 burning hours per year

[2] Standard LED tube refers to Philips CorePro LEDtube EM/mains Ultra Output operating on direct mains

[3] Calculation based on CO_2 gas emissions of 0.42kg/kWh.

[4] Based on multiple scientific literature, an average fully grown tree can absorb 22 kg CO_2 per year.

Product highlight

Real pros choose
Dimmable lights

Philips MASTER LEDtube InstantFit HF T5
is equipped with our latest technology breakthrough.

IP protected ‘Super Compatibility’ design enables compatibility with various ballast types, including dimming ballast!

Product highlights

Safe Installation
Pin safety for safe installation

True Retrofit, True T5 Shape
Both the end-cap and the tube have a true T5 shape. This ensures 100% fitting into existing luminaire.

No Bending
No bending issues any more thanks to the solid Glass Design

High Comfort Light with reduced glare

Industry leading ballast compatibility with
- fixed output ballast
- intelligent/multi-watt ballast
- dimming ballast (DALI, 1-10V)

Typical use cases

Office Space

Office space with dimming capability for comfortable light at any moment.

Industry

Increase your energy saving without any hassle.

Classroom

Optimize comfort by adjusting the light level for every task.

Retail

Optimize shelf lighting hassle free with LED lighting.

PHILIPS

LED tubes

Real pros
change to LEDtubes now

The new, easy-to-install Philips CorePro LEDtube Ultra Output T8.

With the new Philips CorePro LEDtube Ultra Output T8, making the switch from fluorescent to energy- and cost-saving LED is fast, easy, and hassle-free. Plus there are plenty of additional good reasons to switch:

REAL PROs REAL QUALITY

1. Fluorescent tubes to be banned soon

- Fluorescent T8 tubes will be phased out from August 24, 2023 due to EU regulations[1]
- Be best prepared for the switch to LED with Philips LED tubes!

2. Save money straight away

- Saves up to 56% energy compared to a conventional fluorescent equivalence
- Philips LEDtubes pay for themselves within a few months
- Twice the lifetime of fluorescent means less maintenance – and with that an even better overall TCO

3. Hassle-free 1-to-1 replacement

- True retrofit, making it the fastest-to-install solution saving you time and money
- Designed for EM ballast operation, and if needed on direct mains
- Fits straight into existing luminaires

Switching to LED tubes always pays off

Philips LED tubes provide you with unbeatable quality, easy-to-install solutions for every application. It was never easier to switch to LED.

- Available in many sizes
- Substantial energy savings
- Long lifetime and low maintenance
- Ultra bright, flicker-free output
- Various color temperatures available
- No toxic materials, e.g. mercury

Scan the code for more information on product details, EU regulations and TCO calculations or visit:
www.philips.com/ledtube

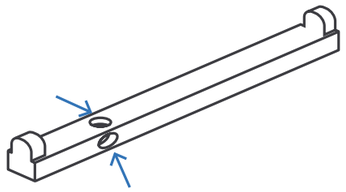
[1] According to the RoHS (Reduction of Hazardous Substances) directive and European Single Lighting Regulation. Products already placed on the market may still be sold after these dates, but they may not be placed on the market.

Choose the right LED tube for every application

Application areas		T8 fixture								T5 fixture		
		CorePro LEDtube SO	Corepro LEDtube UO	MASTER Value LEDtube HO	Corepro LEDtube UO	MASTER Value LEDtube UO	MASTER LEDtube HO	MASTER LEDtube UO	MASTER LEDtube UE	MasterConnect LEDtube	MASTER LEDtube HE	MASTER LEDtube HO	MASTER LEDtube UO
		up to 2200 lm	up to 3500lm	up to 3100 lm	up to 3500lm	up to 3700 lm	up to 3100 lm	up to 3700 lm	up to 3700 lm	up to 3700 lm	up to 3000 lm	up to 3900 lm	up to 5600 lm
	Value and features:												
	Industry Burning hours: varies, max. 24/7 Light requirement: 200–500+ lux		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
	Warehouses/factories Burning hours: 12 hrs/day to 24/7 Light requirement: 200–300 lux		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
	Car park Burning hours: 24/7 Light requirement: 200+ lux	✓	✓	✓	✓		✓			✓		✓	
	Supermarket/retail Burning hours: 12 hrs/day to 24/7 Light requirement: 500+ lux		✓	✓	✓	✓	✓	✓	✓	✓		✓	
	Office/school/healthcare Burning hours: usually 12 hrs/day Light requirement: 500+ lux		✓	✓	✓	✓	✓	✓	✓	✓	✓		
	Public buildings Burning hours: 12 hrs/day to 24/7 Light requirement: 100–500+ lux		✓	✓	✓		✓			✓	✓	✓	

Find the right Philips LED tube for every application and demand using our handy product finder: **philips.com/productfinder**

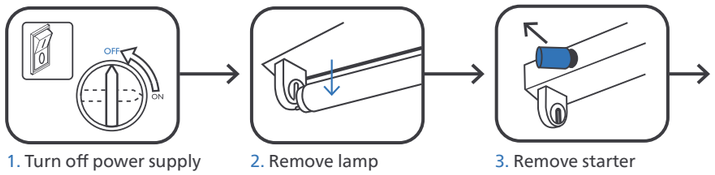
What type of LEDtube do I need?



Does your luminaire have a starter?

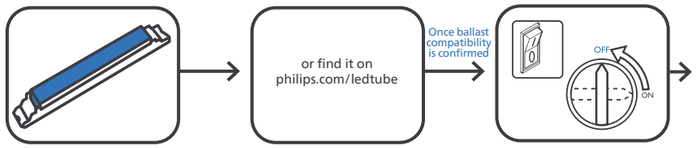
Yes | No

T8 Installation instructions for Electro-magnetic Ballast (EM)



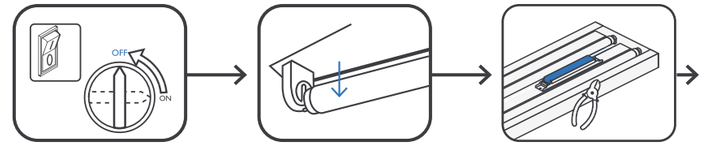
1. Turn off power supply
2. Remove lamp
3. Remove starter
4. Install LED starter
5. Install LED tube (T8; EM/Mains or UN) with light opening facing downwards
6. Turn on power supply

T8 T5 Installation instructions for High-frequency Electronic Ballast (HF)

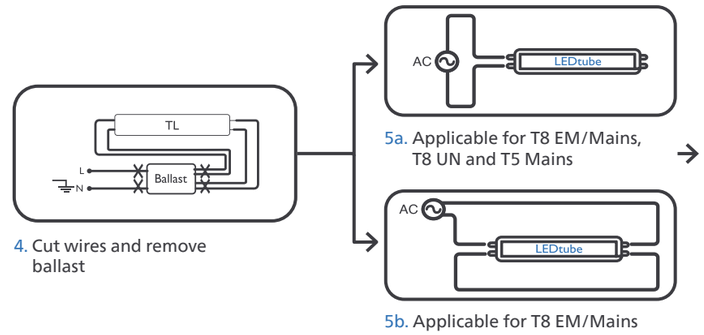


1. Check HF electronic ballast version
2. Verify HF electronic ballast compatibility
3. Turn off power supply
4. Remove lamp
5. Install LED tube (InstantFit HF or UN) with light opening facing downwards
6. Turn on power supply

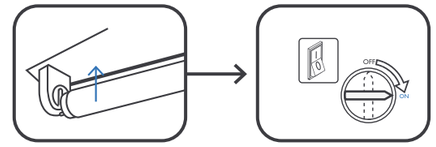
T8 T5 Installation instructions for direct mains connection



1. Turn off power supply
2. Remove lamp
3. Remove cover to expose ballast

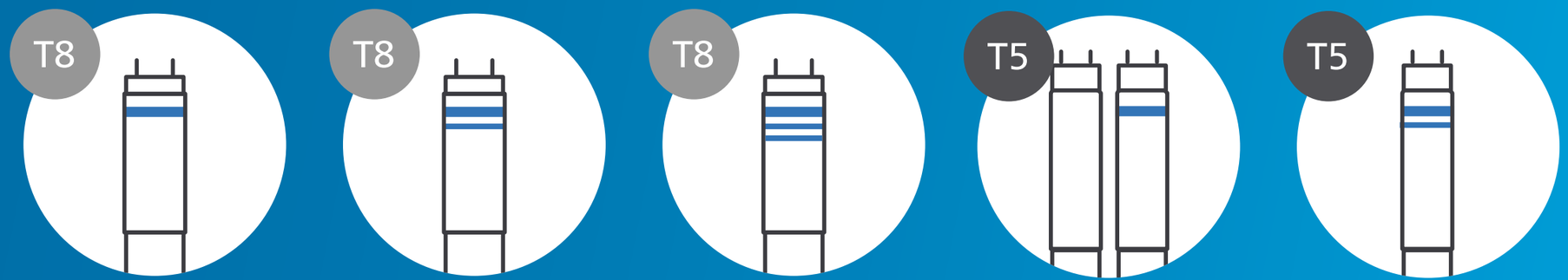


4. Cut wires and remove ballast
5a. Applicable for T8 EM/Mains, T8 UN and T5 Mains
5b. Applicable for T8 EM/Mains



6. LED tube (T8 or T5; EM/Mains, Mains or UN)
7. Turn on power supply

Pro tip for choosing a Philips LED tube: Watch out for the rings!



One ring: EM/Mains
(Electro-magnetic ballast or direct mains)

Two rings: HF
(High-frequency Electronic ballast)

Three rings: UN
(Universal)

No ring/one ring: Mains
(Electro-magnetic ballast or direct mains)

Two rings: HF
(High-frequency Electronic ballast)

Get ready to save energy and costs

Parking

Car parks and transportation networks need to feel bright and welcoming 24 hours a day. White LED light has a higher perceived brightness and superior color rendering, so people feel safer. High Output LED tubes raise the standards in car parks even higher. With a light output of up to 3100 lumen they provide maximum visibility and safety.

	Fluorescent TL-D 1500 mm	CorePro LEDtube SO 1500 mm	CorePro LEDtube UO 1500 mm	MASTER Value LEDtube HO 1500 mm	MASTER LEDtube UO 1500 mm
Lifetime	20,000 hrs	30,000 hrs	30,000 hrs	60,000 hrs	75,000 hrs
Lamp wattage	58W	20W	31.5W	20.5W	18.2W
Total costs/year/lamp*	186.41€	55.14 €	85.25 €	55.35 €	50.10 €
Number of lamps	100				
Burning hours/year	8,760 hrs				
Total savings/year		**13,128 €**	**10,117 €**	**13,107 €**	**13,631 €**
Payback period		**0.9 months**	**1.5 months**	**1.6 months**	**2.5 months**
Total CO_2 reduction over LED lifetime		**65520 kg**	**51030 kg**	**129780 kg**	**169470 kg**
Equivalent to emissions absorbed by		**2978 trees**	**2320 trees**	**5899 trees**	**7703 trees**

Industry

In ultra-demanding applications, 24/7 operations can run up expensive energy bills. With a super bright light output of up to 3700 lumen our Ultra Output and Ultra Efficiency LED tubes combine both the best light output for maximum visibility AND the highest lumen per watt efficiency.

	Fluorescent TL-D 1500 mm	CorePro LEDtube UO 1500 mm	MASTER Value LEDtube UO 1500 mm	MASTER LEDtube UO 1500 mm	MASTER LEDtube UE Class A 1500 mm
Lifetime	20,000 hrs	30,000 hrs	60,000 hrs	75,000 hrs	100,000 hrs
Lamp wattage	58W	31.5W	23W	21.7W	17.6W
Total costs/year/lamp*	93.21 €	42.62 €	30.99 €	29.68 €	49.80 €
Number of lamps	100				
Burning hours/year	4,380 hrs				8,760 hrs
Total savings/year		**5,058 €**	**6,221 €**	**6,353 €**	**13,661 €**
Payback period		**3.1months**	**3.7 months**	**5.9 months**	**4.7 months**
Total CO_2 reduction over LED lifetime		**51030 kg**	**123480 kg**	**158445 kg**	**228480 kg**
Equivalent to emissions absorbed by		**2320 trees**	**5613 trees**	**7202 trees**	**10385 trees**

Retail

Beautiful lighting brings out the best in the products on display and enhances the shopping experience for customers. But with lamps burning for up to 18 hours a day, food retailers want solutions that will reduce energy and maintenance costs – and show their green credentials in the best light.

	Fluorescent TL-D 1500 mm	CorePro LEDtube UO 1500 mm	MASTER Value LEDtube HO 1500 mm	MASTER LEDtube HO 1500 mm	MASTER Value LEDtube UO 1500 mm	MASTER LEDtube UO 1500 mm	MASTER UE Class B 1500 mm
Lifetime	20,000 hrs	30,000 hrs	60,000 hrs	75,000 hrs	60,000 hrs	75,000 hrs	70,000 hrs
Lamp wattage	58W	31.5W	20.5W	18.2W	23W	21.7W	21W
Total costs/year/lamp*	85.12 €	38.93 €	25.27 €	22.88 €	28.30 €	27.11 €	41.40 €
Number of lamps	100						
Burning hours/year	4,000 hrs						6,480 hrs
Total savings/year		**4,619 €**	**5,985 €**	**6,224 €**	**5,682 €**	**5,801 €**	**9,649 €**
Payback period		**3.3 months**	**3.5 months**	**5.4 months**	**4.1 months**	**6.5 months**	**4.9 months**
Total CO_2 reduction over LED lifetime		**51030 kg**	**129780 kg**	**169470 kg**	**123480 kg**	**158445 kg**	**163800 kg**
Equivalent to emissions absorbed by		**2320 trees**	**5899 trees**	**7703 trees**	**5613 trees**	**7202 trees**	**7445 trees**

Office

With a light output of up to 3100 lumen, our High Output LED tubes provide brilliant light quality with the best lumen per watt. Ultra Output LED tubes shine with impressive, high quality light to create the most comfortable ambience that complies with all office norms and still saves on energy.

	Fluorescent TL-D 1500 mm	CorePro LEDtube UO 1500 mm	MASTER Value LEDtube HO 1500 mm	MASTER LEDtube HO 1500 mm	MASTER Value LEDtube UO 1500 mm	MASTER LEDtube UO 1500 mm
Lifetime	20,000 hrs	30,000 hrs	60,000 hrs	75,000 hrs	60,000 hrs	75,000 hrs
Lamp wattage	58W	31.5W	20.5W	18.2W	23W	21.7W
Total costs/year/lamp*	63.84 €	29.19 €	18.95 €	17.16 €	21.23 €	20.33 €
Number of lamps	100					
Burning hours/year	3,000 hrs					
Total savings/year		**3,465 €**	**4,489 €**	**4,668 €**	**4,261 €**	**4,351 €**
Payback period		**4.5 months**	**4.6 months**	**7.2 months**	**5.5 months**	**8.6 months**
Total CO_2 reduction over LED lifetime		**51030 kg**	**129780 kg**	**169470 kg**	**123480 kg**	**158445 kg**
Equivalent to emissions absorbed by		**2320 trees**	**5899 trees**	**7703 trees**	**5613 trees**	**7202 trees**

*Including maintenance and lamp replacement cost. Energy price based on the European average of 29 cent/kWh.
CO_2 gas emissions based on 0.42kg/kWh. Based on multiple scientific literature, an average fully grown tree can absorb 22 kg CO_2 per year.

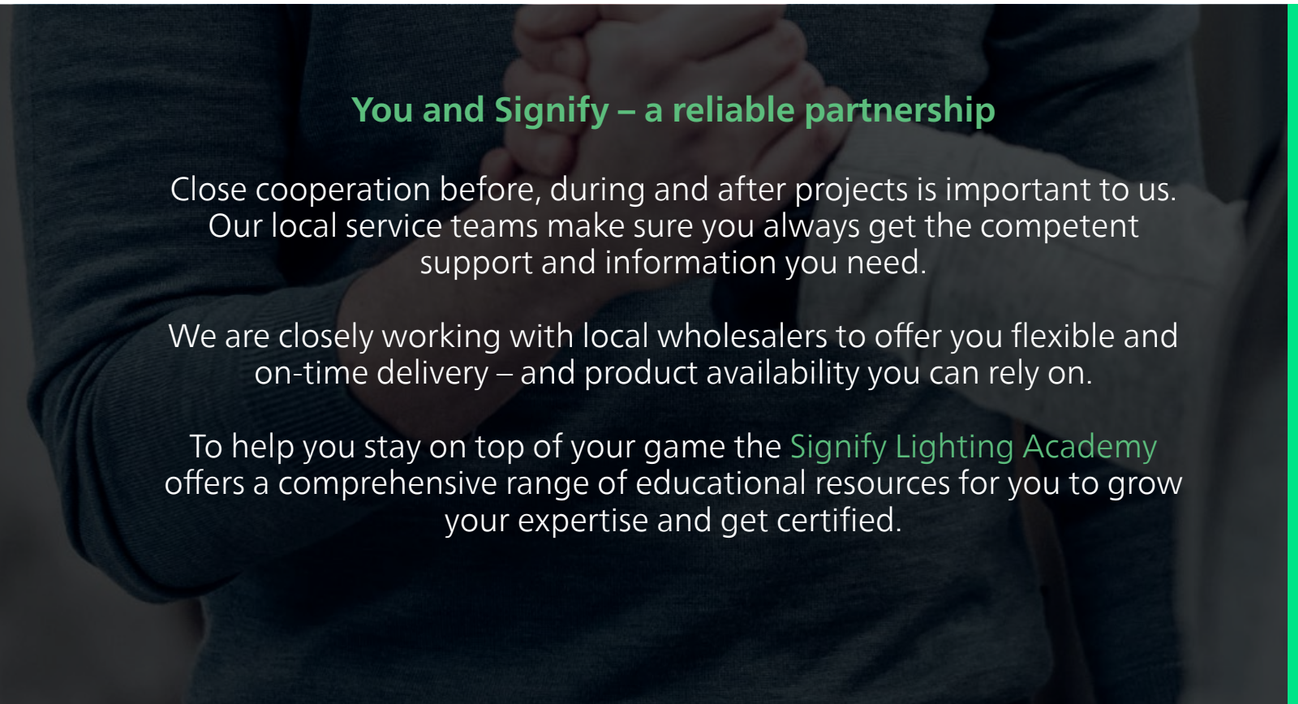
Signify, previously known as Philips Lighting, is the world leader in connected LED lighting systems, software and services. We proudly market the best lighting brands in the world, including Philips and Interact.

PHILIPS

The Philips brand stands for quality and energy-efficiency in light. For over 125 years, Philips products have been at the forefront of innovation. Today Philips is recognized as the leading brand in lighting.

interact

The Philips brand stands for quality and energy-efficiency in light. For over 125 years, Philips products have been at the forefront of innovation. Today Philips is recognized as the leading brand in lighting.



You and Signify – a reliable partnership

Close cooperation before, during and after projects is important to us. Our local service teams make sure you always get the competent support and information you need.

We are closely working with local wholesalers to offer you flexible and on-time delivery – and product availability you can rely on.

To help you stay on top of your game the Signify Lighting Academy offers a comprehensive range of educational resources for you to grow your expertise and get certified.

Brighter lives, better world

Signify is 100% carbon neutral since September 2020.

We recycle up to 90% of our manufacturing waste.

We use 100% renewable electricity.

Our paper packaging for LED lamps and luminaires is saving over 500,000 kilos of plastic waste per year.

Thank you for choosing Philips products offered by Signify and joining us on our mission!

© 2022 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.

www.philips.com/ledtube