



PHILIPS

LED tubes

**REAL
PROs
REAL
QUALITY**

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.

a lighting brand by @signify

philips.com/ledtube

An LED tube for every application



Simplicity and ultra-efficiency make Philips LED tubes the quickest and easiest way to upgrade to LEDs 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 LED tubes for everyday replacement of fluorescent tubes in general applications. The MASTER Value range offers strong performance in demanding applications with intense usage, while the MASTER range is the right choice for every project that calls for best-in-class performance. MasterConnect LED tubes 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 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 majority of 600, 1,200 and 1,500 mm versions.

LED tubes have more than twice the life of fluorescents and half the maintenance cost. 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 light where needed.

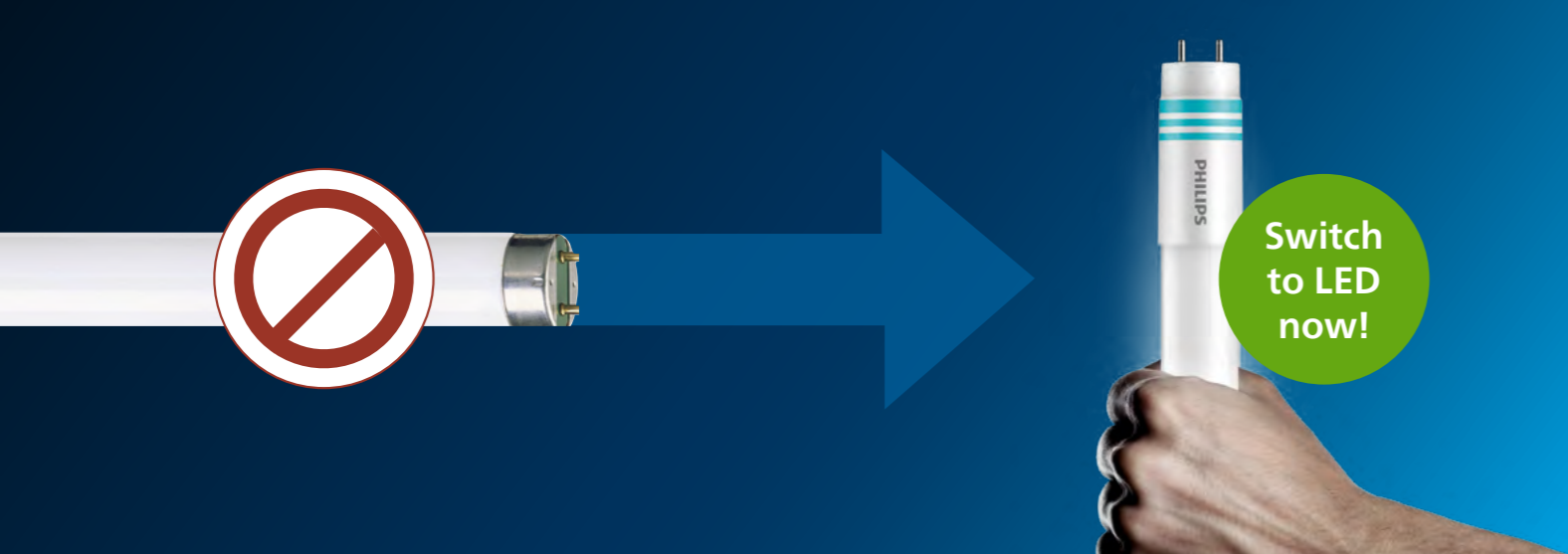
Switch to LEDs now

LED tubes are the future. They have no start-up delay, and they have a long lifetime of up to 100,000 hours compared to fluorescent tubes which have a life of 5,000 - 20,000 hours. Although LED tubes require a larger initial investment, they end up paying for themselves in the first year due to their lower energy consumption.

Make the switch to LED tubes now at www.philips.com/ledconversion

Fluorescent lights are soon going to be redundant. 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 starting on 24 August 2023.

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



LED tubes win 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 and robustness

- LEDtube**
- Highest efficacy of up to 210 lm/W
 - Up to 75% less energy consumption compared to conventional fluorescents
 - Low failure rate
 - Up to 10 years warranty
 - Long lifetime of up to 100,000 hrs

- 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 of 5,000 to 20,000 hrs

Cost of ownership

- LEDtube**
- Relatively high initial costs – but low lifetime costs
 - Lower frequency of maintenance and replacement
 - Payback time 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

www.philips.com/ledconversion

Real pros choose Philips LED tubes for:

Fast and easy installation
Philips LED tubes are true retrofit, making them quick and easy to install

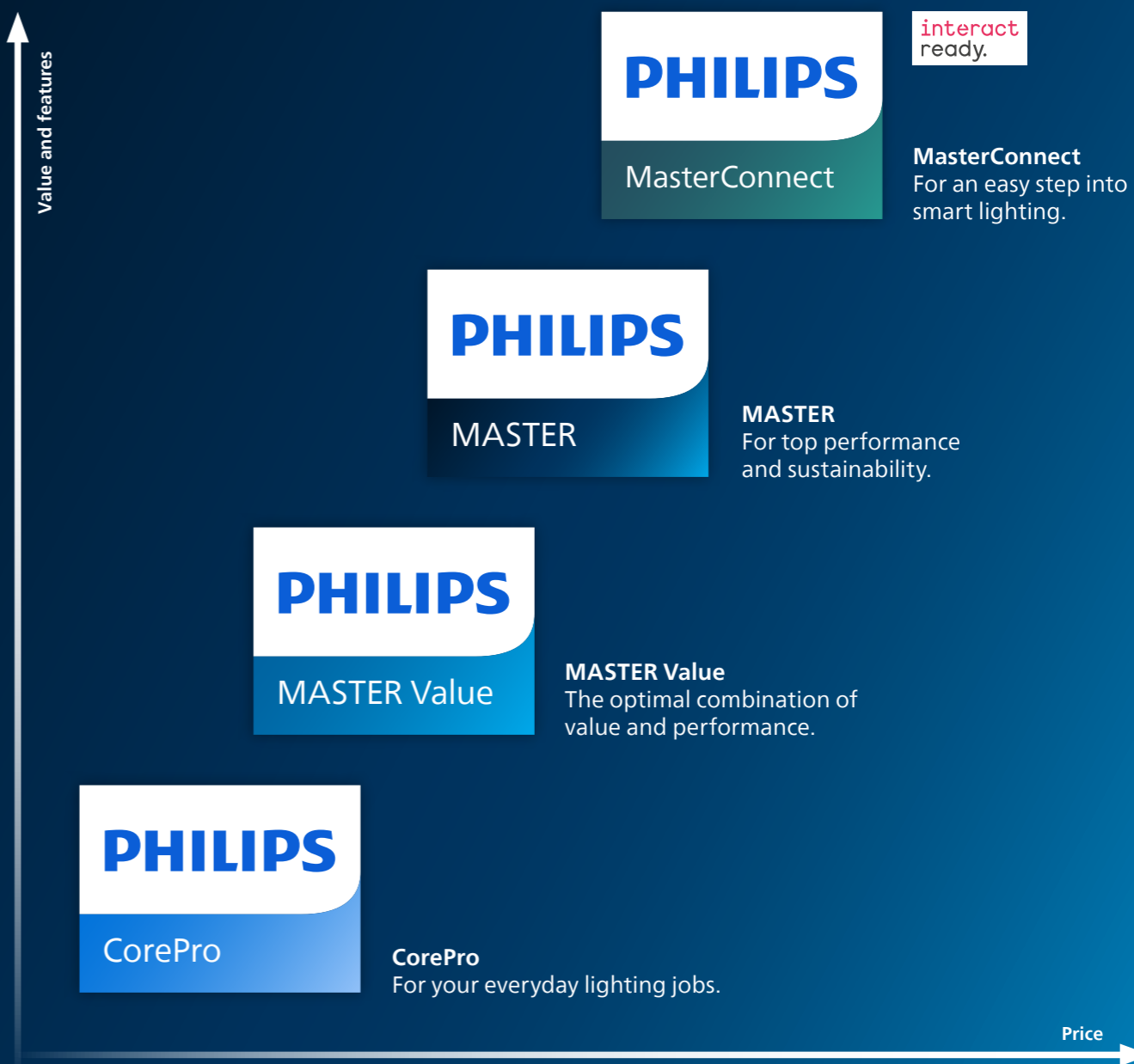
Hassle-free compatibility

- 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
Industry-leading ballast compatibility performance that supports:

- Fixed output ballast
- Intelligent/multi-watt ballast
- Dimming ballast (DALI, 1-10V)

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.



Philips LEDtube T8

- Breakthrough design with >10 IPs that give best-in-class compatibility with high-frequency ballasts
- >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 110 lm/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 150 lm/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 160 lm/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 160 lm/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 savings with up to 210 lm/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 EM/Mains T5



- Optimized glass design to reduce glare
- Up to 155 lm/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 155 lm/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 155 lm/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% energy savings as compared to fluorescent lamps via advanced lighting controls
- Works seamlessly with Interact Pro system
- Scalable and upgradable from standalone to cloud-based solutions

[Click here to see all products](#)

Interact ready.

Always compliant, always up-to-date

New regulations for energy-efficiency standards

In September 2021, the EU implemented 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.

Eco-design for Sustainability Products

Regulation: Aims to improve product performance and sustainability. Products that fail to meet requirements are being phased out.

The Energy Labelling Regulation: Introduces a consumer-friendly energy label to empower end users to choose energy-efficient products.

- Products are labelled using a new A to G scale based on the level of energy efficiency.

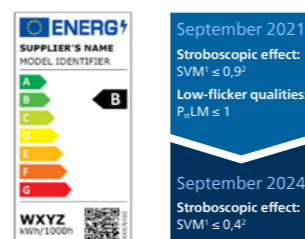
Regulation for optimized light quality

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 stroboscopic 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!

The RoHS ban on fluorescents

The 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. The directive includes 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 Eco-design (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.




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.

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).

Real pros choose light that looks good on camera



Introducing the new camera-friendly feature for MASTER LEDtube EM/Mains T8¹ and InstantFit HF T8². This innovative product design ensures no visible flicker on camera, giving you assurance of a dependable light source when working with cameras³.

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 products, the light sources oscillate rapidly, too quickly to be detected by human eyes. However, if the light source and camera shutter are out of sync, the oscillation might become visible screen.

The use of cameras (phone/digital camera/webcam/security camera etc.) has become part of our daily lives. Now more than ever 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 the next level. With this update you can still rely on the top performance features for this range.

Key benefits:

- Up to 3,700 lm 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 and Ultra efficient (EEL B).
 [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 $\leq 2\text{kHz}$

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

Real pros help their customers realize ultra energy savings



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 costs 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 buildings, so there is much to gain.¹ Did you know there is great potential to save energy, even if you already have LED lights?

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

Unbeatable arguments for your customers

- Saves up to 44% in energy costs compared to standard LED tubes²
- Ultra long lifetime of 100,000 hours – twice as long as standard LED tubes
- Less than 4 months payback time when upgrading from fluorescent tubes
- 10-year warranty

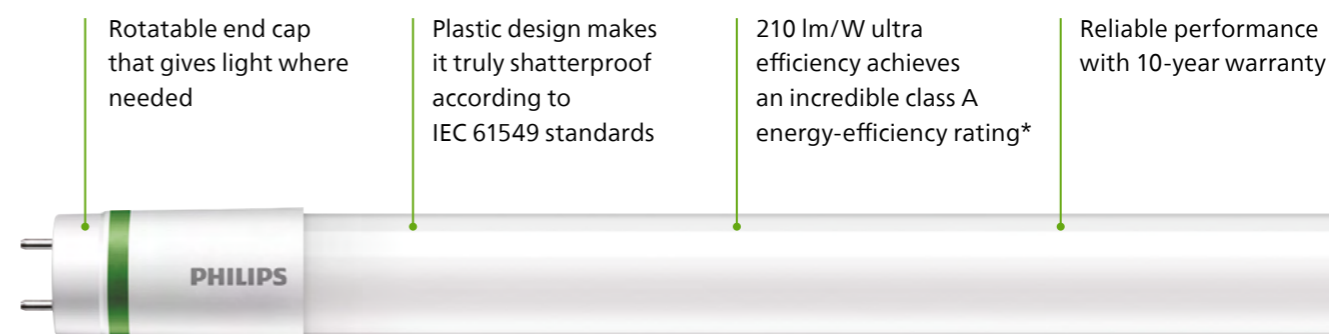
The Philips MASTER LEDtube Ultra Efficient is also available with a class B energy rating³. To learn more visit: www.philips.com/ledtube

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



The Philips MASTER LEDtube Ultra Efficient

All the benefits of LED lighting and more



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

Cost and CO₂ savings right from the start

When updating from fluorescent tubes, your customers can expect a full return on investment in only 4 months. A typical small warehouse will save € 16,044 by replacing 100 units of 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	50,000 hrs >	100,000 hrs	20,000 hrs >	100,000 hrs
Lamp wattage	31.5W >	17.6W	58W >	17.6W
Total savings/year		€ 3,944		€ 16,044
Payback period		1.3 years		0.3 years

Number of lamps	100	Energy costs	€ 0.34/kWh	Lamp cost/year	€ 4.65	Total costs/year/lamp	€ 57.51
Burning hours per year	8,760 hrs ³	Replacement cost/year/lamp	€ 0.44	Energy costs/year/lamp	€ 52.42		

Compared to a fluorescent tube, a new Philips MASTER LEDtube UE can reduce CO₂ emissions by up to 2,285 kg over its lifetime³ – 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 CO₂ emissions by up to 584 kg over its lifetime³ – 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 20,000 hours vs 100 x 17.6W Ultra Efficient A-class LED tubes with a lifetime of 100,000 hours; 34 cent energy cost/hour; 5 euro replacement cost per lamp; 8,760 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 CO₂ gas emissions of 0.42kg/kWh.
 [4] Based on multiple scientific literature, an average fully grown tree can absorb 22 kg CO₂ per year.

Sustainability meets profitability

With Philips MASTER LEDtube Ultra Efficient 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 replacement, the higher investment of your customer will give you a higher profit per light point!

Designed for you and the planet

Real pros swap T5 fluorescents for T5 LED tubes

Philips MASTER LEDtube InstantFit HF T5 is energy-efficient, dimmable and compatible with most ballasts

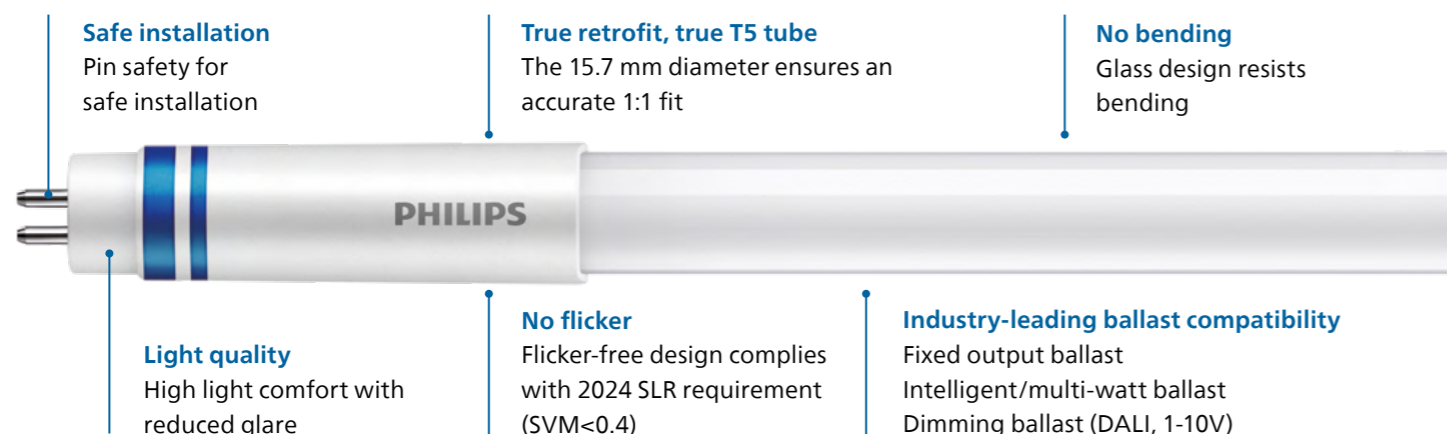


The new generation of Mains T5 LED tube lighting

The new Philips Master LEDtube Mains T5 brings simplicity to your lighting project.



Product highlights



Perfectly safe, reliable & easy to install

Philips MASTER LEDtube Mains T5 installs in luminaires operating on mains power connection. So simple to operate! It is the ideal alternative to standard fluorescent tubes to maximize value over lifetime with high energy saving and lower maintenance costs.

Key benefits

- Reduced operational cost thanks to lower energy consumption
- Lower maintenance cost thanks to longer lifetime than conventional lamps
- Fastest and easiest way to upgrade existing luminaires to LED technology; completely safe product and installation process

Features

- Replacement of existing T5 lamps: operates with mains power connection
- Energy savings compared with fluorescent tubes
- Long lifetime
- No mercury

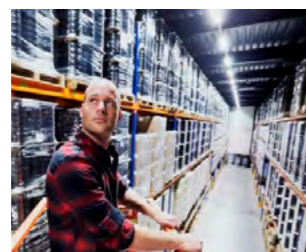
Application

- Office, shops, classrooms
- Industrial facilities and warehouses

Typical use cases



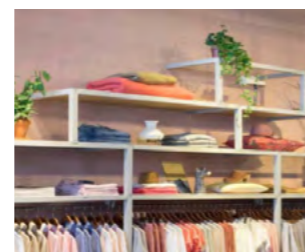
Offices
Office space with dimming capability for comfortable light at any moment.



Industry
Increase your energy savings without any hassle.



Classroom
Optimize comfort by adjusting the light level for every task.



Retail
Optimize shelf lighting hassle-free with LED lighting.



Real pros know: One LED tube is all you need

Introducing the new Philips CorePro Universal Ultra Output T8. Your everyday all-round solution for an easy switch to LED.

Top reasons for making it your 1st choice

1 Universal compatibility

- Works with electromagnetic ballasts, electronic ballasts and direct mains
- No need to check ballast technology in advance, no double stocking

2 Ultra output and light quality

- Up to 3,500 lm output for similar brightness to fluorescent lamps
- Flicker-free light according to 2024 SLR requirement (SVM<0,4)

3 Higher efficiency and longer lifetime

- 150 lm/W for up to 68% energy savings*
- 50,000 hrs lifetime – 2.5 times longer than fluorescent
- High energy savings and lower maintenance mean payback of just a few months

4 Hassle-free 1:1 replacement

- True retrofit, making it the fastest-to-install solution saving you time and money
- Fits straight into existing luminaires
- Available in many sizes and color temperatures

New!
For a super
easy switch
to LED



The 2023 bans
on fluorescent
are in effect!



* Compared with conventional T8

Product highlight

Switching to LED tubes always pays off

The Philips CorePro LEDtube Universal Ultra Output T8 provides you with unbeatable quality, easy-to-install solutions for every application. It was never easier to switch to LED.

The benefits of the new Philips CorePro Universal Ultra Output T8

Hassle-free 1-to-1
replacement

Universal
compatibility

Saves up to 68% energy
compared to a conventional
fluorescent equivalent



Compliant with
upcoming EU regulations*

50,000 hours lifetime –
2.5 times longer than fluorescent

*EU Ecodesign regulation (SLR) and RoHS directive

The cost-efficient all-rounder

With the same brightness as fluorescent tubes and choice of most common lengths, Philips CorePro LEDtube Universal Ultra Output T8 offers reliable performance where you need it: in retail, industry, schools, hospitals, offices, parking lots, warehouses, public areas – and more!

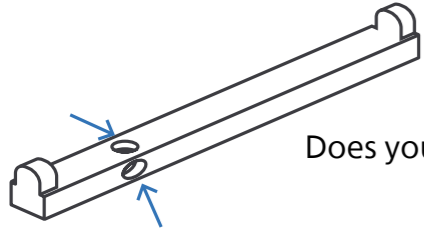


Choose the right LED tube for every application

		T8 fixture						T5 fixture				
		CorePro LEDtube SO	Corepro LEDtube UO	MASTER Value LEDtube HO	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 2,200 lm	up to 3,500 lm	up to 3,100 lm	up to 3,700 lm	up to 3,100 lm	up to 3,700 lm	up to 3,700 lm	up to 3,700 lm	up to 3,000 lm	up to 3,900 lm	up to 5,600 lm
Application areas		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 **electromagnetic ballasts (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 ballasts**

1. Check HF electronic ballast version
2. Verify HF electronic ballast compatibility
or find it on philips.com/ledtube
Once ballast compatibility is confirmed
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

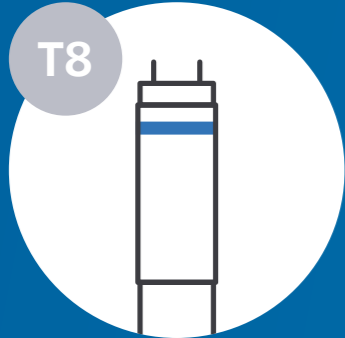
T8 T5 Installation instructions for **direct mains connection**

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

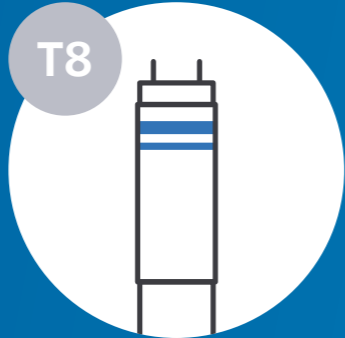
*It is recommended to remove the compensation capacitor to improve the power factor.

**This method is not permitted in Switzerland.

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



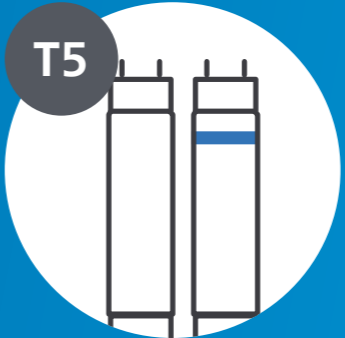
One ring: EM/Mains
(Electromagnetic ballast or direct mains)



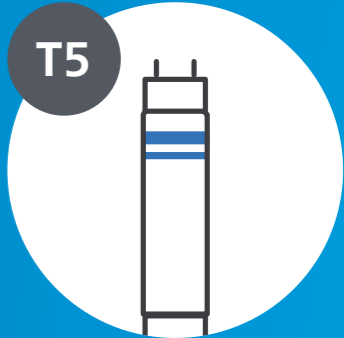
Two rings: HF
(High-frequency electronic ballast)



Three rings: UN
(Universal)



No ring/one ring
(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 high 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 3,100 lumens, they provide maximum visibility and safety.

	Fluorescent TL-D 1,500 mm		CorePro LEDtube SO 1,500 mm	CorePro LEDtube UO 1,500 mm	MASTER Value LEDtube HO 1,500 mm	MASTER LEDtube HO 1,500 mm
Lifetime	20,000 hrs	>	50,000 hrs	50,000 hrs	60,000 hrs	75,000 hrs
Lamp wattage	58W	>	20W	31.5W	20.5W	18.2W
Total costs/year/lamp*	€ 217.95	>	€ 62.16	€ 96.95	€ 64.32	€ 58.07
Number of lamps	100					
Burning hours/year	8,760 hrs					
Total savings/year			€ 15,578	€ 12,099	€ 15,362	€ 15,988
Payback period			0.8 months	1.3 months	1.4 months	2.1 months
Total CO₂ reduction over LED lifetime			109,200 kg	85,050 kg	129,780 kg	169,470 kg
Equivalent to emissions absorbed by			4,963 trees	3,865 trees	5,899 trees	7,703 trees



Retail

Beautiful lighting brings out the best in 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 1,500 mm		CorePro LEDtube UO 1,500 mm	MASTER Value LEDtube HO 1,500 mm	MASTER LEDtube HO 1,500 mm	MASTER Value LEDtube UO 1,500 mm	MASTER LEDtube UO 1,500 mm	MASTER UE Class B 1,500 mm
Lifetime	20,000 hrs	>	50,000 hrs	60,000 hrs	75,000 hrs	60,000 hrs	75,000 hrs	75,000 hrs
Lamp wattage	58W	>	31.5W	20.5W	18.2W	23W	21.7W	20W
Total costs/year/lamp*	€ 99.52	>	€ 44.27	€ 29.37	€ 26.52	€ 32.90	€ 31.45	€ 47.88
Number of lamps	100							
Burning hours/year	4,000 hrs							6,480 hrs
Total savings/year			€ 5,525	€ 7,015	€ 7,300	€ 6,662	€ 6,807	€ 11,334
Payback period			2.8 months	3 months	4.6 months	3.5 months	5.5 months	4.1 months
Total CO₂ reduction over LED lifetime			85,050 kg	129,780 kg	169,470 kg	123,480 kg	158,445 kg	163,800 kg
Equivalent to emissions absorbed by			3,866 trees	5,899 trees	7,703 trees	5,613 trees	7,202 trees	7,445 trees



Industry

In ultra-demanding applications, 24/7 operations can run up expensive energy bills. With a super bright light output of up to 3,700 lumens, our Ultra Output and Ultra Efficiency LED tubes combine both the best light output for maximum visibility and the highest efficacy.

	Fluorescent TL-D 1,500 mm		CorePro LEDtube UO 1,500 mm	MASTER Value LEDtube UO 1,500 mm	MASTER LEDtube UO 1,500 mm	MASTER LEDtube UE Class A 1,500 mm
Lifetime	20,000 hrs	>	50,000 hrs	60,000 hrs	75,000 hrs	100,000 hrs
Lamp wattage	58W	>	31.5W	23W	21.7W	17.6W
Total costs/year/lamp*	€ 108.97	>	€ 48.48	€ 72.90	€ 34.43	€ 57.51
Number of lamps	100					
Burning hours/year	4,380 hrs					8,760 hrs
Total savings/year			€ 6,050	€ 7,294	€ 7,454	€ 16,044
Payback period			2.6 months	3.2 months	5 months	4 months
Total CO₂ reduction over LED lifetime			85,050 kg	123,480 kg	158,445 kg	228,480 kg
Equivalent to emissions absorbed by			3,866 trees	5,613 trees	7,202 trees	10,385 trees



Office

With a light output of up to 3,100 lumens, our High Output LED tubes provide brilliant light quality with the best efficacy. 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 1,500 mm		CorePro LEDtube UO 1,500 mm	MASTER Value LEDtube HO 1,500 mm	MASTER LEDtube HO 1,500 mm	MASTER Value LEDtube UO 1,500 mm	MASTER LEDtube UO 1,500 mm
Lifetime	20,000 hrs	>	50,000 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	>	€ 33.20	€ 22.03	€ 19.89	€ 24.68	€ 23.58
Number of lamps	100						
Burning hours/year	3,000 hrs						
Total savings/year			€ 4,144	€ 5,261	€ 5,475	€ 4,996	€ 5,106
Payback period			3.7 months	4 months	6.2 months	4.6 months	7.3 months
Total CO₂ reduction over LED lifetime			85,050 kg	129,780 kg	169,470 kg	123,480 kg	158,445 kg
Equivalent to emissions absorbed by			3,866 trees	5,899 trees	7,703 trees	5,613 trees	7,202 trees

*Including maintenance and lamp replacement cost. Energy price based on the European average of 34 cent/kWh. CO₂ gas emissions based on 0.42kg/kWh. Based on multiple scientific literature, an average fully grown tree can absorb 22 kg CO₂ 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.

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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.

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Interact is the brand of our IoT software and platform that manages smart lighting systems and the data that those systems collect. Smart, simple and scalable, Interact software can be used in a wide range of application areas, from small offices to entire cities.

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Signify is 100% carbon neutral since September 2020.
We recycle up to 90% of our manufacturing waste.
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