



The new generation of energy saving tube lighting

MASTER LEDtube EM/Mains

The Philips MASTER LEDtube integrates a LED light source into a traditional fluorescent form factor. Its unique design creates a perfectly uniform visual appearance which cannot be distinguished from traditional fluorescent. This product is the ideal solution for up lighting in general lighting applications.

Benefits

- Reduced operational cost thanks to lower energy consumption
- Lower maintenance cost thanks to 2-3 times longer lifetime than normal fluorescent tubes
- Fastest and easiest way to upgrade existing luminaire to LED technology; 100%-safe installation process

Features

- Only 50% energy consumption compared to fluorescent tubes
- Extra-long life of 40,000 hours
- Retrofit to existing T8 lamps on EM or HF electronic gear
- Full safety features and EM Protector safety device
- No mercury

Application

- Car parks
- Warehouses
- Transport and distribution areas
- Front & back of house retail & hospitality

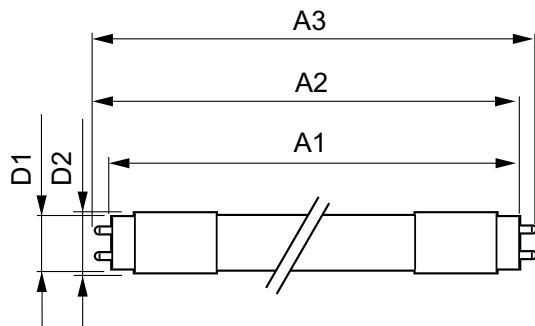
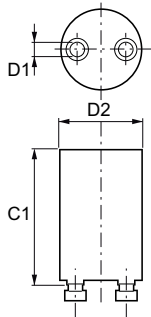
MASTER LEDtube EM/Mains

Versions



MASTER LEDtube EM/Mains

Dimensional drawing

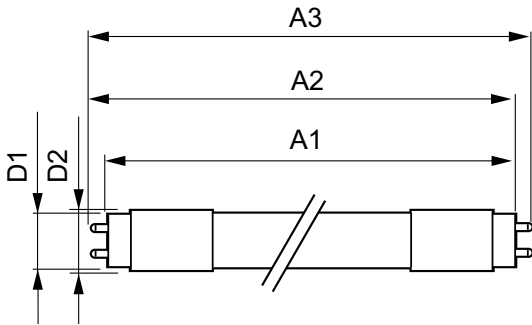


Product	D1	D2	C1
MASTER LEDtube Starter EMP GenII OP	3 mm	21.5 mm	34.5 mm

Product	D1	D2	A1	A2	A3
MAS LEDtube 900mm HO 12W 840 T8	25.78 mm	28 mm	893.3 mm	900.4 mm	907.5 mm
MAS LEDtube 1500mm HO 20W865 T8	25.78 mm	28 mm	1500 mm	1507.1 mm	1514.2 mm
MAS LEDtube 1500mm HO 20W840 T8	25.78 mm	28 mm	1500 mm	1507.1 mm	1514.2 mm
MAS LEDtube 1500mm HO 20W830 T8	25.78 mm	28 mm	1500 mm	1507.1 mm	1514.2 mm
MAS LEDtube 600mm HO 8W865 T8	25.78 mm	28 mm	588.5 mm	595.5 mm	602.5 mm
MAS LEDtube 1200mm UO 16W 840 T8	25.78 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 600mm HO 8W840 T8	25.78 mm	28 mm	588.5 mm	595.5 mm	602.5 mm
MAS LEDtube 1500mm UO 24W 865 T8	25.78 mm	28 mm	1498.7 mm	1505.8 mm	1512.9 mm
MAS LEDtube 1200mm UO 16W 830 T8	25.78 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1500mm UO 24W 840 T8	25.78 mm	28 mm	1498.7 mm	1505.8 mm	1512.9 mm
MAS LEDtube 1500mm UO 24W 830 T8	25.78 mm	28 mm	1498.7 mm	1505.8 mm	1512.9 mm
MAS LEDtube 1200mm UO 16W 865 T8	25.78 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube STD 1200mm 10.5W840 T8 I	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube STD 1200mm 10.5W865 T8 I	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 900mm HO 12W 865 T8	25.78 mm	28 mm	893.3 mm	900.4 mm	907.5 mm
MAS LEDtube 1200mm 14W 840 T8 THD	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm 14W 865 T8 THD	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm

MASTER LEDtube EM/Mains

Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm HO 14W840 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm HO 14W865 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm
MAS LEDtube 1200mm HO 14W830 T8	25.8 mm	28 mm	1198.2 mm	1205.3 mm	1212.4 mm

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	11 kWh	A++
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	11 kWh	A++
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	14 kWh	A++
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	14 kWh	A++
68736900	MAS LEDtube 1200mm UO 16W 830 T8	16 kWh	A++
68738300	MAS LEDtube 1200mm UO 16W 840 T8	16 kWh	A++
68740600	MAS LEDtube 1200mm UO 16W 865 T8	16 kWh	A++
68742000	MAS LEDtube 1500mm UO 24W 830 T8	24 kWh	A++
68744400	MAS LEDtube 1500mm UO 24W 840 T8	24 kWh	A++
68746800	MAS LEDtube 1500mm UO 24W 865 T8	24 kWh	A++
68712300	MAS LEDtube 1500mm HO 20W830 T8	20 kWh	A++

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Energy Efficiency Label (EEL)
68714700	MAS LEDtube 1500mm HO 20W840 T8	20 kWh	A++
68716100	MAS LEDtube 1500mm HO 20W865 T8	20 kWh	A++
68708600	MAS LEDtube 900mm HO 12W 840 T8	12 kWh	A++
68710900	MAS LEDtube 900mm HO 12W 865 T8	12 kWh	A++
69749800	MAS LEDtube 600mm HO 8W840 T8	8 kWh	A++
69751100	MAS LEDtube 600mm HO 8W865 T8	8 kWh	A++
68724600	MAS LEDtube 1200mm HO 14W830 T8	14 kWh	A++
68726000	MAS LEDtube 1200mm HO 14W840 T8	14 kWh	A++
68728400	MAS LEDtube 1200mm HO 14W865 T8	14 kWh	A++
81965400	MASTER LEDtube Starter EMP GenII OP	-	-

Controls and Dimming

Order Code	Full Product Name	Dimmable
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	No
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	No
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	No
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	No
68736900	MAS LEDtube 1200mm UO 16W 830 T8	No
68738300	MAS LEDtube 1200mm UO 16W 840 T8	No

Order Code	Full Product Name	Dimmable
68740600	MAS LEDtube 1200mm UO 16W 865 T8	No
68742000	MAS LEDtube 1500mm UO 24W 830 T8	No
68744400	MAS LEDtube 1500mm UO 24W 840 T8	No
68746800	MAS LEDtube 1500mm UO 24W 865 T8	No
68712300	MAS LEDtube 1500mm HO 20W830 T8	no
68714700	MAS LEDtube 1500mm HO 20W840 T8	No

MASTER LEDtube EM/Mains

Order Code	Full Product Name	Dimmable
68716100	MAS LEDtube 1500mm HO 20W865 T8	no
68708600	MAS LEDtube 900mm HO 12W 840 T8	No
68710900	MAS LEDtube 900mm HO 12W 865 T8	No
69749800	MAS LEDtube 600mm HO 8W840 T8	No
69751100	MAS LEDtube 600mm HO 8W865 T8	No

Order Code	Full Product Name	Dimmable
68724600	MAS LEDtube 1200mm HO 14W830 T8	No
68726000	MAS LEDtube 1200mm HO 14W840 T8	No
68728400	MAS LEDtube 1200mm HO 14W865 T8	No
81965400	MASTER LEDtube Starter EMP GenII OP	-

Operating and Electrical

Order Code	Full Product Name	Input	Voltage	Power	Starting
		Frequency	(Nom)	(Rated) (Nom)	Time (Nom)
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	50 to 60 Hz	220-240 V	10.5 W	0.5 s
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	50 to 60 Hz	220-240 V	10.5 W	0.5 s
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	50 to 60 Hz	220-240 V	14 W	0.5 s
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	50 to 60 Hz	220-240 V	14 W	0.5 s
68736900	MAS LEDtube 1200mm UO 16W 830 T8	50 to 60 Hz	220-240 V	16 W	0.5 s
68738300	MAS LEDtube 1200mm UO 16W 840 T8	50 to 60 Hz	220-240 V	16 W	0.5 s
68740600	MAS LEDtube 1200mm UO 16W 865 T8	50 to 60 Hz	220-240 V	16 W	0.5 s
68742000	MAS LEDtube 1500mm UO 24W 830 T8	50 to 60 Hz	220-240 V	24 W	0.5 s
68744400	MAS LEDtube 1500mm UO 24W 840 T8	50 to 60 Hz	220-240 V	24 W	0.5 s
68746800	MAS LEDtube 1500mm UO 24W 865 T8	50 to 60 Hz	220-240 V	24 W	0.5 s
68712300	MAS LEDtube 1500mm HO 20W830 T8	50 to 60 Hz	220-240 V	20 W	0.5 s

Order Code	Full Product Name	Input	Voltage	Power	Starting
		Frequency	(Nom)	(Rated) (Nom)	Time (Nom)
68714700	MAS LEDtube 1500mm HO 20W840 T8	50 to 60 Hz	220-240 V	20 W	0.5 s
68716100	MAS LEDtube 1500mm HO 20W865 T8	50 to 60 Hz	220-240 V	20 W	0.5 s
68708600	MAS LEDtube 900mm HO 12W 840 T8	50 to 60 Hz	220-240 V	12 W	0.5 s
68710900	MAS LEDtube 900mm HO 12W 865 T8	50 to 60 Hz	220-240 V	12 W	0.5 s
69749800	MAS LEDtube 600mm HO 8W840 T8	50 to 60 Hz	220-240 V	8 W	0.5 s
69751100	MAS LEDtube 600mm HO 8W865 T8	50 to 60 Hz	220-240 V	8 W	0.5 s
68724600	MAS LEDtube 1200mm HO 14W830 T8	50 to 60 Hz	220-240 V	14 W	0.5 s
68726000	MAS LEDtube 1200mm HO 14W840 T8	50 to 60 Hz	220-240 V	14 W	0.5 s
68728400	MAS LEDtube 1200mm HO 14W865 T8	50 to 60 Hz	220-240 V	14 W	0.5 s
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-

General Information

MASTER LEDtube EM/Mains

Order Code	Full Product Name	Cap-Base	Nominal Lifetime (Nom)	Rated Lifetime (Hours)	Switching Cycle	Order Code	Full Product Name	Cap-Base	Nominal Lifetime (Nom)	Rated Lifetime (Hours)	Switching Cycle
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	G13	50000 h	50000 h	200000X	68714700	MAS LEDtube 1500mm HO 20W840 T8	G13	50000 h	50000 h	200000X
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	G13	50000 h	50000 h	200000X	68716100	MAS LEDtube 1500mm HO 20W865 T8	G13	50000 h	50000 h	200000X
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	G13	50000 h	50000 h	50000X	68708600	MAS LEDtube 900mm HO 12W 840 T8	G13	50000 h	50000 h	200000X
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	G13	50000 h	50000 h	50000X	68710900	MAS LEDtube 900mm HO 12W 865 T8	G13	50000 h	50000 h	200000X
68736900	MAS LEDtube 1200mm UO 16W 830 T8	G13	50000 h	50000 h	200000X	69749800	MAS LEDtube 600mm HO 8W840 T8	G13	50000 h	50000 h	200000X
68738300	MAS LEDtube 1200mm UO 16W 840 T8	G13	50000 h	50000 h	200000X	69751100	MAS LEDtube 600mm HO 8W865 T8	G13	50000 h	50000 h	200000X
68740600	MAS LEDtube 1200mm UO 16W 865 T8	G13	50000 h	50000 h	200000X	68724600	MAS LEDtube 1200mm HO 14W830 T8	G13	50000 h	50000 h	200000X
68742000	MAS LEDtube 1500mm UO 24W 830 T8	G13	50000 h	50000 h	200000X	68726000	MAS LEDtube 1200mm HO 14W840 T8	G13	50000 h	50000 h	200000X
68744400	MAS LEDtube 1500mm UO 24W 840 T8	G13	50000 h	50000 h	200000X	68728400	MAS LEDtube 1200mm HO 14W865 T8	G13	50000 h	50000 h	200000X
68746800	MAS LEDtube 1500mm UO 24W 865 T8	G13	50000 h	50000 h	200000X	81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-
68712300	MAS LEDtube 1500mm HO 20W830 T8	G13	50000 h	50000 h	200000X						

Light Technical (1/2)

Order Code	Full Product Name	Beam Angle (Nom)	Colour Code	Correlated Colour Temperature (Nom)	Colour	Llmf At End Of		
					Rendering Index (Nom)	Nominal Lifetime (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	-	840	4000 K	83	70 %	1600 lm	1600 lm
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	-	865	6500 K	83	70 %	1600 lm	1600 lm
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	-	840	4000 K	83	70 %	2100 lm	2100 lm
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	-	865	6500 K	83	70 %	2100 lm	2100 lm
68736900	MAS LEDtube 1200mm UO 16W 830 T8	160 °	830	3000 K	83	70 %	2300 lm	2300 lm
68738300	MAS LEDtube 1200mm UO 16W 840 T8	160 °	840	4000 K	83	70 %	2500 lm	2500 lm
68740600	MAS LEDtube 1200mm UO 16W 865 T8	160 °	865	6500 K	83	70 %	2500 lm	2500 lm
68742000	MAS LEDtube 1500mm UO 24W 830 T8	160 °	830	3000 K	83	70 %	3400 lm	3400 lm
68744400	MAS LEDtube 1500mm UO 24W 840 T8	160 °	840	4000 K	83	70 %	3700 lm	3700 lm
68746800	MAS LEDtube 1500mm UO 24W 865 T8	160 °	865	6500 K	83	70 %	3700 lm	3700 lm
68712300	MAS LEDtube 1500mm HO 20W830 T8	-	830	3000 K	83	70 %	2900 lm	2900 lm
68714700	MAS LEDtube 1500mm HO 20W840 T8	-	840	4000 K	83	70 %	3100 lm	3100 lm
68716100	MAS LEDtube 1500mm HO 20W865 T8	-	865	6500 K	83	70 %	3100 lm	3100 lm
68708600	MAS LEDtube 900mm HO 12W 840 T8	160 °	840	4000 K	83	70 %	1575 lm	1575 lm
68710900	MAS LEDtube 900mm HO 12W 865 T8	160 °	865	6500 K	83	70 %	1575 lm	1575 lm

MASTER LEDtube EM/Mains

Order Code	Full Product Name	Beam Angle (Nom)	Colour Code	Correlated Colour Temperature (Nom)	Colour	Llmf At End Of		
					Rendering Index (Nom)	Nominal Lifetime (Nom)	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
69749800	MAS LEDtube 600mm HO 8W840 T8	160 °	840	4000 K	83	70 %	1050 lm	1050 lm
69751100	MAS LEDtube 600mm HO 8W865 T8	160 °	865	6500 K	83	70 %	1050 lm	1050 lm
68724600	MAS LEDtube 1200mm HO 14W830 T8	-	830	3000 K	83	70 %	2000 lm	2000 lm
68726000	MAS LEDtube 1200mm HO 14W840 T8	-	840	4000 K	83	70 %	2100 lm	2100 lm
68728400	MAS LEDtube 1200mm HO 14W865 T8	-	865	6500 K	83	70 %	2100 lm	2100 lm
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-	-	-	-

Light Technical (2/2)

Order Code	Full Product Name	Rated Beam Angle	Order Code	Full Product Name	Rated Beam Angle
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	-	68714700	MAS LEDtube 1500mm HO 20W840 T8	-
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	-	68716100	MAS LEDtube 1500mm HO 20W865 T8	-
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	-	68708600	MAS LEDtube 900mm HO 12W 840 T8	160 °
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	-	68710900	MAS LEDtube 900mm HO 12W 865 T8	160 °
68736900	MAS LEDtube 1200mm UO 16W 830 T8	160 °	69749800	MAS LEDtube 600mm HO 8W840 T8	160 °
68738300	MAS LEDtube 1200mm UO 16W 840 T8	160 °	69751100	MAS LEDtube 600mm HO 8W865 T8	160 °
68740600	MAS LEDtube 1200mm UO 16W 865 T8	160 °	68724600	MAS LEDtube 1200mm HO 14W830 T8	-
68742000	MAS LEDtube 1500mm UO 24W 830 T8	160 °	68726000	MAS LEDtube 1200mm HO 14W840 T8	-
68744400	MAS LEDtube 1500mm UO 24W 840 T8	160 °	68728400	MAS LEDtube 1200mm HO 14W865 T8	-
68746800	MAS LEDtube 1500mm UO 24W 865 T8	160 °	81965400	MASTER LEDtube Starter EMP GenII OP	-
68712300	MAS LEDtube 1500mm HO 20W830 T8	-			

Temperature

Order Code	Full Product Name	T-Ambient (Max)	T-Ambient (Min)	T-Case Maximum (Nom)	T-Storage (Max)	T-Storage (Min)
68768000	MAS LEDtube STD 1200mm 10.5W840 T8 I	45 °C	-20 °C	50 °C	65 °C	-40 °C
68770300	MAS LEDtube STD 1200mm 10.5W865 T8 I	45 °C	-20 °C	50 °C	65 °C	-40 °C
72857400	MAS LEDtube 1200mm 14W 840 T8 THD	45 °C	-20 °C	55 °C	65 °C	-40 °C
72859800	MAS LEDtube 1200mm 14W 865 T8 THD	45 °C	-20 °C	55 °C	65 °C	-40 °C
68736900	MAS LEDtube 1200mm UO 16W 830 T8	35 °C	-20 °C	55 °C	65 °C	-40 °C
68738300	MAS LEDtube 1200mm UO 16W 840 T8	35 °C	-20 °C	55 °C	65 °C	-40 °C
68740600	MAS LEDtube 1200mm UO 16W 865 T8	35 °C	-20 °C	55 °C	65 °C	-40 °C
68742000	MAS LEDtube 1500mm UO 24W 830 T8	35 °C	-20 °C	60 °C	65 °C	-40 °C
68744400	MAS LEDtube 1500mm UO 24W 840 T8	35 °C	-20 °C	60 °C	65 °C	-40 °C
68746800	MAS LEDtube 1500mm UO 24W 865 T8	35 °C	-20 °C	60 °C	65 °C	-40 °C
68712300	MAS LEDtube 1500mm HO 20W830 T8	45 °C	-20 °C	60 °C	65 °C	-40 °C
68714700	MAS LEDtube 1500mm HO 20W840 T8	45 °C	-20 °C	60 °C	65 °C	-40 °C
68716100	MAS LEDtube 1500mm HO 20W865 T8	45 °C	-20 °C	60 °C	65 °C	-40 °C
68708600	MAS LEDtube 900mm HO 12W 840 T8	45 °C	-20 °C	50 °C	65 °C	-40 °C
68710900	MAS LEDtube 900mm HO 12W 865 T8	45 °C	-20 °C	50 °C	65 °C	-40 °C
69749800	MAS LEDtube 600mm HO 8W840 T8	35 °C	-20 °C	50 °C	65 °C	-40 °C
69751100	MAS LEDtube 600mm HO 8W865 T8	35 °C	-20 °C	50 °C	65 °C	-40 °C
68724600	MAS LEDtube 1200mm HO 14W830 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
68726000	MAS LEDtube 1200mm HO 14W840 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
68728400	MAS LEDtube 1200mm HO 14W865 T8	45 °C	-20 °C	55 °C	65 °C	-40 °C
81965400	MASTER LEDtube Starter EMP GenII OP	-	-	-	-	-

MASTER LEDtube EM/Mains

