APM LED TUBE PRODUCT INTRODUCTION



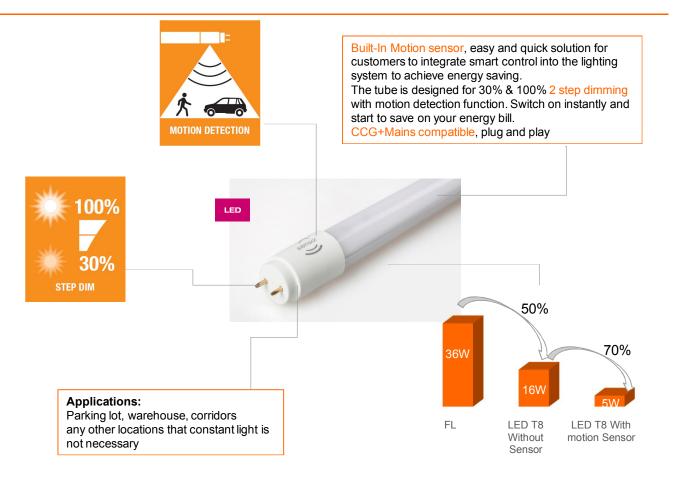
MOTION SENSOR TUBE

Raysen Feng | DCS | Oct. 2017



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LED STAR+ MOTION SENSOR TUBE



Your top 5 benefit

✓ Built-in motion sensor technology,

automatically adjusting light output by

detecting motion

✓ Hassle free 1:1 replacement for

fluorescent tube in CCG installation

Excellent payback story and energy

savings of up to 70%*

- ✓ High efficiency of up to 100 lm/W
- Very good light quality and distribution

*compared to conventional FL lamps

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Product Information Sheet General specification

Key Technical Dat	ta
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ct L	LED STAR+ MOTION S	SENSOR Tube
body G	Glass	Glass
า 2	2FT	4FT
ous flux 8	800 lm	1600 lm
mption 8	8W	16W
ge 2	220 – 240 V 50/60Hz	220 – 240 V 50/60Hz
	CCG+Mains; Microwave sensor	CCG+Mains Microwave sensor
4	4000K,6500 K	4000K,6500 K
a) >	>80	>80
<	<6	<6
r factor >	>0.9	>0.9
ne (L70/B50) 3	30 000 h	30 000 h
ning cycles 5	50 000	50 000
nce angle >	>160°	>160°
able S	Step DIM 30%-100%	Step DIM 30%-100%
6	603 mm x 28 mm	1212 mm x 28 mm
t G	G13	G13
andard C	CB,EMC	CB,EMC
a) > factor > ne (L70/B50) 3 ning cycles 5 nce angle > able S 6 t 6	>80 <6 >0.9 30 000 h 50 000 >160° Step DIM 30%-100% 603 mm x 28 mm G13	>80 <6 >0.9 30 000 h 50 000 >160° Step DIM 30%-100 1212 mm x 28 mm G13

Product description:

- 1:1 LED replacement for fluorescent tube (2ft and 4ft)
- · For operation at CCG installation
- · Can be operated with direct AC 230V
- · Glass tube body with out bending issue
- High color homogeneity
- RoHS-conformity, no mercury
- Suitable for ambient temperatures from -20 $^\circ$ $\ ...$ 45 $^\circ$ C

Key product features:

- · High efficiency of up to 100 Im/W
- Up to 70% energy savings compared to conventional fluorescent lamps
- Instant 100% light without flickering
- 2 years LEDVANCE guarantee

Application:

- Car park
- Stairways
- · Corridors, Foyers
- Warehouse

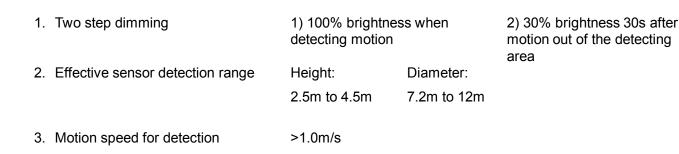


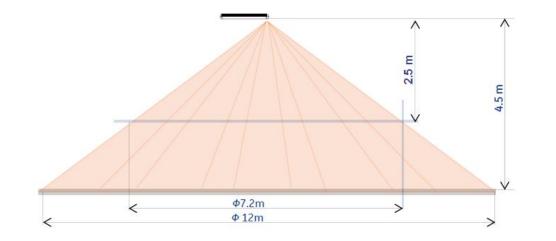


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Product Information Sheet

Motion sensor technical spec and application notice

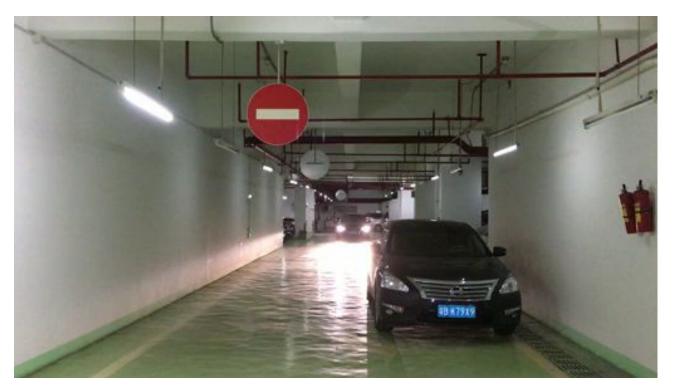




- The built-in motion sensor (microwave sensor) is installed in one end of the tube (with product label). It should avoid be covered by metal parts and direction down.
- Install in places far away from magnetic field to avoid wrong function.
- Install in places far away from moving objects (such as fans, etc.) to avoid wrong function.
- · Recommended installation distant between tubes is >6 meter

Product Application

Short Video: application in car park





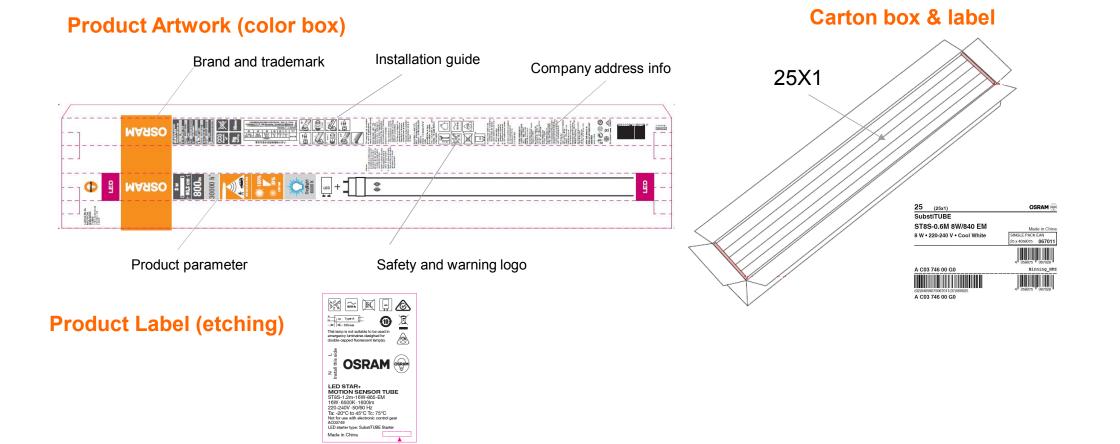
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Link of share point folder for the video:

https://lightweb.osram.com/content/10000137/cl_apac_intranet/Shar ed%20Documents/Forms/AllItems.aspx?RootFolder=%2Fcontent% 2F10000137%2Fcl%5Fapac%5Fintranet%2FShared%20Document s%2FLED%20LAMPS%20APM%2FDocuments%2FProduct%20Ma rketing%20Information%2FLED%20Tube%20%2D%207HF%2FFY %201718%2FLED%20STAR%2B%20M0TION%20SENSOR%20T UBE%2FProduct%20Introduction&FolderCTID=0x0120006AEFCA9 AF80FBC4A8649491103046025&View=%7B35C6796D%2DD3CE %2D4CCA%2D8101%2D96B1C5AAD40D%7D

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Product Package



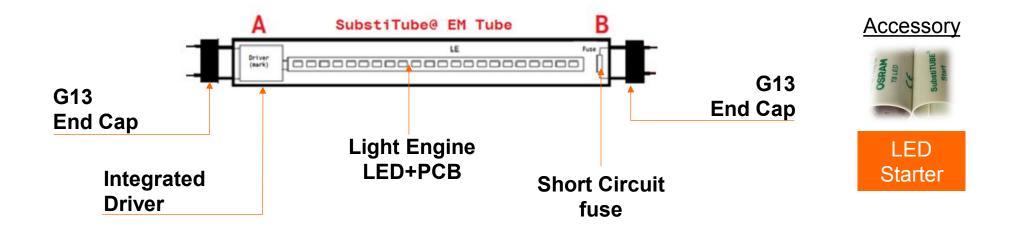




Wiring Introduction What is EM tube and how the design structure is

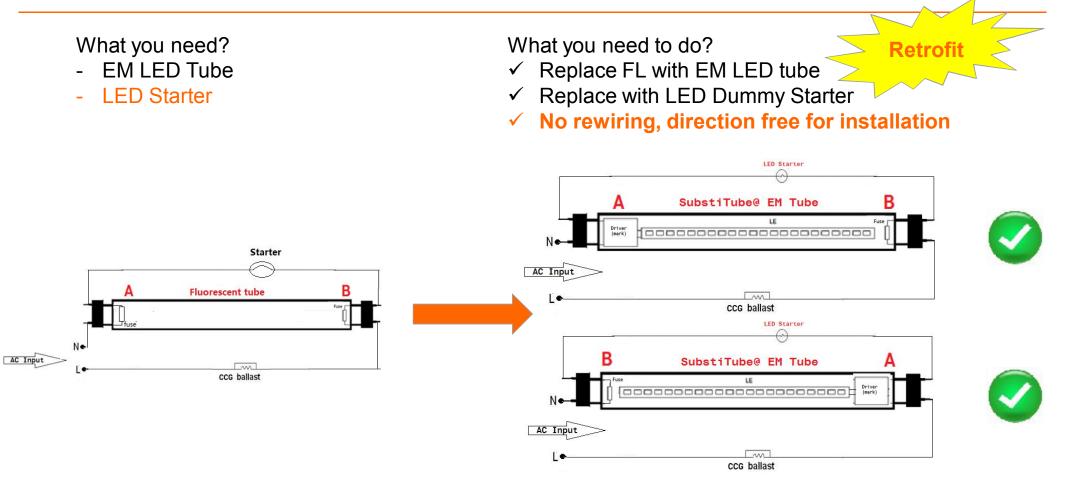
LED START+ MOTION SENSOR TUBE IS A EM LED TUBE

- 1. LED tube for ElectroMagnetic control gears (CCG)
- 2. LED tube for direct AC input





Wiring Introduction Wiring in CCG Circuit double end input





Rewiring

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Wiring Introduction

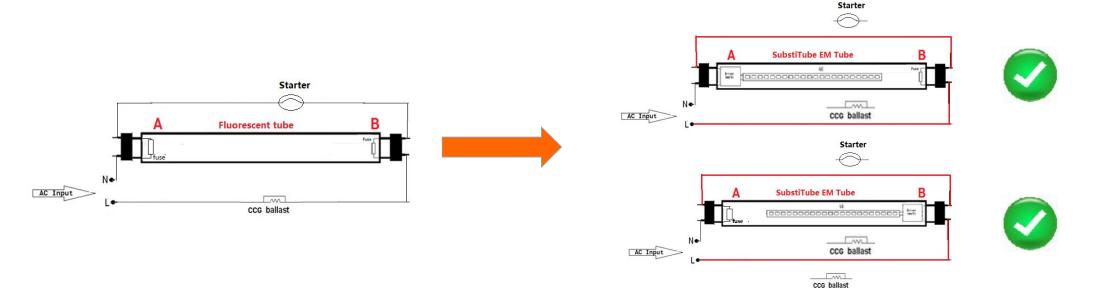
Wiring in direct AC input Circuit double end input

What you need?

- EM LED Tube
- Doesn't need LED starter

What you need to do?

- ✓ Replace FL with EM tube
- ✓ **Bypass** wring of ballast
- ✓ **Bypass** wiring of Starter
- ✓ Connect to the AC main, direction free for installation

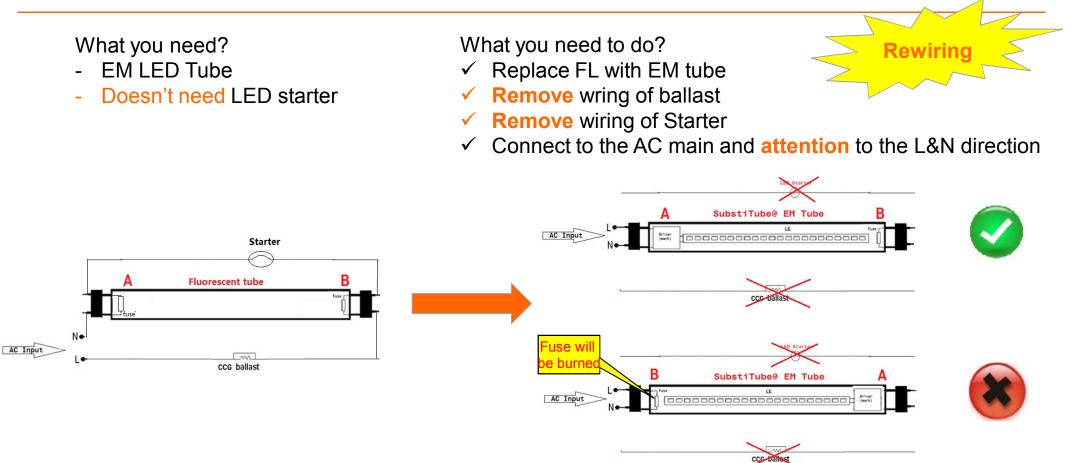




Wiring Introduction

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Wiring in direct AC input Circuit single end input





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Product phase in phase out mapping

Available date will be different by BG since local approbation and shipping lead time

			2017 Q3				2017 C	24				2018 Q1	Comments
Product Segment *	Product Type *	Region *	May	-	Jun	Jul	Aug	💌 Sep	Oct		Nov 💌	Dec	⊂ommonts ▼
LED STAR+ (M1)	LED STAR+ MOTION SENSOR	APM							AC0374600G	0	4058075067011	ST85-0.6M 8W/840 230V EM 25X1 APM OSRAM	New portfolio
LED STAR+ (M1)	LED STAR+ MOTION SENSOR	APM							AC0374700G	0	4058075055599	ST8S-0.6M 8W/865 230V EM 25X1 APM OSRAM	New portfolio
LED STAR+ (M1)	LED STAR+ MOTION SENSOR	APM							AC0374800G	0	4058075067035	ST85-1.2M 16W/840 230V EM 25X1 APM OSRAM	New portfolio
LED STAR+ (M1)	LED STAR+ MOTION SENSOR	АРМ							AC0374900G	0	4058075055612	ST85-1.2M 16W/865 230V EM 25X1 APM OSRAM	New portfolio

NEW PORTFOLIO OF APM LED TUBE

Pls confirm with supply chain colleague for the actual lead time and available date by different BG



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Ordering info 25pcs per shipping box

Product	EAN-10*	EAN-40**	S-Unit***
ST8S-0.6M 8W/840 230V EM 25X1 APM OSRAM	4058075067011	4058075067028	
ST8S-0.6M 8W/865 230V EM 25X1 APM OSRAM	4058075055599	4058075055605	25X1
ST8S-1.2M 16W/840 230V EM 25X1 APM OSRAM	4058075067035	4058075067042	2371
ST8S-1.2M 16W/865 230V EM 25X1 APM OSRAM	4058075055612	4058075055629	

* ENA-10: ordering code for single unit

** ENA-40: ordering code for shipping unit

*** S-Unit: Lamps per shipping unit



Information Hub: Share-point

Share point link: TI sheet, Product Introduction PPT, Certification and test report, IES-file

https://lightweb.osram.com/content/10000137/cl_apac_intranet/Shared%20Documents/Forms/AllItems.aspx?RootFold er=%2Fcontent%2F10000137%2Fcl%5Fapac%5Fintranet%2FShared%20Documents%2FLED%20LAMPS%20APM% 2FDocuments%2FProduct%20Marketing%20Information%2FLED%20Tube%20%2D%207HF%2FFY%201718%2FLE D%20STAR%2B%20MOTION%20SENSOR%20TUBE&FolderCTID=0x0120006AEFCA9AF80FBC4A8649491103046 025&View=%7B35C6796D%2DD3CE%2D4CCA%2D8101%2D96B1C5AAD40D%7D&InitialTabId=Ribbon%2EDocum ent&VisibilityContext=WSSTabPersistence

Share point link: IC & EAN list

https://lightweb.osram.com/content/10000137/cl_apac_intranet/Shared%20Documents/Forms/AllItems.aspx?RootFold er=%2Fcontent%2F10000137%2Fcl%5Fapac%5Fintranet%2FShared%20Documents%2FLED%20LAMPS%20APM% 2FDocuments%2FProduct%20Marketing%20Information%2FMonthly%20IC%20and%20EAN%20List%2F2017%20IC %20and%20EAN%20List&FolderCTID=0x0120006AEFCA9AF80FBC4A8649491103046025&View=%7B35C6796D%2 DD3CE%2D4CCA%2D8101%2D96B1C5AAD40D%7D

In case you have further unclear, you may send email to <u>rr.feng@ledvance.com</u> (Raysen Feng) for further support.



THANK YOU