



LED Ceiling Light  
AL117 Series



## Introduction

This is a super slim and frameless ceiling light design. It has a curved surface, sand-grained PC shade offers a uniform light output, frameless with full luminous. IP54 and IK08 high protection ensure a long lifespan, loop in/out design makes an easier installation.

## Features

- Super slim with 46/48mm thickness.
- High lumen efficiency, 100lm/W.
- IP54 IK08 high protection level.
- Dimming way: Non- dim, triac dim, DALI dim.
- Internal flicker free driver.
- Adjustable CCT and adjustable power.
- Lamp color: White RAL9016.(Can customize other color as required.)
- S7: Adjustable sensor with slide switch.

## Application Areas

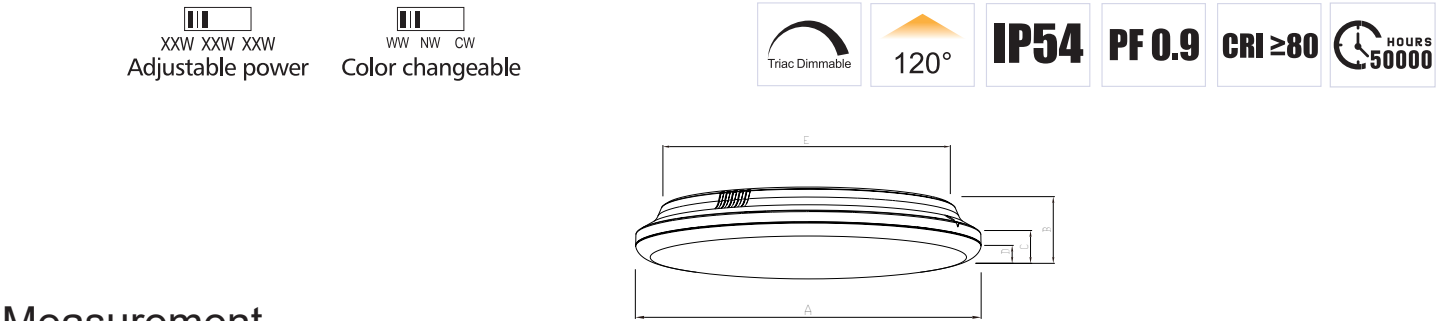
It is designed for general lighting applications, such as Hotel, office, Restaurant, Corridor etc, also can be used in class room (wet condition), living room (wet condition)





Technical Data Sheet (1)

Code No.			AL117-8-12W	AL117-11-12W	AL117-11-18W	AL117-14-25W
Dimension(mm)			Ø200*46	Ø275*48		Ø350*48
Cutout (mm)			-			
Watt(W)			12W	12W	18W	25W
Rated Input Voltage(V)			AC230V			
Input Voltage(V)			AC200-240V			
LED Module Input			-			
Light Source			SMD			
SDCM			<6 (@3000K 4000K 5000K)			
CCT(K)			1-CCT: 3000K/4000K/5000K/5700K    3-CCT: 3000K + 4000K + 5700K			
CCT Selection DIP Switch			YES			
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	1100-1300	1100-1300	1660-1900	2300-2650
	DIM		1050-1250	1050-1250	1620-1850	2250-2600
	Non-DIM	3-CCT	1100-1350	1100-1350	1660-1950	2300-2700
	DIM		1050-1300	1050-1300	1620-1900	2250-2650
CRI			≥80			
Beam Angle (°)			120°			
UGR			-			
LED Driver			Built-in			
Dimming Option			Triac/ DALI			
Sensor			Microwave sensor & Daylight sensor			
Emergency Kits			-			
Electrical Class			Class II			
Ingress Protection (IP Rating)			IP54			
Impact Resistance (IK Rating)			IK08			
Product Finishing(Base)			White RAL 9016			
Materials of Optics			PC			
Materials of Housing			PC			
Lifetime (hr)			50,000h @ L70B50 Ta=25°C			
Glow wire test (°C )			750°C Cover) 850°C (Lamp Base)			
Operating Temp. (°C )			-20°C ~45°C			
Storage Temp. (°C )			-20°C ~65°C			
Installation			Surface mount/Wall mount			



Measurement

Code	Dimension(mm)					Size(mm)	Product Weight (Kg)		Package weight (Kg)		Carton Size(cm)	Qty/CTN	20GP (pcs)	40HQ (pcs)
	A	B	C	D	E		N.W/PC	G.W/PC	N.W/CTN	G.W/CTN				
8"	Ø200	46	24	16	175	Ø200*46	0.5	0.62	6	8.2	47.5*34.5*25	12	8436	19944
11"	Ø275	48	26	17	230	Ø275*48	0.8	0.96	9.6	12.5	58.5*34.5*30.5	12	5136	12384
14"	Ø350	48	26	17	305	Ø350*48	1.2	1.43	12	15.5	57.5*37.5*38	10	3600	7930

Technical Data Sheet (2)

Code No.			AL117-11-18W-A3	AL117-11-18W-A3C3	AL117-14-24W-A3	AL117-14-24W-A3C3
Dimension(mm)			Ø275*48			Ø350*48
Cutout (mm)			-			
Watt(W)			6W/12W/18W			15W/20W/24W
Rated Input Voltage(V)			AC85-265V			
Input Voltage(V)			AC100-240V			
LED Module Input			-			
Light Source			SMD			
SDCM			<6 (@3000K 4000K 5000K)			
CCT(K)			1-CCT: 3000K/4000K/5000K/5700K	3-CCT: 3000K + 4000K + 5700K	1-CCT: 3000K/4000K/5000K/5700K	3-CCT: 3000K + 4000K + 5700K
CCT Selection DIP Switch			NO	YES	NO	YES
Luminous Flux (lm) ±5%	Non-DIM	1-CCT	6W: 600-680 12W: 1100-1300 18W: 1650-1850	-	15W: 1450-1650 20W: 1850-2100 24W: 2250-2500	-
	DIM		-			
	Non-DIM	3-CCT	-	6W: 600-700 12W: 1100-1350 18W: 1650-1900	-	15W: 1450-1700 20W: 1850-2200 24W: 2250-2600
	DIM		-			
CRI			≥80			
Beam Angle (°)			120°			
UGR			-			
LED Driver			Built-in			
Dimming Option			NO			
Sensor			-			
Emergency Kits			-			
Electrical Class			Class II			
Ingress Protection (IP Rating)			IP54			
Impact Resistance (IK Rating)			IK08			
Product Finishing(Base)			White RAL 9016			
Materials of Optics			PC			
Materials of Housing			PC			
Lifetime (hr)			50,000h @ L70B50 Ta=25°C			
Glow wire test (°C )			750°C Cover) 850°C (Lamp Base)			
Operating Temp. (°C )			-20°C ~45°C			
Storage Temp. (°C )			-20°C ~65°C			



Driver Datasheet(Non-dimmable )

Total load wattage		12W	18W	25W
Output	Output Voltage range	DC60-75V		
	Rated output current	160mA	230mA	330mA
	Line Regulation	±5%		
	Setup, Rise Time	<0.5S		
	Flickering Index	3%,IEEE1789 NO RISK		
Input	Input Voltage	AC200-240V		
	Rated Input Voltage(V)	AC230V		
	Frequency	50/60Hz		
	Input Current	≤0.07A	0.1A	0.14A
	Rated Input Current	≤0.06A	0.09A	0.12A
	Power Factor	0.9		
	THD	-		<20% @230V
	Efficiency	≥85%		
	No load wattage	<0.5W		
Protection	Short circuit protection	Pass		
	Over voltage protection	Pass		
	Over temperature protection	Pass		
Safety &EMC	Withstand voltage	—		
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω		
	Surge	L-N:0.5KV		L-N:1KV
	EMC Emission	EN55015, EN61000-3-2		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547		

Driver Datasheet(DALI Dimmable )

Total load wattage		18W	25W
Output	Output Voltage range	DC28-40V	
	Rated output current	400mA	600mA
	Line Regulation	±5%	
	Setup, Rise Time	<1S	
	Flickering Index	<5%(NO RISK)	
Input	Input Voltage	AC200-240V	
	Rated Input Voltage(V)	230V	
	Frequency	50/60Hz	
	Input Current	≤0.1A	≤0.14A
	Rated Input Current	0.09A	0.13A
	Power Factor	0.9	
	THD	<20% @230V	
	Efficiency	≥81%	
	No load wattage	<1W	
Protection	Short circuit protection	Pass	
	Over voltage protection	Pass	
	Over temperature protection	Pass	
Safety &EMC	Withstand voltage	I/P-O/P:3.75KVac,<5mA 60S; I/P-FG:1.6KVac,<5mA 60S; O/P-FG:0.5KVac,<5mA 60S	
	Isolation Resistance	I/P-O/P: 500VDC, ≥100M Ω	
	Surge	L-N:0.5KV	L-N:1KV
	EMC Emission	EN55015, EN61000-3-2	
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547	

Driver Datasheet(Traic Dimmable )

Total load wattage		12W	18W	25W
Output	Output Voltage range	DC60-75V		DC65-75V
	Rated output current	140mA	230mA	320mA
	Line Regulation	±5%		
	Setup, Rise Time	<0.5S		<1S
	Flickering Index	<5%(NO RISK)		
Input	Input Voltage	AC200-240V		
	Rated Input Voltage(V)	AC230V		
	Frequency	50Hz		
	Input Current	≤0.07A	≤0.1A	0.14A
	Rated Input Current	≤0.06A	≤0.09A	0.13A
	Power Factor	0.9		
	THD	-		
	Efficiency	81%	84%	
	No load wattage	≤1W		<1W
Protection	Short circuit protection	Pass		
	Over voltage protection	Pass		
	Over temperature protection	Pass		
Safety &EMC	Withstand voltage	—		
	Isolation Resistance	—		
	Surge	L-N:0.5KV		L-N:1KV
	EMC Emission	EN55015, EN61000-3-2		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547		

Driver Datasheet(Adjustable power)

Total load wattage		6W/12W/18W	15W/20W/24W
Output	Output Voltage range	DC60-75V	
	Rated output current	75/160/245mA	205/270/320mA
	Line Regulation	±5%	
	Setup, Rise Time	<0.5S	
	Flickering Index	<30%	
Input	Input Voltage	AC85-265V	
	Rated Input Voltage(V)	AC100-240V	
	Frequency	50/60Hz	
	Input Current	≤0.24A	≤0.32A
	Rated Input Current	≤0.2A	≤0.27A
	Power Factor	0.9	
	THD	<20% @230V	
	Efficiency	≥88%	
	No load wattage	<0.5W	
Protection	Short circuit protection	Pass	
	Over voltage protection	Pass	
	Over temperature protection	Pass	
Safety &EMC	Withstand voltage	-	
	Isolation Resistance	-	
	Surge	P<25W L-N:500V	
	EMC Emission	EN55015, EN61000-3-2	
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547	

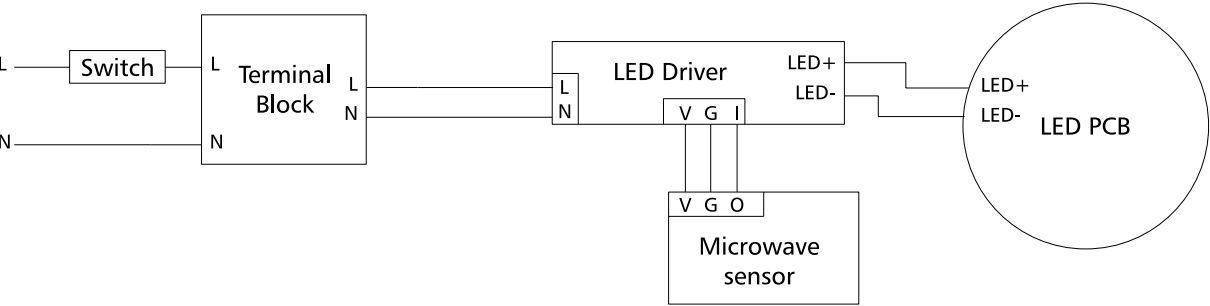
Driver Datasheet(Non-dimmable for sensor)

Total load wattage		12W		18W		25W	
Output	Output Voltage range	DC60-75V					
	Rated output current	145mA		220mA		320mA	
	Line Regulation	±5%					
	Setup, Rise Time	<0.5S					
	Flickering Index	3%(NO RISK)					
Input	Input Voltage	AC85-265V					
	Rated Input Voltage(V)	AC100-240V					
	Frequency	50/60Hz					
	Input Current	≤0.16A		≤0.24A		≤0.33A	
	Rated Input Current	≤0.14A		≤0.2A		≤0.28A	
	Power Factor	0.85		0.9			
	THD	<20% @230V					
	Efficiency	≥81%				≥84%	
	No load wattage	<0.7W					
Protection	Short circuit protection	Pass					
	Over voltage protection	Pass					
	Over temperature protection	Pass					
Safety &EMC	Withstand voltage	—					
	Isolation Resistance	—					
	Surge	L-N:0.5KV				L-N:1KV	
	EMC Emission	EN55015, EN61000-3-2					
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11; EN61547					

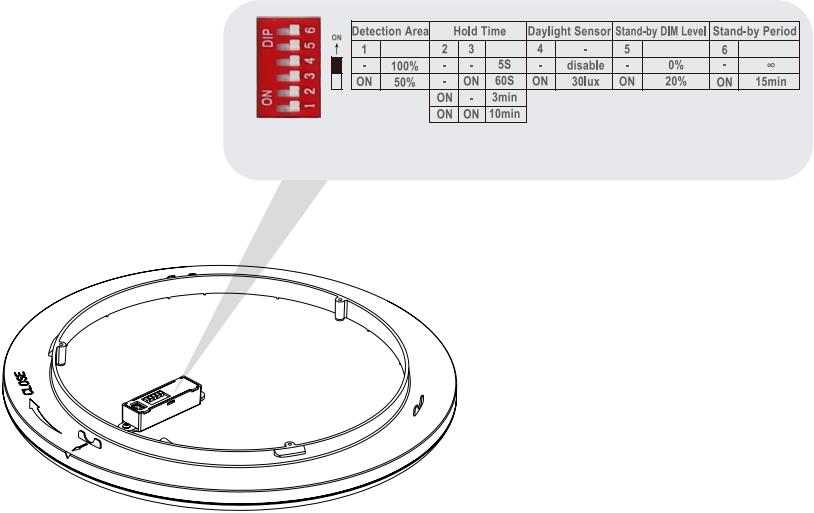
Datasheet (Sensor S7)

Sensor datasheet	
Operating Voltage	DC7-12V
Power consumption	0.5W±0.2W
Microwave frequency	5.8GHz±75MHz, ISM wave band
Transmission power	<0.5mW
Detection angle	140°
Detection Area	4-6M
Hold time	5S/60S/3min/10min
Daylight sensor	30lux/disable
Stand-by DIM Level	0% / 20%
Stand-by Period	15min / ∞
Dimming Range	—
Microwave ON/OFF function	—
Installation Height	Recommended Installation Height: Wall mounted height 1.8m. Ceiling mounted height 3m.
Operating temperature(°C)	-20°C ~60°C

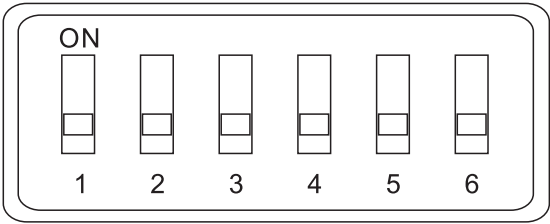
Wiring Diagram



Daylight & Microwave Sensor:



factory setting:



Sensor Setting:

Detection Area	
1	
-	100%
ON	50%

Detection area:

Detection area can be reduced by selecting the combination on the DIP switches to fit precisely each application.

Notice 1: The test is based on a height of 3m, the radius is the ground detect distance,which can be selected through the slide switch.

Notice 2: The detective range is measured by human body whose stature is around 1.6-1.7M with medium size and traveling speed is around 1.0-1.5M per second. If the stature, bodily form and traveling speed are changed,then the detective range will be changed accordingly.

Notice 3: Test result will be highly influenced by test environment, the more open environment, the closer detect distance; the narrower environment, the longer detect distance. The detectormay do self-excitation in a narrow environment.

Hold Time		
2	3	
-	-	5S
-	ON	60S
ON	-	3min
ON	ON	10min

Hold time:

Refers to the time period the lamp remains at 100% illumination after no motion detected.

Notice 1: The hold time can be selected by the slide switch.

The hold time counting should be started after the sensor is powered on and initialized.

Daylight Sensor	
4	-
-	disable
ON	30lux

Daylight sensor:

The sensor can be set to only allow the lamp to illuminate below a defined ambient brightness threshold. When set to Disable mode, the daylight sensor will switch on the lamp when motion is detected regardless of ambient light level.  
Notice 1: The light threshold can be selected through the slide switch, it may cause a large deviation in different lamps.

Stand-by DIM Level	
5	
-	0%
ON	20%

Stand-by dimming level:

This is the dimmed low light output level you would like to have after the hold-time in the absence of people.

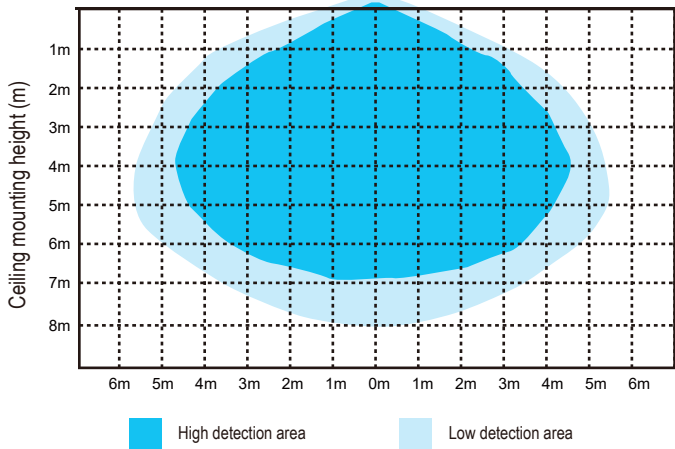
Stand-by Period	
6	
-	∞
ON	15min

Stand-by period:

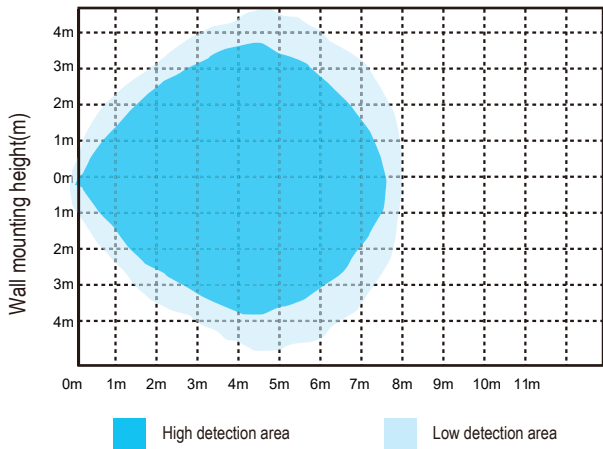
This is the time period you would like to keep at the low light output level before it is completely switched off in the long absence of people.

Induction Range

Ceiling Mounting pattern(Unit: m )



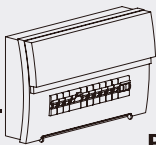
Wall Mounting pattern(Unit: m )



Installation Instruction

WARNING

- 1.Switch off before installation.
- 2.Switch on only after complete installation and examination of the circuit.
- 3.Professional electrician for installation and maintenance only.



Turn Off  
Power Supply

How to Install

