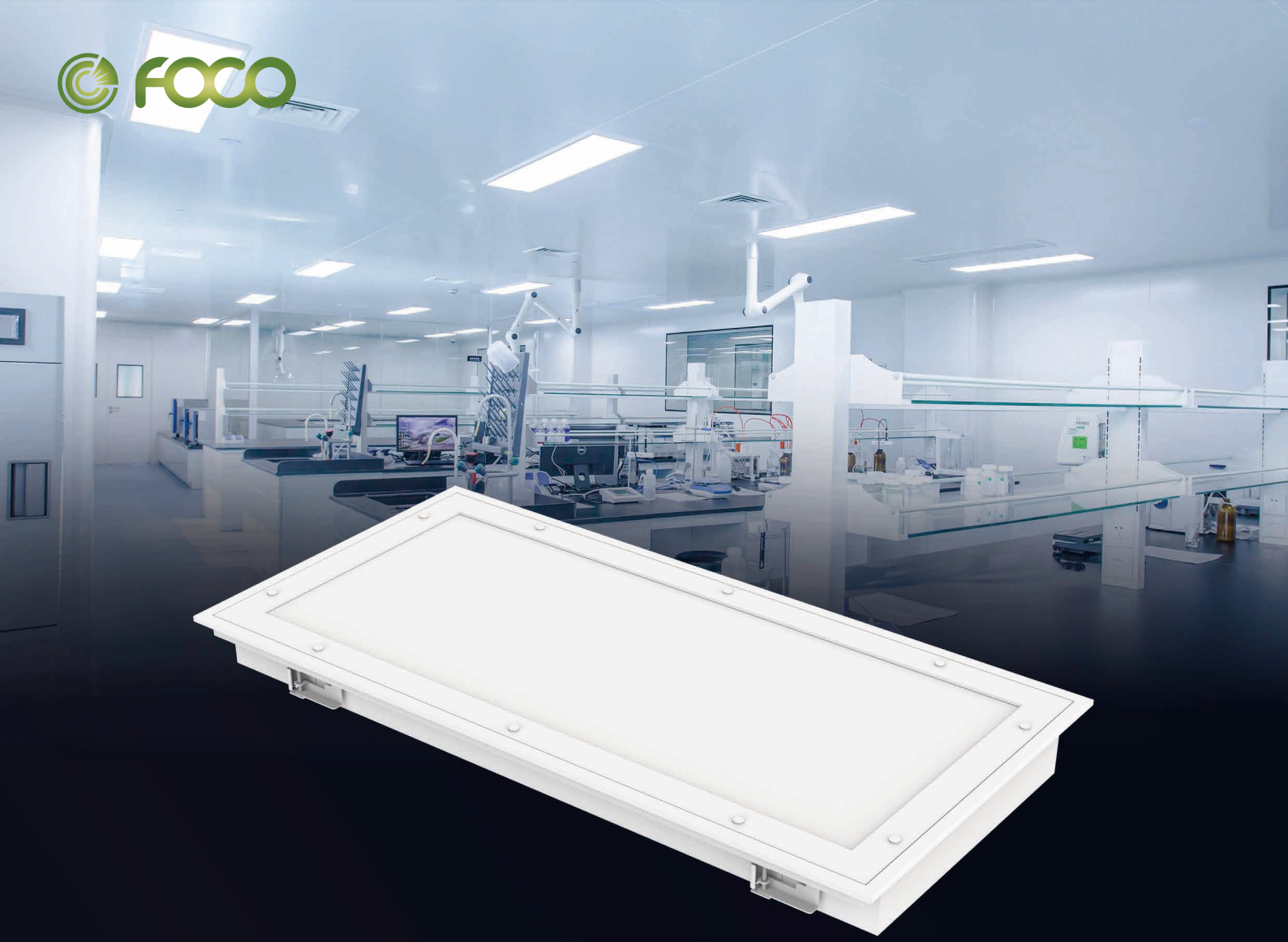


CP SERIES

CLEANROOM PANEL LIGHT

INTRODUCTION

The FGE-CP Series Cleanroom Panel Light is engineered for ISO Cleanliness Classes 1-9 clean-rooms, pharmaceutical workshops, laboratories, hospitals and other enclosed spaces with strict hygiene requirements requiring strict sanitation and uniform illumination.

Built with fully welded construction, the CP Series features IP65 rating and concealed front fixings. It delivers high-efficiency LED performance with soft, even light output. The standard PC diffuser can be replaced with toughened glass for chemical protection. Its detachable front cover allows the light source plate and power supply to be removed and replaced using the handle for easy maintenance, while antibacterial coating and high-efficiency control ensure reliable long-lasting performance.

Fraunhofer IPA-certified for clean-room compatibility, the CP Series eliminates contamination risks for hygienic environments. With a robust design built for demanding clean-room conditions, this fixture allows for straightforward installation and operation, offering a dependable, low-maintenance lighting solution for modern clean-room facilities.



Intertek NOM NSF FC DLC PREMIUM RoHS IP65

LM-79 **LM-80** **TM-21** **ISTMT** **IEC**

FEATURES

5 CCTS SELECTABLE

5 CCTS Selectable: Adjustable color temperature to suit diverse environments.

135lm/W

High Efficacy & Energy Saving: Up to 135 lm/W, reducing energy consumption by over 60% compared with HID fixtures.

0-10V DIMMABLE

Smart Control Ready: Compatible with 0-10V/DALI dimming, optional microwave/ infrared sensor, and emergency kit.

RELIABLE WARRANTY

Reliable Warranty: 5 Years Warranty.

Fully welded construction: Robust seamless welded housing eliminates gaps, preventing dust accumulation for clean-room use.

Concealed front fixings: Hidden front-mount fasteners deliver smooth surface, avoiding dust-trapping exposed screw points.

Tempered glass diffuser options: Chemical-resistant tempered glass cover offers uniform light transmission with strong impact resistance.

Fraunhofer IPA Certificate: Certified compliance for ISO 1-9 clean-room classes, zero contamination risk for high-grade clean-room environments.

- **Robust Protection:**
  IP65 waterproof & dustproof, IK08 impact resistance for harsh industrial environments.
- **Superior Thermal Management:**
  Aluminum housing with optimized heat sink for reliable performance.
- **Wide Input Voltage:**
  AC120–277V, suitable for global power grids.

APPLICATIONS



Dust-free factory: Deliver soft, even anti-glare lighting, maintain high-level cleanliness, meet strict hygiene requirements for clean-room production environments.



Laboratory: Offer high-CRI accurate color rendering illumination, create stable, flicker-free lighting environment to support precise experimental operations.



Hospital: Provide comfortable, low-glare soft lighting, reduce visual fatigue, fit for wards, nurse stations and hospital public corridors to improve patient experience.

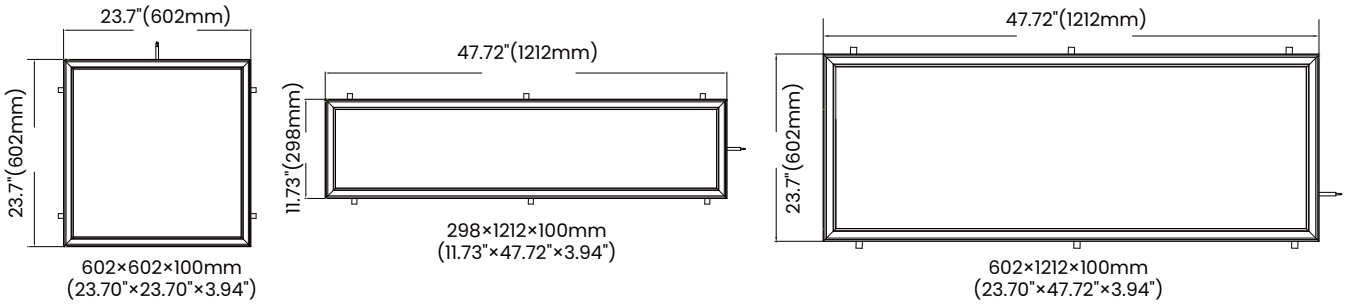


Pharmaceutical factory: Supply hygienic, dust-proof uniform lighting, comply with pharmaceutical production sanitation standards, ensure reliable illumination for production workshops.

TECHNICAL PARAMETERS

Product Model	CP-50W	CP-100W
Length	2x2 FT, 1x4 FT	2x4 FT
Electrical Performance		
Wattage	50W	100W
Input Voltage	AC120-277V	AC120-277V
Frequency	50/60Hz	50/60Hz
Power Factor (PF)	>0.9	>0.9
Surge Protection	4KV	4KV
THD	<20%	<20%
Optical Performance		
Luminous Efficacy	135lm/W	135lm/W
Luminous Flux	6750lm	13500lm
CCT Selectable	3500K/4000K/5000K/5700K/6500K	3500K/4000K/5000K/5700K/6500K
CRI	Ra>80	Ra>80
Beam Angle	110°	110°
Unified Glare Rating (UGR)	<22	<22
Reliability		
Lifetime	>100,000h, L70 @25°C	>100,000h, L70 @25°C
Operating Temperature	-25 ~ +40°C	-25 ~ +40°C
Storage Temperature	-40 ~ +70°C	-40 ~ +70°C
Ingress Protection	IP65	IP65
Impact Resistance	IK08	IK08
Control		
Dimming	0-10V/DALI	0-10V/DALI
Sensor	-	-
Communication Protocol	-	-
Emergency Kit	8W Battery Backup	8W Battery Backup
Mechanical		
Housing Material	Aluminum	Aluminum
Lens Material	PC/Tempered glass/Antibacterial PC	PC/Tempered glass/Antibacterial PC
Net Weight	2x2FT: 9.1kg 1x4FT: 9.33Kg	18.6Kg
Dimensions	2x2FT: 602x602x100mm 1x4FT: 298x1212x100mm	602x1212x100mm
Warranty	5 Years	5 Years

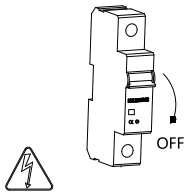
MECHANICAL DIMENSIONS



Product Model	CP-50W	CP-100W
Wattage Selectable	50W	100W
Outer box (L*W*H)	2x2FT: 653×260×653mm (25.79"×10.24"×25.79") 1x4FT: 1320×260×420mm (51.97"×10.24"×16.54")	1252×260×352mm (49.29"×10.24"×13.86")
Q'ty/Ctn	1pc	1pc
N.W./Ctn	2x2FT: 9.10kg/20.06lbs 1x4FT: 9.33kg/20.57lbs	18.60kg/41.01lbs
G.W./Ctn	2x2FT: 19.60kg/43.21lbs 1x4FT: 19.83kg/43.72lbs	39.83kg/87.79lbs
Remarks	-	-

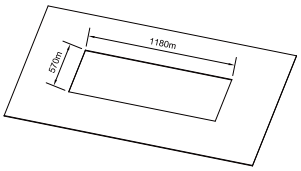
INSTALLATION

1.Turn off the power

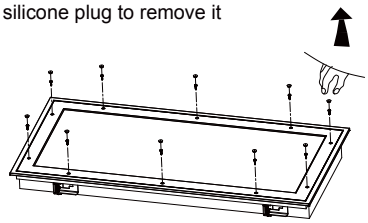


2.Ceiling openings:

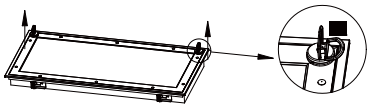
2x4:1180*570
2x2:570*570
1x4:1180*270

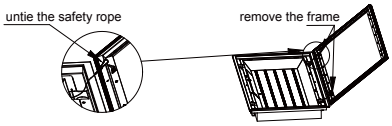


3.Remove the silicone plug from the face frame and unscrew the screw under the silicone plug to remove it

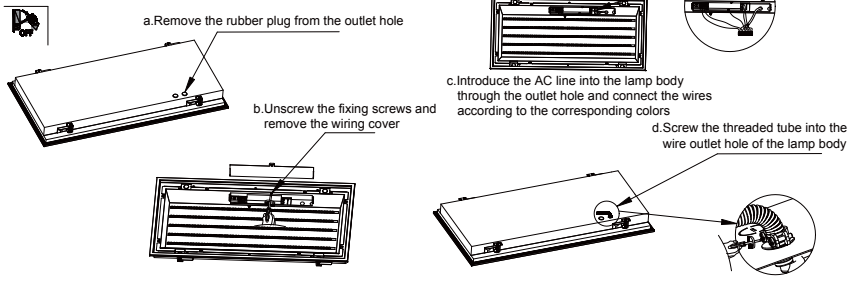


4.Use suction cups to hold the two corners of the frame and pull it apart

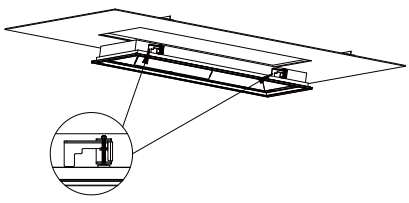




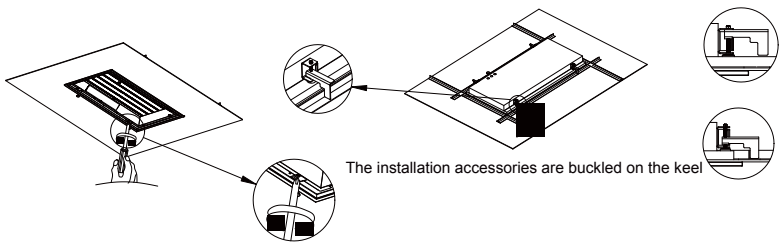
4.AC line wiring steps diagram:



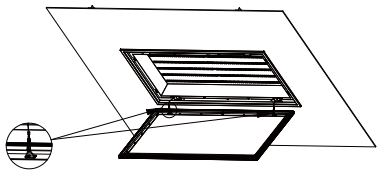
6.Adjust the lamp body mounting accessories to the retracted state and embed them into the ceiling



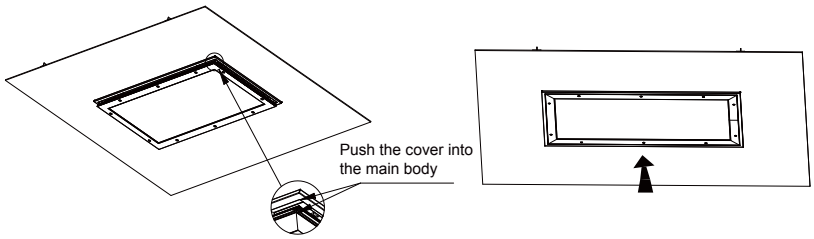
7.Use a screwdriver to rotate the front screw to hang the installation accessories on the keel above the ceiling (adaptive keel height Min: 20mm, Max 47mm)



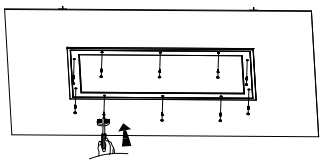
8.Connect the lamp body safety rope to the edge of the cover



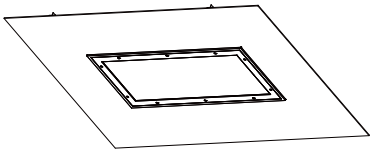
9.Push the cover into the main body



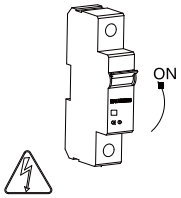
10.Use a screwdriver to tighten the screws and install the silicone plug



11.Installation completed



12.Turn on the power and detect



ORDER INFORMATION

CP-YY-YY-YY

1 2 3 4 5 6 7

1 CP Series Cleanroom Panel Light

2 Size

14	1x4′
22	2x2′
24	2x4′

3 Wattage

50W	50W
100W	100W

4 Color Temperature

50K	3500K/4000K/5000K/5700K/ 6500K Selectable (Default: 5000K)

5 Voltage

(Blank)	120-277V

6 EM Back-up

(Blank)	Without EM Back-up
EM	With EM Back-up

7 Optics

(Blank)	110°

WARRANTY PERIOD
5 YEARS WARRANTY

WARRANTY COVERAGE
LED LIGHT SOURCE, DRIVER

24h
AFTER-SALES SERVICE COMMITMENT
24H RESPONSE

72h
AFTER-SALES SERVICE COMMITMENT
72H RESOLUTION/REPLACEMENT