

Copyright
Boe MLED Technology Co., Ltd. reserves the right to interpret the product specifications. Without the signed permission of BOE MLED Technology Co., LTD., any other individual or organization shall not excerpt, reprint, copy, translate, edit or publish the specifications in any form. This specification is subject to change without prior notice.



SPEC. NUMBER

Product Group

REV.

Release Date

Page

-

MLED

O

2025.04.08

1 OF 22

Product Pre-Specification BYH012 Pro Rev. O

Zhuhai BOE MLED Technology Co., Ltd.

Copyright
 Boe MLED Technology Co., Ltd. reserves the right to interpret the product specifications. Without the signed permission of BOE MLED Technology Co., LTD., any other individual or organization shall not excerpt, reprint, copy, translate, edit or publish the specifications in any form. This specification is subject to change without prior notice.



SPEC. NUMBER -	Product Group MLED	REV. 0	Release Date 2025.04.08	Page 2 OF 22
-------------------	-----------------------	-----------	----------------------------	-----------------

Change History

- () Original Specification
- () Final Specification

Rev.	Page	Modified Content Description	Revision Date	Revision Person
0	-	Original Design	2025/03/18	

Copyright
Boe MLED Technology Co., Ltd. reserves the right to interpret the product specifications. Without the signed permission of BOE MLED Technology Co., LTD., any other individual or organization shall not excerpt, reprint, copy, translate, edit or publish the specifications in any form. This specification is subject to change without prior notice.



SPEC. NUMBER	Product Group	REV.	Release Date	Page
-	MLED	O	2025.04.08	3 OF 22

Content

No	ITEM	Page
	Change History	2
	Content	3
1	Scope of application	4
2	Product description	4
3	Product technical parameters	5
4	Product interfaces	7
5	product brand	8
6	Product certification information and reminders	8
7	Reliability test specification and method	9
8	Packaging solution	10
9	Precautions for product use	14
10	Product usage instructions	16
11	The appendix	18

SPEC. NUMBER	Product Group	REV.	Release Date	Page
-	MLED	O	2025.04.08	4 OF 22

1.0 Scope of application

This specification is suitable for indoor full-color point spacing P1.2 COB front main tenance cabinet, the following is the general product parameters, if there is special req uirements, can be customized according to customer requirements.

2.0 Product description

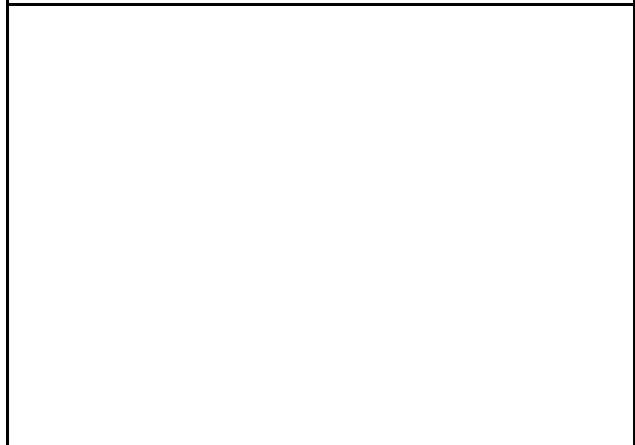
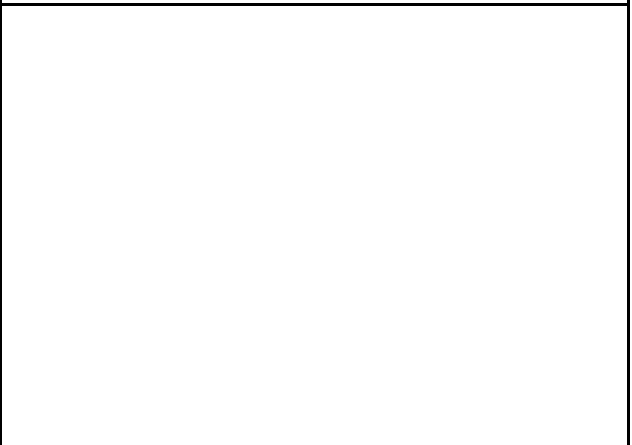
2.1 Product introduction

Full flip COB mini-LED technology solution, higher light efficiency, low flicker, to ach ieve a more environmentally friendly, healthier picture display effect, using the leading drive design and surface treatment scheme, can achieve lower power consumption and higher display contrast.

2.2 Product features

- 1) Display every pixel on the module unit module, using full flip R, G, B chip packa ge, each chip is fixed on the substrate;
- 2) The display unit of the box body is a pre-maintenance magnetic suction structu re, which is equipped with professional magnetic suction tools to complete inst allation and maintenance;
- 3) Modular structure design, simple connection, light weight, more convenient in stallation and disassembly;
- 4) High contrast to achieve better display effect;
- 5) Low power consumption, energy saving and environmental protection;

2.3 Product pictures

Front view of a Cabinet	Back view of a Cabinet
	

SPEC. NUMBER	Product Group	REV.	Release Date	Page
-	MLED	O	2025.04.08	5 OF 22

3.0 Product technical parameters

3.1 mechanical parameters

	Item	Technical parameters	Remark
MDL	Pitch(mm)	1.25	
	LED Type	COB 0306	
	Resolution	120*270	
	Size(mm*mm)	150*337.5	
	The surface hardness	2H	
	Protection grade	IP65	
Cabinet	Composition of Cabinet	4*1	
	Resolution	480*270	
	Size(mm*mm)	600*337.5	
	Pixel density(dot/m ²)	640000	
	Thickness(mm)	32.3	
	Weight (kg)	4.5	
	Maintenance mode	Front	
	Material	ADC12	
	Flatness(mm)	≤0.1	

3.2 Electrical parameters

Item	Technical parameters	Remark
Average power consumption of a cabinet(W)	17	@600nit
Max power consumption of a cabinet(W)	50	@600nit
Average power consumption per square meter(W)	83	@600nit
Max power consumption per square meter(W)	249	@600nit
Power supply requirements(V)	AC 100-240	

SPEC. NUMBER	Product Group	REV.	Release Date	Page
-	MLED	O	2025.04.08	6 OF 22

3.3 Optical parameters

Item	Technical parameters	Remark
Single point brightness correction	Support	
Single point chromaticity correction	Support	
Brightness(cd/m ²)	Typ 1200, Max 1500	
Color coordinates	Typ 0.313 0.329, Adjustable	
Color temperature(K)	Typ 9300, 2000 ~ 15000 Adjustable	
Color gamut	Typ. 93% DCI-P3	
Horizontal Angle of view(°)	160±10	
vertical Angle of view(°)	160±10	
Colour cast(°)	170±10	$\Delta u'v' \leq 0.02$
Relative deviation of pixel center distance	$\leq 3\%$	
Luminance uniformity	$\geq 97\%$	
Chroma uniformity	$\Delta u'v' \leq 0.005$	
Ambient light contrast	$\geq 10000:1$	10 lux light environment
Contrast	$\geq 1,000,000:1$	Darkroom L0

3.4 System parameters

Item	Technical parameters	Remark
frame frequency(Hz)	60	
refresh rate(Hz)	≥ 3840	
Drive mode	PM Constant current drive	
Grayscale (bit)	≥ 13	