

Copyright

The interpretation right of this product specification belongs to BOE MLED. Without the signed permission of BOE MLED, any other individual or organization is not allowed, in any form, to excerpt, reproduce, copy, translate, edit or publish this product specification. This product specification is subject to modification without prior notice.



SPEC. NUMBER -	Product organization MLED	REV. -	Release date 2023.11.30	Page 1
-------------------	------------------------------	-----------	----------------------------	-----------

BTS050

Product Introduction

Rev. 0

BOE MLED Technology Co., Ltd.

Copyright

The interpretation right of this product specification belongs to BOE MLED. Without the signed permission of BOE MLED, any other individual or organization is not allowed, in any form, to excerpt, reproduce, copy, translate, edit or publish this product specification. This product specification is subject to modification without prior notice.

BOE

SPEC. NUMBER

-

Product organization

MLED

REV.

-

Release date

2023.11.30

Page

2

1. Product Introduction

1.1 Scope of Application

This product specification is applicable to outdoor P5.0 full-color modules

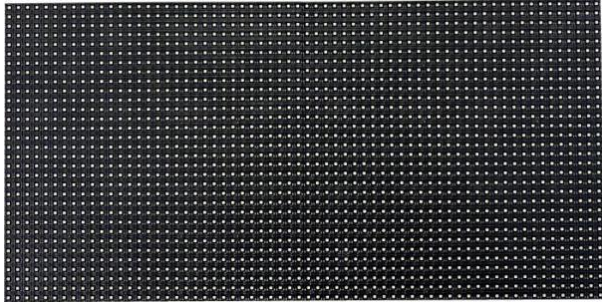


1.2 Product Description

This product uses SMD1921 lamp beads, each of which encapsulates a red chip, a green chip, and a blue chip. The 1921 lamp beads are welded to the PCB with the surface mount technology (SMT)

This product uses a constant current driver IC chip and an integrated line driver chip and is controlled by a computer.

Lamp beads and chips are mounted on the PCB board to form a unit board, which is then mounted on the bottom case to form a module

1.3 Product Picture

View	Illustration
Front view	
Back view	
Side view	

2. Product Specification

Category	Parameters	Specification
Module	Pitch(mm)	5.0
	LED Model	SMD1921
	LED Type	Gold/Copper wire
	Module resolution	64*32

SPEC. NUMBER

Product organization

REV.

Release date

Page

-

MLED

-

2023.11.30

3

Category	Parameters	Specification
	Module size \pm tolerance(mm \times mm \times mm)	319.8 \pm 0.2*159.8 \pm 0.2*17.5 \pm 0.2
	Module weight \pm tolerance(g)	430 \pm 10
	Module flatness (mm)	\leq 0.7
	Pixel density (dots/m ²)	40000
Optical Parameters	White balance brightness (cd/m ²)	\geq 5000
	Color temperature	9000-15000K
	Horizontal viewing angle	\geq 120°
	Vertical viewing angle	\geq 120°
	View distance (m)	\geq 5
Electrical Parameters	Maximum power consumption per module (W)	\leq 40W
	Operating voltage (V)	5
	Signal input interface type	HUB75
Processing performance	Scanning mode	1/8
	Frame change frequency (Hz)	60
	Refresh frequency (Hz)	\geq 3840
	Driving mode	Constant drive
	Grayscale (Bit)	14
Operating Parameters	Continuous operation time	168hrs, Support uninterrupted display
	Average trouble-free working time	\geq 5000 hours
	Discrete runaway point	Preset at 0, < 30PPM
	Continuous runaway point	0
	Blind spot rate	Preset at 0, < 30PPM
Utilization Parameters	Typical life value (hrs)	100000
	Operating temperature (°C)	-10-60
	Storage temperature (°C)	-20-60
	Operating humidity (RH)	10%-60%
	Storage humidity (RH)	10%-60%
Protection grade	Protection grade	IP65(The protection level of the lamp surface when the back of the panel is under strict protection)
Certification	CCC	—
	Energy saving	—
	ROHS	—
	CE	—
	CB	—
	UL	—
	FCC	—

3. Definition of signal interface

Copyright

The interpretation right of this product specification belongs to BOE MLED. Without the signed permission of BOE MLED, any other individual or organization is not allowed, in any form, to excerpt, reproduce, copy, translate, edit or publish this product specification. This product specification is subject to modification without prior notice.



SPEC. NUMBER -	Product organization MLED	REV. -	Release date 2023.11.30	Page 4
-------------------	------------------------------	-----------	----------------------------	-----------

HUB75		Pin	Signal	Function	Pin	Signal	Function
1	2	1	R1	Red data signal	2	G1	Green data signal
3	4	3	B1	Blue data signal	4	GND	GND of power supply
5	6	5	R2	Red data signal	6	G2	Green data signal
7	8	7	B2	Blue data signal	8	N	Suspended
9	10	9	A	Line control signal	10	B	Line control signal
11	12	11	C	Line control signal	12	N	Suspended
13	14	13	CLK	Clock signal	14	LAT	Latch signal
15	16	15	OE	Enable signal	16	GND	GND of power supply

4. Mounting holes

4.1 Module mounting hole location (Unit: mm)

